Solid IT Networks DIR-CPO-4852

ADVA, February 2023

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DIR Discount Levels

Network Virtualization 10%
Time Synchronization, Network Access, 20%
Network Virtualization
Optical Transport Network, ALM, 30%
Pluggables, Generic Accessories
Maintenance 2%
Services, Training 1%

Part Number	Description		DIR MSRP
	OptiSwitch preinstalled SW Rel.4.5.100, FW 0x2C5. Includes SW image and FPGA FW for		
1091480460-01	OS9124/OS9244, OS940 and OS906G	\$	-
	OptiSwitch preinstalled SW Rel.4.5.100, FW 0xC2. Includes SW image and FPGA FW for		
1091480461-01	OS904/OS906/OS912 and OS606 (L2+)	\$	-
1061800760-01	MicroMux: QSFP28, MPO, 10x10GbE	\$	13,531.43
1061800764-01	MicroMux: QSFP28, MPO, 10x10GbE, 2x 40GbE, 1x 100GE	\$	11,047.66
1061022201-01	SFP+, LC, 10GbE, BiDi, i-Temp	\$	676.57
1061020801-01	MicroMux: QSFP+, MPO, 4x10GbE, BiDi	\$	4,876.19
1061002141-01	MicroMux Nano SR: SFP+, MPO, 10x1GbE, multimode (SX) - Generic version	\$	3,047.62
	400G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.25 to		
1061700638-01	196.1 THz on a 12.5GHz grid	\$	28,525.71
1061000701-01	MicroMux Quattro SR: QSFP-DD, MPO, 4x100GbE, multimode - Generic version	\$	5,705.14
1061000601-01	AOE T400: ICTROSA OIF comp., 400Gbps, SiPh	\$	8,716.19
1061000760-01	MicroMux: QSFP28, MPO, 10x10GbE, Generic version	\$	14,072.38
1061000703-01	MicroMux Quattro LR4: QSFP-DD, SN connector, 4x100GbE, single mode - Generic version	\$	7,131.43
1061800764-99	MicroMux: QSFP28, MPO, 10x10GbE, 1x 100GE for F8/T-MP-2D12CT only	\$	11,047.66
	CFP2 DWDM C-Band tunable coherent network IF center frequency from 191.25 to 196.10 THz		
1061700633-01	on a 6.25GHz grid with up to 224Gbit/s, supporting QPSK 100G and 16QAM 200G mode	\$	27,391.39
1001000000	AOE CFP2-DCO DWDM C-Band tunable coherent network frequency from 191.25 to 196.10		22 240 02
1061000633-01	THz 6.25GHz grid 200Gbit/s, Generic version	\$	23,219.92
	AOEC210 CFP2-DCO DWDM C-Band tunable coherent network frequency from 191.25 to 196.10 THz 6.25GHz grid 100Gbit/s, supporting QPSK and DQPSK 100G modes - Generic		
1061002151-01	version	\$	20,757.22
1061002142-01	MicroMux Nano LR: SFP+, MPO, 10x1GbE, singlemode (LX) - Generic version	\$	5,276.95
1061000764-01	MicroMux: QSFP28, MPO, 10x10GbE, 1x 100GE	\$	8,795.43
1001000/04-01	400G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.25 to	-	0,733.43
1061000634-01	196.1 THz on a 12.5GHz grid - Generic version	\$	28,525.71
1061000702-01	MicroMux Quattro CWDM4: QSFP-DD, SN, 4x100GbE, singlemode (CWDM) - Generic version	\$	7,131.43

	112G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.25 to		
1061700635-01	196.1 THz on a 12.5GHz grid	\$	24,345.92
1061800764-02	MicroMux: QSFP28, MPO, 10x10GbE, 1x 100GE	\$	11,047.66
	AOE CFP2-DCO DWDM C-Band tunable coherent network frequency from 191.25 to 196.10		
1061002152-01	THz 6.25GHz grid 100Gbit/s, AEC Version	\$	28,145.37
	MicroMux: QSFP28, MPO, 10x10GbE, 1x 100GE, for use with QuadFlex/QuadFlex-S only		
1061800764-21	(F8/MP-2B4CT and F8/MP-2B4CT-S).	\$	11,047.66
	Mounting Kit for 64ALM in a 21" or 23" rack. NOTE: the 19" brackets are included with the		
1013904054	ALM64.	\$	229.68
4042720002.04	ALM Demarcation Reflector, pad, LC/APC connector. Demarcation reflector optimized for PON,		50.60
1043739882-01	grey and DWDM channels. Do not use for CWDM.	\$	58.63
1043739880-01	Jumper cabling between ALM Monitor Unit and ALM WDM Coupler - Single Mode, LC/APC, 100		41.31
	cm	\$	
1043739883-01	ALM Demarcation Reflector, pad, SC/APC connector	\$	263.12
1013904015	Mounting Kit for F7/16ALM and 8/1CSM as a single unit in a 19" rack	\$	25.94
1013904016	Mounting Kit for two F7/16ALM and 8/1CSM units in a 19" rack	\$	224.95
1013904017	Mounting Kit for F7/16ALM and 8/1CSM as a single unit in an ETSI or 23" rack	\$	177.22
1013904018	Mounting Kit for two F7/16ALM and 8/1CSM units in an ETSI or 23" rack	\$	327.20
1043739879-01	ALM Demarcation Reflector for OSFMA, LC/APC connector	\$	37.20
	ALM Demarcation Reflector, pad, SC/APC connector. Demarcation reflector optimized for grey		
1043739878-01	and DWDM channels.	\$	54.53
	ALM Demarcation Reflector, pad, SC/PC connector. Demarcation reflector optimized for grey		
1043739877-01	and DWDM channels.	\$	54.53
1043739876-01	ALM Demarcation Reflector patch cord, 75cm length, LC/APC connector	\$	224.95
	Jumper cabling between ALM Monitor Unit and ALM WDM Coupler - Single Mode, LC/APC, 310		
1043739874-01	cm, LSZH	\$	21.81
1043739873-01	ALM Demarcation Reflector patch cord, 310cm length, LC/PC connector	\$	204.50
	ALM WDM Coupler Y-cable w/ 1x 1650nm upgrade port, 310 cm length, LC/APC connector to		
1043739865-01	ALM processor unit, LC/PC to network upgrade ports	\$	286.29
	ALM WDM Coupler Shelf, 1HU filter shelf w/ 16 x 1650nm upgrade ports, passive and		
1043739861-01	unmanaged, LC/APC connector to ALM processor unit, LC/PC to network upgrade ports. Mounting kit included.	\$	2,785.56
			•
1043739871-01	ALM Demarcation Reflector, pad, SC/PC connector	\$	263.12
	ALM WDM Coupler Shelf, 1HU half width filter shelf w/ 8 x 1650nm upgrade ports, passive and unmanaged, LC/APC connector to ALM processor unit, LC/PC to network upgrade ports.		
1043709866-01	Mounting kit NOT included, please use ALM16 mounting kits.	\$	2,004.06
20 107 00 000 02	ALM WDM Coupler Shelf, 1HU filter shelf w/ 32 x 1650nm upgrade ports, passive and	Ψ	2,0000
	unmanaged, LC/APC connector to ALM processor unit, LC/PC to network upgrade ports.		
1043709863-01	Mounting kit included.	\$	6,243.87
	ALM Monitor Unit, 64 ports with LC/APC connector, AC powered. Only 19" brackets included.		
1043709846-01	Please order ALM64/MK for additional mounting options.	\$	27,238.55
	ALM Monitor Unit, 64 ports with LC/APC connector, -48V DC powered. Only 19" brackets		
1043709847-01	included. Please order ALM64/MK for additional mounting options.	\$	27,238.55
	ALM Monitor Unit, 16 ports with LC/APC connector, -48V DC powered. Mounting kit not		
1043709842-02	included.	\$	14,968.93
1042700941 02	ALMA Manitar Unit 16 north with 16/ADC connector AC neward Maunting bit not included	۲.	14.069.03
1043709841-02	ALM Monitor Unit, 16 ports with LC/APC connector, AC powered. Mounting kit not included.	\$	14,968.93
1043739867-01	ALM WDM Coupler Y-cable w/ 1x 1650nm upgrade port, 200 cm length, no connectors, 900μ fibers	\$	143.14
1091737011-01			1,162.74
1031/3/011-01	RTU for a manhole sensor (MHS) for the ALM. Per manhole sensor one RTU is required. ALM Demarcation Reflector, Premium Isolation, 16 demarcation reflectors integrated in 19	\$	1,102.74
1043739869-01	inch, passive and unmanaged, SC/PC connectors	\$	4,089.87
20.0700000 01	passire and annianaged, soft e connectors	Y	.,005.07

	ALM Demogration Reflector Premium Idelation 4 demogration reflectors integrated in 10 inch		
1043739870-01	ALM Demarcation Reflector, Premium Isolation, 4 demarcation reflectors integrated in 19 inch, half-width, passive and unmanaged, SC/PC connectors	\$	1,145.16
1043733870-01	ALM Demarcation Reflector, pad, LC/PC connector. Demarcation reflector optimized for PON,	ڔ	1,145.10
1043739881-01	grey and DWDM channels. Do not use for CWDM.	\$	58.63
1043709867-01	Re-usable water sensor for mounting fiber trays	\$	436.25
1043703607-01	Jumper cabling between ALM Monitor Unit and ALM WDM Coupler - Single Mode, LC/APC, 200	۲	430.23
1043739902-01	cm	\$	47.98
1043733302 01	Jumper cabling between ALM Monitor Unit and ALM WDM Coupler - Single Mode, LC/APC,	Y	47.50
1043739904-01	1000 cm	\$	47.98
10.137.3330.1.01	SW for ALM Release 4.1.3 preinstalled, Full System SW includes both ALM System Controller	Υ	17.50
1091707041-03	and ALM Monitor Unit software	\$	_
	Jumper cabling between ALM Monitor Unit and ALM WDM Coupler - Single Mode, LC/APC, 600	•	
1043739903-01	cm	\$	47.98
1043739868-01	95/5% passive splitter for use with manhole sensors. 200 cm length, no connectors, bare fibers	\$	44.99
1043709841-03	ALM Monitor Unit, 16 ports with LC/APC connector, AC powered. Mounting kit not included.	\$	14,968.93
20.07.030.12.00	ALM Monitor Unit, 64 ports with LC/APC connector, AC powered. Only 19" brackets included.	Ψ	1.,500.50
1043709846-02	Please order ALM64/MK for additional mounting options.	\$	27,238.55
	ALM Monitor Unit, 16 ports with LC/APC connector, -48V DC powered. Mounting kit not	•	_,,
1043709842-03	included.	\$	14,968.93
	ALM Demarcation Reflector patch cord with bare fiber, LSH/APC connector (E2000®		
1043739901-02	Connector) on one end and no connector on the other end	\$	196.63
	ALM Monitor Unit, 64 ports with LC/APC connector, -48V DC powered. Only 19" brackets		
1043709847-02	included. Please order ALM64/MK for additional mounting options.	\$	27,238.55
	ALM Demarcation Reflector patch cord with low bending loss bare fiber, 200cm length,		
1043739905-01	without connectors.	\$	53.14
	SW for ALM Release 4.1.2 preinstalled, Full System SW includes both ALM System Controller		
1091707041-02	and ALM Monitor Unit software	\$	-
1043709876-01	Sensor for door or cabinet, LC/APC connectors	\$	601.81
	ALM Demarcation Reflector, pad, SC/PC connector. Demarcation reflector optimized for grey		
1043739898-01	and DWDM channels. Bundle of 2k pcs	\$	68,778.67
	SW for ALM Release 5.1.1 preinstalled, Full System SW includes both ALM System Controller		
1091707051-01	and ALM Monitor Unit software	\$	-
	Mounting Kit for 16ALM as a single unit and space for a 1-slot LGX module in a 19" rack. Two		
1013904019	Fiber Fingers are included.	Ş	158.88
1013904044	Small cover for the DC power connector to the ALM.	\$	24.32
	Jumper cabling between ALM Monitor Unit and ALM WDM Coupler - Single Mode, LC/APC, 150		
1043739890-01	cm	\$	43.62
	ALM Demarcation Reflector patch cord with low bending loss G657.A2 fibers and 900		
1043709845-02	micrometer coating, 155cm length, without connectors.	\$	109.07
1043739891-01	50/50% passive splitter. 200 cm length, no connectors, bare fibers	\$	49.12
4004707045 04	SW for ALM Release 4.5.1 preinstalled, Full System SW includes both ALM System Controller	<u>,</u>	
1091707045-01	and ALM Monitor Unit software	\$	-
1091707045-02	SW for ALM Release 4.5.2 preinstalled, Full System SW includes both ALM System Controller and ALM Monitor Unit software	\$	
1091707043-02		۲	-
1091707033-01	SW for ALM Release 3.3.1 preinstalled, Full System SW includes both ALM System Controller and ALM Monitor Unit software	\$	-
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	ALM WDM Coupler, 1-slot LGX module w/ 8x WDM couplers, passive and unmanaged. Each		
	coupler has 1x 1650nm mon, 1x network and 1x client port. LC/APC to ALM processor unit,		
1043709875-01	LC/PC to network and client ports. LGX shelve or mounting kit NOT included.	\$	2,004.04
	ALM Demarcation Reflector, pad, SC/PC connector. Demarcation reflector optimized for grey		
1043739899-01	and DWDM channels. Bundle of 10k pcs	\$	318,857.14

1043739895-01	ALM Demarcation Reflector, pad, LC/PC connector. Demarcation reflector optimized for PON, grey and DWDM channels. Do not use for CWDM. Bundle of 10k pcs	\$	354,285.71
1043739896-01	ALM Demarcation Reflector, pad, SC/APC connector. Demarcation reflector optimized for grey and DWDM channels. Bundle of 2k pcs	\$	68,778.67
1043709849-01	96-port extension unit for the 16ALM with USB for power and management, 2x LC/APC connections to the ALM and 96x LC/APC as output.	\$	14,171.43
1043739900-01	ALM Demarcation Reflector patch cord, 140cm length, LSH/APC connector (E2000® Connector) ALM Demarcation Reflector, pad, LC/APC connector. Demarcation reflector optimized for PON,		204.50
1043739893-01	grey and DWDM channels. Do not use for CWDM. Bundle of 10k pcs	\$	354,285.71
1091707052-01	SW for ALM Release 5.2.1 preinstalled, Full System SW includes both ALM System Controller and ALM Monitor Unit software	\$	-
	ALM Demarcation Reflector, pad, LC/APC connector. Demarcation reflector optimized for PON,		
1043739892-01	grey and DWDM channels. Do not use for CWDM. Bundle of 2k pcs ALM Demarcation Reflector, pad, SC/APC connector. Demarcation reflector optimized for grey	\$	78,604.19
1043739897-01	and DWDM channels. Bundle of 10k pcs	\$	318,857.14
1042700040 01	384-port extension unit for the 16ALM with USB for power and management, 8x LC/APC	,	FC COF 71
1043709848-01	connections to the ALM and 16x MPO24 as output. ALM Demarcation Reflector, pad, LC/PC connector. Demarcation reflector optimized for PON,	\$	56,685.71
1043739894-01	grey and DWDM channels. Do not use for CWDM. Bundle of 2k pcs	\$	78,604.19
1043739889-01	Jumper for internal cabling - Single Mode, LC/APC-LC/PC, 1500 cm	\$	21.81
1043733683-01	SW for ALM Release 3.4.1 preinstalled, Full System SW includes both ALM System Controller	۲	21.01
1091707034-01	and ALM Monitor Unit software	\$	_
	SW for ALM Release 4.1.4 preinstalled, Full System SW includes both ALM System Controller	-	
1091707041-04	and ALM Monitor Unit software	\$	-
	SW for ALM Release 3.2.1 preinstalled, Full System SW includes both ALM System Controller		
1091707032-01	and ALM Monitor Unit software	\$	-
	SW for ALM Release 3.3.2 preinstalled, Full System SW includes both ALM System Controller		
1091707033-02	and ALM Monitor Unit software	\$	-
1091707055-01	SW for ALM Release 5.5.1 preinstalled, Full System SW includes both ALM System Controller and ALM Monitor Unit software	\$	
1031707033-01	SW for ALM Release 3.2.2 preinstalled, Full System SW includes both ALM System Controller	ڔ	-
1091707032-02	and ALM Monitor Unit software	\$	-
1043739886-01	Jumper for internal cabling - Single Mode, LC/APC-SC/APC, 700 cm, LSZH	\$	43.62
1043739885-01	Jumper for internal cabling - Single Mode, LC/APC-FC/PC, 700 cm, LSZH	\$	43.62
1043739887-01	Jumper for internal cabling - Single Mode, FC/PC-FC/PC, 700 cm, LSZH	\$	43.62
1043733007 01	vHosting platform feature set up to 8 physical cores (including Connector footprint). Licensed	Ţ	43.02
1091301101-01	for one machine per unit qty.	\$	280.00
	vHosting platform feature set up to 12 physical cores (including Connector footprint). Licensed		
1091301102-01	for one machine per unit qty.	\$	508.15
	vHosting platform feature set up to 4 physical cores (including Connector footprint). Licensed		
1091301100-01	for one machine per unit qty.	\$	72.59
1001201105 01	vHosting platform feature set up to 36 physical cores (including Connector footprint). Licensed	۲.	1 451 05
1091301105-01	for one machine per unit qty. vHosting platform feature set up to 16 physical cores (including Connector footprint). Licensed	\$	1,451.85
1091301103-01	for one machine per unit qty.	\$	725.93
-05-05-100 0-	vHosting platform feature set up to 24 physical cores (including Connector footprint). Licensed	Ψ.	, 20.00
1091301104-01	for one machine per unit qty.	\$	1,140.74
	Connector support for management and datapath over LTE access networks. Licensed for one		
1091301151-01	machine per unit qty.	\$	41.48
	Support for Connector internal local router capabilities, including NAT, IP Passthrough and	_	
1091301152-01	Hybrid WAN Failover. Licensed for one machine per unit quantity.	\$	1.04
1089002030-01	4010C, Intel D-1548, 2xDDR4-2133 16GB UDIMM, 512GB SSD, includes 8 Gbe RJ45 ports and 1 NIC slot. NIC cards sold separately.	\$	6,740.74
1003002030-01	ine side. Nie cards sold separately.	ڔ	0,740.74

1089002206-01	1515 chassis, 12 Core Intel C3858, 2 x 16GB DDR4-ECC SODIMM (32GB total), 512GB SSD, includes 6 x Gbe RJ45 ports, 2 x SFP ports.	\$	5,600.00
1089002207-01	1515 chassis, 12 Core Intel C3858, 2 x 16GB DDR4-ECC SODIMM (32GB total), 512GB SSD, includes 6 x Gbe RJ45 ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	6,263.70
1089002207-01	1515 chassis, 16 Core Intel C3958, 2 x 16GB DDR4-ECC SODIMM (32GB total), 512GB SSD,	ڔ	0,203.70
1089002208-01	includes 6 x Gbe RJ45 ports, 2 x SFP ports.	\$	5,729.63
1089002209-01	1515 chassis, 16 Core Intel C3958, 2 x 16GB DDR4-ECC SODIMM (32GB total), 512GB SSD, includes 6 x Gbe RJ45 ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	6,382.96
	1515 chassis, 4 Core Intel C3558, DDR4-2133 8GB DIMM, 128GB SSD, includes 4 x Gbe RJ45		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1089002210-01	ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	3,007.41
1089002211-01	1515 chassis, 4 Core Intel C3558, 2xDDR4-2133 8GB DIMM, 256GB SSD, includes 4 x Gbe RJ45 ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	4,085.93
1091301901-41	Ensemble Pre-Installed SW Rel.19.1.1 Installation SW packaged for XG304u. Full CIB.	۶ \$	4,065.55
1091301901-51	Ensemble Rel.19.1.1 Installation SW packaged for XG304u. KVM Only.	\$	_
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1091301901-61	Ensemble Pre-Installed SW Rel.19.1.1 Installation SW packaged for XG118Pro (SH). Full CIB.	\$	-
1091301901-71	Ensemble Pre-Installed SW Rel.19.1.1 Installation SW packaged for XG118Pro (SH). KVM Only.	\$	-
	48 Core license bundle - 60 month subscription. Connector base with vhosting licenses. MANO (HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001254	directional traffic on one 48 core CPU server per unit quantity.	\$	5,475.56
	ADVA Ensemble SaaS MANO Service. Tier 2 managed service includes hosting and 24x7		
BC00001274	monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per 100 managed elements for a 12 month term.	\$	126,884.59
	ADVA Ensemble SaaS MANO Service. Tier 2 managed service includes hosting and 24x7	•	,
	monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per		
BC00001278	5000 managed elements for a 12 month term.	\$	422,074.07
	48 Core license bundle - 36 month subscription. Connector base with vhosting licenses. MANO (HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001253	directional traffic on one 48 core CPU server per unit quantity.	\$	3,608.89
	ADVA Ensemble SaaS MANO Service. Tier 2 managed service includes hosting and 24x7		
DC00004.376	monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per	<u>,</u>	400 777 70
BC00001276	1000 managed elements for a 12 month term. ADVA Ensemble SaaS MANO Service. Tier 1 additional Tenant setup, hosting, monitoring.	\$	189,777.78
	Includes 100 MANO license RTU during the term. Priced per 100 managed elements for a 12		
BC00001279	month term.	\$	17,318.52
1091302003-01	Ensemble Connector SW PREINST Rel.19.1.5 Installation SW	\$	-
4004204405.04	vHosting platform feature set up to 48 physical cores (including Connector footprint). Licensed	<u>,</u>	1.000.07
1091301106-01	for one machine per unit qty. ADVA Ensemble SaaS MANO Service. Tier 2 managed service includes hosting and 24x7	\$	1,866.67
	monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per		
BC00001275	500 managed elements for a 12 month term.	\$	148,845.93
1091302101-01	Ensemble Connector SW PREINST Rel.21.1.1 Installation SW	\$	-
	ADVA Ensemble SaaS MANO Service. Tier 1 managed service includes hosting and 24x7		
BC00001272	monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per 2500 managed elements for a 12 month term.	\$	199,111.11
5666661272	ADVA Ensemble SaaS MANO Service. Tier 1 managed service includes hosting and 24x7	Y	133,111.11
	monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per		
BC00001273	5000 managed elements for a 12 month term.	\$	312,148.15
	ADVA Ensemble SaaS MANO Service. Tier 2 managed service includes hosting and 24x7 monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per		
BC00001277	2500 managed elements for a 12 month term.	\$	290,370.37
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	ADVA Encomble Sees MANO Service Tier 2 additional Tenant setup, besting, monitoring		
	ADVA Ensemble SaaS MANO Service. Tier 2 additional Tenant setup, hosting, monitoring. Includes 100 MANO license RTU during the term. Priced per 100 managed elements for a 12		
BC00001280	month term.	\$	28,829.63
	Connector license for advanced routing capabilities including various routing protocols. L2 and		
	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 1		
1091301163	Gbps and 50 IPSec tunnels for one machine per unit qty.	\$	437.63
	Connector license for advanced routing capabilities including various routing protocols. L2 and		
	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 100		
1091301167	Mbps and 10 IPSec tunnels for one machine per unit qty.	\$	163.85
	Connector license for advanced routing capabilities including various routing protocols. L2 and		
1091301161	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 100 Mbps and 50 IPSec tunnels for one machine per unit qty.	\$	264.44
1091301101	Connector license for advanced routing capabilities including various routing protocols. L2 and	ې	204.44
	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 500		
1091301162	Mbps and 50 IPSec tunnels for one machine per unit qty.	\$	368.15
	Connector license for advanced routing capabilities including various routing protocols. L2 and	•	
	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 2		
1091301164	Gbps and 50 IPSec tunnels for one machine per unit qty.	\$	565.19
	Connector license for advanced routing capabilities including various routing protocols. L2 and		
	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 5		
1091301165	Gbps and 50 IPSec tunnels for one machine per unit qty.	\$	617.04
	Connector license for advanced routing capabilities including various routing protocols. L2 and		
1091301166	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 10 Gbps and 50 IPSec tunnels for one machine per unit qty.	\$	700.00
1091301100	Gateway license pre-integrated for hubbing Ensemble management or user traffic. Licensed up	ې	700.00
1091301180	to 1 Gbps and 100 tunnels.	\$	3,162.96
1091302002-02	Ensemble Connector SW PREINST Rel.20.2.2 Installation SW	\$	-
1091302101-02	Ensemble Connector SW PREINST Rel.21.1.2 Installation SW	\$	_
1091302101-03	Ensemble Connector SW PREINST Rel.21.1.3 Installation SW	\$	
1091302101-03	Connector performance license supporting VNF acceleration via SR-IOV up to 2 Gbps bi-	ې	-
	directional traffic. Support for 10G physical ports and use of advanced data acceleration,		
1091301155-01	including SR-IOV in WAN/LAN segments. Licensed for one machine per unit.	\$	207.41
	16 Core - 1 Gbps, perpetual license bundle - Connector base and vhosting license. MANO (HA) -		
	high availability licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-directional		
BC00001209	traffic on one 16 core CPU server per unit quantity.	\$	1,145.93
	8 Core - 1 Gbps, perpetual license bundle - Connector base and vhosting license. MANO (HA) -		
	high availability licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-directional		
BC00001207	traffic on one 8 core CPU server per unit quantity.	\$	700.00
	4 Core - 1 Gbps, perpetual license bundle - Connector base and vhosting license. MANO (HA) -		
BC00001206	high availability licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-directional traffic on one 4 core CPU server per unit quantity.	\$	492.59
1091302201-01	Ensemble Connector SW PREINST Rel.22.1.1 Installation SW	\$	732.33
			-
1091302103-01	Ensemble Connector SW PREINST Rel.21.3.1 Installation SW Catoway license are integrated for hubbing Ensemble management or user traffic Licensed up	\$	-
1091301183	Gateway license pre-integrated for hubbing Ensemble management or user traffic. Licensed up to 10 Gbps and 5000 tunnels.	\$	20,222.22
1031301103	Gateway license pre-integrated for hubbing Ensemble management or user traffic. Licensed up	Y	20,222.22
1091301185	to 5 Gbps and 5000 tunnels.	\$	15,140.73
	36 Core - 1 Gbps, perpetual license bundle - Connector base and vhosting license. MANO (HA) -		*
	high availability licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-directional		
BC00001211	traffic on one 36 core CPU server per unit quantity.	\$	1,871.85
	4 Core license bundle - 36 month subscription. Connector base with vhosting licenses. MANO		
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001212	directional traffic on one 4 core CPU server per unit quantity.	\$	738.37

	9 Cara license hundle 26 month subscription Connector base with wheeting licenses MANO		
	8 Core license bundle - 36 month subscription. Connector base with vhosting licenses. MANO (HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001213	directional traffic on one 8 core CPU server per unit quantity.	\$	1,070.22
500000-2-0	16 Core license bundle - 36 month subscription. Connector base with vhosting licenses. MANO	Ψ	2,070.22
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001215	directional traffic on one 16 core CPU server per unit quantity.	\$	1,783.70
	36 Core license bundle - 36 month subscription. Connector base with vhosting licenses. MANO	•	,
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001217	directional traffic on one 36 core CPU server per unit quantity.	\$	2,945.19
	4 Core license bundle - 60 month subscription. Connector base with vhosting licenses. MANO	•	,
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001218	directional traffic on one 4 core CPU server per unit quantity.	\$	1,120.00
	8 Core license bundle - 60 month subscription. Connector base with vhosting licenses. MANO	·	ŕ
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001219	directional traffic on one 8 core CPU server per unit quantity.	\$	1,624.00
	16 Core license bundle - 60 month subscription. Connector base with vhosting licenses. MANO		
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001221	directional traffic on one 16 core CPU server per unit quantity.	\$	2,706.67
	36 Core license bundle - 60 month subscription. Connector base with vhosting licenses. MANO		
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001223	directional traffic on one 36 core CPU server per unit quantity.	\$	4,469.63
	48 Core - 1 Gbps, perpetual license bundle - Connector base and vhosting license. MANO (HA) -		
	high availability licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-directional		
BC00001252	traffic on one 48 core CPU server per unit quantity.	\$	2,255.56
	Gateway license pre-integrated for hubbing Ensemble management or user traffic. Licensed up		
1091301195	to 10 Gbps and 7000 tunnels.	\$	28,259.26
	16 Core - 36 month subscription - Connector base, vhosting and hybrid WAN failover feature		
	licenses. MANO base Orchestration and Director licenses (non-HA). Licensed for up to 1 Gbps		
BC00001002	bi-directional traffic on one 16 core CPU server per unit quantity.	\$	1,742.22
	24 Core - 1 Gbps, perpetual license bundle - Connector base and vhosting license. MANO (HA) -		
	high availability licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-directional		
BC00001210	traffic on one 24 core CPU server per unit quantity.	\$	1,560.74
	Gateway license pre-integrated for hubbing Ensemble management or user traffic. Licensed up		
1091301186	to 2 Gbps and 2000 tunnels.	\$	6,928.39
	Connector license for advanced routing capabilities including various routing protocols. L2 and		
	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 2		
1091301192	Gbps and 10 IPSec tunnels for one machine per unit qty.	\$	466.67
	12 Core license bundle - 60 month subscription. Connector base with vhosting licenses. MANO		
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001220	directional traffic on one 12 core CPU server per unit quantity.	\$	2,177.78
	Gateway license pre-integrated for hubbing Ensemble management or user traffic. Licensed up		
1091301184	to 25 Gbps and 10000 tunnels.	\$	34,222.22
	4 Core license bundle - 100 Mbps - 60 month subscription. Connector base, vHosting, and LTE		
	licenses. Director and high availability licenses. Licensed for up to 100 Mbps bi-directional		
BC00001182	traffic on one 4 Core CPU server per unit quantity.	\$	844.15
	24 Core license bundle - 60 month subscription. Connector base with vhosting licenses. MANO		
	(HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001222	directional traffic on one 24 core CPU server per unit quantity.	\$	3,714.67
	4 Core license bundle - 60 month subscription. Connector base with vHosting and LTE licenses.		
	Director and high availability licenses. Licensed for up to 1 Gbps bi-directional traffic on one 4		
BC00001180	Core CPU server per unit quantity.	\$	1,057.78
	Connector base license with APIs, 1 Gbps bi-directional traffic, L2 data path with CE2.0		
	functionality, L3 IP Classification / IP Forwarding, VRF & BGP support and IKE/IPsec on		00
1091301003-01	management plane. Licensed for one machine per unit qty.	\$	202.22

	Orchestration base license includes VNFM and NFVO feature set. Licensed per managed		c=
1091301454-01	element. Ensemble Director base license, includes management and Zero Touch feature set. Licensed	\$	67.41
1091303003-01	per managed element.	\$	93.33
1091303004-01	Ensemble Director high availability license feature uplift. Licensed per managed element. 1515 chassis, 4 Core Intel C3558, DDR4-2133 16GB DIMM, 128GB SSD, includes 4 x Gbe RJ45	\$	25.91
1089002202-01	ports, 2 x SFP ports. LTE enabled - Sierra-7430 module installed. 1515 chassis, 8 Core Intel C3758, 2xDDR4-2133 16GB DIMM, 512GB SSD, includes 6 x Gbe RJ45	\$	3,318.52
1089002205-01	ports, 2 x SFP ports. LTE enabled - Sierra-7430 module installed. Subscription 12 month term (with Support) - VNF via SR-IOV up to 2 Gbps bi-directional traffic.	\$	4,796.30
	10G physical ports and use of advanced data acceleration, including SR-IOV in WAN/LAN		
BC00001184	segments. Licensed for one machine per unit.	\$	133.66
1091302002-01	Ensemble Connector SW PREINST Rel.20.2.1 Installation SW	\$	-
BC00001191	Subscription 60 month term (with Support) - vHosting platform feature set up to 12 physical cores (including Connector footprint). Licensed for one machine per unit qty.	\$	1,234.07
BC00000922	Ensemble Director Base and HA license, includes management and Zero Touch feature set. Licensed per managed element.	\$	119.26
	12 Core license bundle - 36 month subscription. Connector base with vhosting licenses. MANO (HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001214	directional traffic on one 12 core CPU server per unit quantity.	\$	1,435.26
BC00001181	4 Core license bundle - 60 month subscription. Connector base and vHosting licenses. Director and high availability licenses. Licensed for up to 1 Gbps bi-directional traffic on one 4 Core CPU server per unit quantity.	\$	957.19
BC00001181	Connector license for advanced routing capabilities including various routing protocols. L2 and	Ļ	337.13
1091301191	encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 1 Gbps and 10 IPSec tunnels for one machine per unit qty.	\$	337.04
	12 Core - 1 Gbps, perpetual license bundle - Connector base and vhosting license. MANO (HA) -		
BC00001208	high availability licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-directional traffic on one 12 core CPU server per unit quantity.	\$	928.15
	Subscription 12 month (with support): Connector SMB base license -limit of 100 Mbps and 4-core server. License: APIs, L2 data path with CE2.0 features, L3 IP Class'n / IP Forwarding, VRF		
BC00001195	& BGP and IKE/IPsec on mgt plane. Licensed for one machine.	\$	120.30
DC00004400	Subscription 36 month term (with Support) - vHosting platform feature set up to 12 physical	<u>,</u>	042.04
BC00001190	cores (including Connector footprint). Licensed for one machine per unit qty. Subscription 12 month term (with Support) - vHosting platform feature set up to 24 physical	\$	813.04
BC00001192	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	735.14
	Subscription 36 month term (with Support) - vHosting platform feature set up to 24 physical		
BC00001193	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	1,825.19
	Connector license for advanced routing capabilities including various routing protocols. L2 and encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 10		
1091301194	Gbps and 10 IPSec tunnels for one machine per unit qty.	\$	596.30
1091302001-01	Ensemble Connector SW PREINST Rel.20.1.1 Installation SW	, \$	-
	4 Core license bundle - 100 Mbps - 60 month subscription. Connector base and vHosting		
	licenses. Director and high availability licenses. Licensed for up to 100 Mbps bi-directional		
BC00001183	traffic on one 4 Core CPU server per unit quantity.	\$	743.56
	Connector license for advanced routing capabilities including various routing protocols. L2 and encapsulation, IP networking HA, security and QoS options (see datasheet). Licensed up to 5		
1091301193	Gbps and 10 IPSec tunnels for one machine per unit qty.	\$	518.52
	Subscription 36 month term (with Support) - VNF via SR-IOV up to 2 Gbps bi-directional traffic.		
DC0000440F	10G physical ports and use of advanced data acceleration, including SR-IOV in WAN/LAN	<u> </u>	224.25
BC00001185	segments. Licensed for one machine per unit. Subscription 60 month term (with Support) - vHosting platform feature set up to 24 physical	\$	331.85
BC00001194	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	2,770.37

BC00001189	Subscription 12 month term (with Support) - vHosting platform feature set up to 12 physical cores (including Connector footprint). Licensed for one machine per unit qty.	\$	327.48
BC00001186	Subscription 60 month term (with Support) - VNF via SR-IOV up to 2 Gbps bi-directional traffic. 10G physical ports and use of advanced data acceleration, including SR-IOV in WAN/LAN segments. Licensed for one machine per unit.	\$	503.70
	24 Core license bundle - 36 month subscription. Connector base with vhosting licenses. MANO (HA) - base and HA licenses for Orchestrator and Director. Licensed for up to 1 Gbps bi-		
BC00001216	directional traffic on one 24 core CPU server per unit quantity. Gateway license pre-integrated for hubbing Ensemble management or user traffic. Licensed up	\$	2,447.41
1091301197	to 1 Gbps and 1000 tunnels. Gateway license pre-integrated for hubbing Ensemble management or user traffic. Licensed up	\$	5,288.89
1091301196	to 1 Gbps and 500 tunnels.	\$	4,158.52
1089002047-01	1515 chassis, 8 Core Intel C3758, 2xDDR4-2133 16GB DIMM, 512GB SSD, includes 6 x Gbe RJ45 ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	4,796.59
	ADVA Ensemble SaaS MANO Service. Tier 1 managed service includes hosting and 24x7 monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per	·	,
BC00001271	1000 managed elements for a 12 month term.	\$	108,888.89
1089002035-01	1515 chassis, 4 Core Intel C3558, DDR4-2133 8GB DIMM, 128GB SSD, includes 4 x Gbe RJ45 ports, 2 x SFP ports.	\$	2,281.48
	8 Core - 36 month subscription - Connector base, vhosting and hybrid WAN failover feature licenses. MANO base Orchestration and Director licenses (non-HA). Licensed for up to 1 Gbps		,
BC00001001	bi-directional traffic on one 8 core CPU server per unit quantity. Connector high bandwidth performance license. Enables support for 10G physical ports and	\$	1,028.74
	use of advanced data acceleration features, including SR-IOV in WAN/LAN segments. Licensed		
1091301154-01	for one machine per unit qty.	\$	414.81
	4 Core - 36 month subscription - Connector base, vhosting and hybrid WAN failover feature licenses. MANO base Orchestration and Director licenses (non-HA). Licensed for up to 1 Gbps		
BC00001000	bi-directional traffic on one 4 core CPU server per unit quantity.	\$	696.89
	4 Core - 12 month subscription - Connector base, vhosting and hybrid WAN failover feature licenses. MANO base Orchestration and Director licenses (non-HA). Licensed for up to 1 Gbps		
BC00001003	bi-directional traffic on one 4 core CPU server per unit quantity.	\$	281.04
	8 Core - 12 month subscription - Connector base, vhosting and hybrid WAN failover feature		
	licenses. MANO base Orchestration and Director licenses (non-HA). Licensed for up to 1 Gbps		
BC00001004	bi-directional traffic on one 8 core CPU server per unit quantity.	\$	414.81
BC00001028	Subscription 12 month term (with Support) - Connector support for management and datapath over LTE access networks. Licensed for one machine per unit qty.	\$	26.74
500001025	Subscription 12 month term (with Support) - Support for Connector internal local router	Y	20.74
	capabilities, including NAT, IP Passthrough and Hybrid WAN Failover. Licensed for one machine		
BC00001029	per unit quantity.	\$	25.91
	Subscription 12 month term (with support) - Orchestration base feature set, includes VNFM		
BC00001030	and NFVO feature set. Licensed per managed element.	\$	43.44
BC00001032	Subscription 12 month term (with support) - Ensemble Director base license, includes management and Zero Touch feature set. Licensed per managed element.	\$	60.15
BC00001032	Subscription 12 month term (with support) - Ensemble Director high availability feature uplift.	ب	00.13
BC00001033	Licensed per managed element.	\$	16.71
	Management with Base Orchestration and Director licenses, including high availability feature		
BC00001039	support. Licensed for one CPU machine per unit quantity.	\$	186.67
400000000000000	1515 chassis, 8 Core Intel C3758, E4DDR4-2133 16GB DIMM, 256GB SSD, includes 6 x Gbe RJ45		2 554 05
1089002203-01	ports, 2 x SFP ports. LTE enabled - Sierra-7430 module installed. ADVA Ensemble SaaS MANO Service. Tier 1 managed service includes hosting and 24x7	\$	3,551.85
	monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per		
BC00001270	500 managed elements for a 12 month term.	\$	75,641.48
	16 Core - 12 month subscription - Connector base, vhosting and hybrid WAN failover feature		
	licenses. MANO base Orchestration and Director licenses (non-HA). Licensed for up to 1 Gbps		
BC00001005	bi-directional traffic on one 16 core CPU server per unit quantity.	\$	700.00

	Subscription 12 month (with Support) Connector base license with APIs, 1 Gbps bi-directional		
	traffic, L2 data path with CE2.0 functionality, L3 IP Class'n /IP Forwarding, VRF & BGP support		
BC00001043	and IKE/IPsec on management plane. Licensed for one machine.	\$	130.33
	Subscription 12 month term (with Support) - vHosting platform feature set up to 4 physical		
BC00001044	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	46.79
	Subscription 12 month term (with Support) - vHosting platform feature set up to 8 physical		
BC00001045	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	180.44
	Subscription 12 month term (with Support) - vHosting platform feature set up to 16 physical		
BC00001046	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	467.82
	ADVA Ensemble SaaS MANO Service. Tier 1 managed service includes hosting and 24x7		
	monitoring of MANO infrastructure. Includes MANO license RTU during the term. Priced per		
BC00001269	100 managed elements for a 12 month term.	\$	53,682.22
	1515 chassis, 8 Core Intel C3758, E4DDR4-2133 16GB DIMM, 256GB SSD, includes 6 x Gbe RJ45		
1089002199-01	ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	3,551.85
	Connector SMB, throughput limit to 50 Mbps, max 4-core server. License with APIs, L2 data		
	path with CE2.0 features, L3 IP Class'n / IP Forwarding, VRF & BGP and IKE/IPsec on mgt plane.		
1091303185-01	Licensed for one machine per unit qty.	\$	114.07
	Connector SMB, throughput limit to 100 Mbps, max 4-core server. License with APIs, L2 data		
	path with CE2.0 features, L3 IP Class'n / IP Forwarding, VRF & BGP and IKE/IPsec on mgt plane.	_	
1091303186-01	Licensed for one machine per unit qty.	\$	186.67
	Subscription 36 month (with Support) Connector base license with APIs, 1 Gbps bi-directional		
DC00000047	traffic, L2 data path with CE2.0 functionality, L3 IP Class'n /IP Forwarding, VRF & BGP support		222.56
BC00000817	and IKE/IPsec on management plane. Licensed for one machine.	\$	323.56
	Subscription 60 month (with Support) Connector base license with APIs, 1 Gbps bi-directional		
DC00000818	traffic, L2 data path with CE2.0 functionality, L3 IP Class'n /IP Forwarding, VRF & BGP support	Ļ	491.11
BC00000818	and IKE/IPsec on management plane. Licensed for one machine.	\$	491.11
BC00000819	Subscription 36 month term (with Support) - vHosting platform feature set up to 4 physical	\$	116.15
BC00000813	cores (including Connector footprint). Licensed for one machine per unit qty.	Ş	110.15
BC00000820	Subscription 60 month term (with Support) - vHosting platform feature set up to 4 physical cores (including Connector footprint). Licensed for one machine per unit qty.	\$	176.30
BC00000820	Subscription 36 month term (with Support) - vHosting platform feature set up to 16 physical	ې	170.30
BC00000823	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	1,161.48
BC00000823	Subscription 36 month term (with Support)- vHosting platform feature set up to 8 physical	Ļ	1,101.48
BC00000821	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	448.00
500000021	Subscription 60 month term (with Support) - vHosting platform feature set up to 8 physical	Y	440.00
BC00000822	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	680.00
5666666522	Subscription 36 month term (with Support) - vHosting platform feature set up to 36 physical	Y	000.00
BC00000825	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	2,322.96
	Subscription 60 month term (with Support) - vHosting platform feature set up to 16 physical	7	_,=
BC00000824	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	1,762.96
	Subscription 60 month term (with Support) - Connector support for management and datapath		,
BC00000828	over LTE access networks. Licensed for one machine per unit qty.	\$	100.74
	Subscription 60 month term (with Support) - vHosting platform feature set up to 36 physical		
BC00000826	cores (including Connector footprint). Licensed for one machine per unit qty.	\$	3,525.93
	Subscription 36 month term (with Support) - Connector support for management and datapath		
BC00000827	over LTE access networks. Licensed for one machine per unit qty.	\$	66.37
	Subscription 36 month term (with Support) - Support for Connector internal local router		
	capabilities, including NAT, IP Passthrough and Hybrid WAN Failover. Licensed for one machine		
BC00000850	per unit quantity.	\$	5.19
	Subscription 60 month term (with Support) - Support for Connector internal local router		
	capabilities, including NAT, IP Passthrough and Hybrid WAN Failover. Licensed for one machine		
BC00000851	per unit quantity.	\$	51.85
	Subscription 36 month (with support): Connector SMB base license -limit of 50 Mbps and 4-		
	core server. License: APIs, L2 data path with CE2.0 features, L3 IP Class'n / IP Forwarding, VRF		
BC00000858	& BGP and IKE/IPsec on mgt plane. Licensed for one machine.	\$	182.52

	Subscription 60 month term (with support) - Orchestration base feature set, includes VNFM		
BC00000863	and NFVO feature set. Licensed per managed element.	\$	163.70
	Subscription 36 month (with support): Connector SMB base license -limit of 100 Mbps and 4-	*	2000
	core server. License: APIs, L2 data path with CE2.0 features, L3 IP Class'n / IP Forwarding, VRF		
BC00000860	& BGP and IKE/IPsec on mgt plane. Licensed for one machine.	\$	298.67
	Subscription 60 month (with support): Connector SMB base license -limit of 50 Mbps and 4-		
	core server. License: APIs, L2 data path with CE2.0 features, L3 IP Class'n / IP Forwarding, VRF		
BC00000859	& BGP and IKE/IPsec on mgt plane. Licensed for one machine.	\$	277.04
	Subscription 60 month (with support): Connector SMB base license -limit of 100 Mbps and 4-		
	core server. License: APIs, L2 data path with CE2.0 features, L3 IP Class'n / IP Forwarding, VRF		
BC00000861	& BGP and IKE/IPsec on mgt plane. Licensed for one machine.	\$	453.33
	Subscription 36 month term (with support) - Orchestration base feature set, includes VNFM		
BC00000862	and NFVO feature set. Licensed per managed element.	\$	107.85
	Subscription 36 month term (with support) - Ensemble Director base license, includes		
BC00000866	management and Zero Touch feature set. Licensed per managed element.	\$	149.33
DC0000000	Subscription 60 month term (with support) - Ensemble Director high availability feature uplift.	<u>,</u>	62.06
BC00000869	Licensed per managed element.	\$	62.96
BC00000867	Subscription 60 month term (with support) - Ensemble Director base license, includes	۲	226.67
BC00000867	management and Zero Touch feature set. Licensed per managed element. Subscription 36 month term (with support) - Ensemble Director high availability feature uplift.	\$	226.67
BC00000868	Licensed per managed element.	\$	41.48
BC00000808	1515 chassis, 8 Core Intel C3758, 2xDDR4-2133 8GB DIMM, 128GB SSD, includes 6 x Gbe RJ45	Ų	41.40
1089002046-01	ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	3,552.27
1003002010 01	1515 chassis, 4 Core Intel C3558, 2xDDR4-2133 8GB DIMM, 128GB SSD, includes 4 x Gbe RJ45	Y	3,332.27
1089002048-01	ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	3,318.50
1089002200-01	1515 series rack mount kit (single unit)	, \$	136.89
1003002200 01	1515 series ruck mount kit (single unit) 1515 chassis, 8 Core Intel C3758, 2x E4DDR4-2133 16GB DIMM, 256GB SSD, includes 6 x Gbe	7	130.03
1089002049-01	RJ45 ports, 2 x SFP ports. LTE enabled - Sierra-7455 module installed.	\$	4,666.65
1089002201-01	1515 series wall mount kit (single unit)	\$	136.89
	Ensemble Activator bundle includes whitebox license, control plane, BC Sync, whitebox	*	100.00
BC00001385	advance control plane Key and 100G, each license with 2 Keys	\$	10,080.00
	Ensemble Activator bundle includes whitebox license, control plane, BC Sync, whitebox		
BC00001386	advance control plane Key and 400G, each license with 2 Keys	\$	22,026.67
1091489200-01	FSP 150-Z4806V2 Base SW features, Must order one License for each Z4806V2 chassis	\$	2,240.00
	Ensemble Activator bundle includes whitebox license, control plane, BC Sync, whitebox		
BC00001384	advance control plane Key and 400G	\$	11,013.33
	Ensemble Activator bundle includes whitebox license, control plane, BC Sync, whitebox		
BC00001383	advance control plane Key and 100G	\$	5,040.00
	Ensemble Activator for Whitebox 480G Bandwidth Capacity Key. Requires		
1091489501-01	ACTVR/WB/SW/100G/BASE/KEY to be installed.	\$	5,973.33
1091489503-01	Ensemble Activator for whitebox IP control plane Key	\$	747.02
1091489504-01	Ensemble Activator for whitebox advance control plane Key	\$	1,492.96
	Ensemble Activator for Whitebox Base key that provides basic functionality and 120G		
1091489500-01	Bandwidth capacity. Must order one License for each device/chassis	\$	2,240.00
1091489505-01	Ensemble Activator for whitebox BC Sync Key	\$	560.00
1091489202-01	FSP 150-Z4806V2 L3 License Key. F150/Z4806/SW/BASE/KEY is mandatory to use this key	\$	11,200.00
1091489203-01	FSP 150-Z4806 MPLS License Key. F150/Z4806/L3/KEY is mandatory to use this key	\$	5,600.00
	FSP 150-Z4806V2 Full Bandwidth Capacity License Key. F150/Z4806/400G/KEY is mandatory to	Ψ.	2,200.00
1091489201-01	use this key	\$	8,960.00
	FSP 150-Z4806V2 for 480G Bandwidth Capacity License Key. F150/Z4806/200G/KEY is	•	,
1091489205-01	mandatory to use this key	\$	2,240.00
	Ensemble Activator for Whitebox 800G Bandwidth Capacity key. Requires		
1091489502-01	ACTVR/WB/400G/KEY to be installed.	\$	8,960.00

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91003751	Ensemble Controller Connection License for one shelf of FAS ALM 64, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	881.75
91003/31		Ş	001.75
91003851	Ensemble Controller Connection License for one shelf of FAS ALM 64 UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	298.13
31003831	Ensemble Bandwidth Manager, license shipped in paper form, applicable to ENC 11.3 and prior	Ų	236.13
1091002900	versions	\$	13,675.20
1091002900		Ş	15,675.20
1091002905	Upgrade of Ensemble Bandwidth Manager, license shipped in paper form, applicable to ENC	\$	5,014.24
1091002903	11.3 and prior versions	Ş	5,014.24
1091002680	Ensemble Controller Connection Licenses for a network elements of type Cesium Clock, license	\$	1,169.53
1091002080	shipped in paper form, applicable to ENC 11.3 and prior versions	Ş	1,109.55
	Ensemble Controller Connection Licenses for a network elements of type FSP 150 CP, CC, Mx,		
1091002586	GE114Pro, XG100, XG300, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	164.62
1091002586		Ş	104.02
	Ensemble Controller Connection Licenses for a network elements of type OSA 5548C SSU/TSG		
1001002670	(E200/E60), OSA5335 PTP GM and OSA 5440, license shipped in paper form, applicable to ENC	ċ	2,340.21
1091002670	11.3 and prior versions	\$	2,340.21
1001002652	Ensemble Controller Connection Licenses for a network elements of type OSA542x, license	<u> </u>	101.00
1091002652	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	191.08
04.004.750	Optional license per ENC server for stand-by server usage, license shipped in paper form,	<u>,</u>	20.056.06
91001750	applicable to ENC 11.3 and prior versions	\$	20,056.96
04000450	Ensemble Controller Connection License for FSP 3000R7, license shipped in paper form,		2 222 27
91003150	applicable to ENC 11.3 and prior versions	\$	2,832.87
	Ensemble Controller Connection License for one slimline shelf of FSP 3000 C (1HU or 2HU),		
91003520	license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	1,025.64
	Ensemble Controller Connection License for one slimline shelf of FSP 3000C (1HU or 2HU)		
91003620	UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	399.44
	Ensemble Controller Connection Licenses for a tiny network element of type FSP 150		
1091002089	(GE101Pro) UPDATE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	19.57
	Ensemble Controller Connection Licenses for a tiny network element of type FSP 150		
1091002084	(GE101Pro), license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	49.50
	Upgrade for Ensemble Sync Director Server License, license shipped in paper form, applicable		
1091002625	to ENC 11.3 and prior versions	\$	2,393.16
	Ensemble Sync Director Server License, license shipped in paper form, applicable to ENC 11.3		
1091002620	and prior versions	\$	5,849.94
	Ensemble Sync Director Connection License for small Access devices/Edge PTP GM, license		
1091002630	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	62.16
	Ensemble Sync Director Connection License Big, license shipped in paper form, applicable to		
1091002640	ENC 11.3 and prior versions	\$	1,276.58
	Ensemble Sync Director Connection License for small Access devices/Edge PTP GM UPGRADE,		
1091002635	license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	20.73
	Upgrade for Ensemble Sync Director Connection License Big, license shipped in paper form,		
1091002645	applicable to ENC 11.3 and prior versions	\$	425.91
	Ensemble Controller Connection Licenses for a network elements of type OSA542x UPGRADE,		
1091002657	license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	66.77
	FS Ensemble Sync Director Connection License for Medium/Large PTP GMs and SSU/TSGs		
1091002637	UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	34.55
	Ensemble Controller Connection Licenses for one shelf of type FSP 3000R7 small only, license		
91003160	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	478.86
	Ensemble Controller Connection Licenses for a network elements of type OSA 5548C SSU/TSG		
	(E200/E60), OSA5335 PTP GM and OSA 5440 UPGRADE, license shipped in paper form,		
1091002675	applicable to ENC 11.3 and prior versions	\$	702.18
	Ensemble Controller Connection License for one shelf of FAS ALM, license shipped in paper		
91003750	form, applicable to ENC 11.3 and prior versions	\$	455.84

	FCD Notice of Manager OTN Consider Language Process Alice of Section 12 and 12		
1091002800	FSP Network Manager OTN Service Layer License, license shipped in paper form, applicable to ENC 10.5 and prior versions	\$	9,116.79
01003350	Ensemble Controller Connection Licenses for one shelf of type FSP 3000R7 UPGRADE, license	۲	046 21
91003250	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	946.21
91003260	Ensemble Controller Connection Licenses for one shelf of type FSP 3000R7 small UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	160.00
91003200		Ş	160.00
91004100	Ensemble Controller Connection License for Generic SNMP NE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	181.88
91004100	Ensemble Controller Connection License for Generic SNMP NE UPGRADE, license shipped in	۲	101.00
91004200	paper form, applicable to ENC 11.3 and prior versions	\$	61.01
31004200	Ensemble Optical Director License for Active WDM Provisioning, license shipped in paper form,	Ų	01.01
1091002500	applicable to ENC 11.3 and prior versions	\$	22,792.00
1031002300	Ensemble Controller Connection Licenses for a network element of type FSP 150CM, FSP	Y	22,732.00
	150CC-XG210 or HN 4000, license shipped in paper form, applicable to ENC 11.3 and prior		
1091002082	versions	\$	637.72
	Ensemble Controller Connection Licenses for a network element of type FSP 150EG-X or FSP	•	
1091002083	150EG-M, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	4,512.36
	Ensemble Controller Connection Licenses for a network element of type FSP 150CM, FSP		
	150CC-XG210 or HN 4000 UPGRADE, license shipped in paper form, applicable to ENC 11.3 and		
1091002087	prior versions	\$	218.71
	Ensemble Controller Connection Licenses for a network element of type FSP 150EG-X or FSP		
1091002088	150EG-M UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	1,504.50
	Ensemble Controller Connection License for one large shelf of FSP 3000 C (12HU), license		
91003500	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	10,028.47
	Ensemble Sync Director Connection License for Medium/Large PTP GMs and SSU/TSGs, license		
1091002632	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	95.56
	Upgrade for Ensemble Optical Director License for Active WDM Provisioning, license shipped in		
1091002530	paper form, applicable to ENC 11.3 and prior versions	\$	8,205.13
	Upgrade of Ensemble Command Based Manager, license shipped in paper form, applicable to		
1091002705	ENC 11.3 and prior versions	\$	4,558.40
	Upgrade Ensemble ConnectGuard Director, license shipped in paper form, applicable to ENC	_	
1091002605	11.3 and prior versions	\$	5,166.19
100100000	Upgrade of FSP Network Manager OTN Service Layer License, license shipped in paper form,		2 440 00
1091002805	applicable to FSP NM 10.5 and prior versions	\$	3,418.80
1001003500	Ensemble ConnectGuard Director, license shipped in paper form, applicable to ENC 11.3 and	Ļ	12 675 20
1091002600	prior versions	\$	13,675.20
1091002650	Ensemble Controller Connection Licenses for a network elements of type OSA540x or OSA541x, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	105.90
1091002030	Ensemble Controller Connection License for a network elements of type PTP GM and NTP	Ç	103.90
	Server OSA 5430 and PTP GM OSA 5331 UPGRADE, license shipped in paper form, applicable to		
1091002665	ENC 11.3 and prior versions	\$	249.79
		7	
	Ensemble Controller Connection Licenses for a network elements of type OSA540x or OSA541x		
1091002655	UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	36.83
	Ensemble Controller Connection License for a network elements of type PTP GM and NTP		
	Server OSA 5430 and PTP GM OSA 5331, license shipped in paper form, applicable to ENC 11.3		
1091002660	and prior versions	\$	744.77
	Ensemble Controller Connection License for one shelf of type FSP 3000R7 big (9 HU) UPGRADE,		
91003270	license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	1,504.50
	Ensemble Controller Connection License for one shelf of type FSP 3000R7 big (9 HU), license		
91003170	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	4,558.40
	Ensemble Command Based Manager Connection Licenses for a small network elements of type		
	FSP 150 (GE101Pro, GO102Pro, GE 201, GE112 or GE114) and OSA54xx, license shipped in	_	
1091002701	paper form, applicable to ENC 11.3 and prior versions	\$	27.63

	Ensemble Command Based Manager Connection Licenses for a network element of type FSP		
	150CM or FSP 150CC-XG210, license shipped in paper form, applicable to ENC 11.3 and prior		
1091002702	versions	\$	160.00
	Ensemble Command Based Manager Connection Licenses for a small network elements of type		
1091002706	FSP 150 (GE101Pro, GO102Pro, GE 201, GE112 or GE114) UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	9.21
1031002700	Ensemble Command Based Manager Connection Licenses for a network element of type FSP	ې	9.21
	150CM or FSP 150CC-XG210 UPGRADE, license shipped in paper form, applicable to ENC 11.3		
1091002707	and prior versions	\$	55.26
	Ensemble Command Based Manager Connection Licenses for a network elements of type FSP	•	
	150 CC (GE206, 825, T-series), GE114Pro, XG100 UPGRADE, license shipped in paper form,		
1091002709	applicable to ENC 11.3 and prior versions	\$	14.96
	Ensemble Command Based Manager Connection Licenses for a network elements of type FSP		
	150 CC (GE206, 825, T-series), GE114Pro, XG100, license shipped in paper form, applicable to		
1091002704	ENC 11.3 and prior versions	\$	41.44
	Ensemble Command Based Manager Connection Licenses for a network element of type FSP		
	150EG-X or FSP 150EG-M, license shipped in paper form, applicable to ENC 11.3 and prior		
1091002703	versions	\$	911.67
	Ensemble Command Based Manager Connection Licenses for a network element of type FSP		
1091002708	150EG-X or FSP 150EG-M UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	308.50
	·		308.30
1091002285	Specific Development Service for FSP Network Manager	\$	-
91003850	Ensemble Controller Connection License for one shelf of FAS ALM UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	151.94
91003830	Ensemble Controller Connection Licenses for a small network elements of type FSP 150	۲	131.94
	(GO102Pro, GE 201, GE112 or GE114) or HN400, license shipped in paper form, applicable to		
1091002081	ENC 11.3 and prior versions	\$	90.93
	Ensemble Controller Connection Licenses for a small network elements of type FSP 150		
	(GO102Pro, GE 201, GE112 or GE114) or HN400 UPGRADE, license shipped in paper form,		
1091002086	applicable to ENC 11.3 and prior versions	\$	32.24
	Ensemble Controller Connection Licenses for a network elements of type FSP 150 CP, CC, Mx,		
	GE114Pro, XG100, XG300 UPGRADE, license shipped in paper form, applicable to ENC 11.3 and		
1091002581	prior versions	\$	57.56
	Ensemble Command Based Manager, license shipped in paper form, applicable to ENC 11.3		
1091002700	and prior versions	\$	12,033.72
01003510	Ensemble Controller Connection License for one compact shelf of FSP 3000 C (3HU or 4HU),	<u>,</u>	2 522 76
91003510	license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	3,532.76
91003550	Ensemble Controller Connection License for one QuadFlex Card (MP-2B4CT), license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	5,014.24
91003330	Ensemble Controller Connection License for one large shelf of FSP 3000 C (12HU) UPGRADE,	۲	3,014.24
91003600	license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	3,532.76
	Ensemble Controller Connection License for one QuadFlex Card (MP-2B4CT) UPGRADE, license	*	2,2222
91003650	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	1,800.34
	Ensemble Controller Connection License for one compact shelf of FSP 3000 C (3HU or 4HU)		
91003610	UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	1,253.56
	Ensemble Controller Connection Licenses for a network elements of type ADVA 150-XG400,		
1091002721	FSP 150-Z UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	820.74
1001002720	Ensemble Controller Connection Licenses for a network elements of type ADVA 150-XG400,		2 507 42
1091002720	FSP 150-Z, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	2,507.13
1091002685	Ensemble Controller Connection Licenses for a network elements of type Cesium Clock UPGRADE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	409.79
1031002003	Optical Connection UPGRADE License F7 Large: ENC License for one shelf of type FSP 3000R7	ب	703.73
1091007035	big (9 HU) UPGRADE from 12.X or higher to next major release	\$	1,173.38
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	ENC Instance Upgrade License to upgrade from release 12.X to 13.X; any OS; Media is NOT		
1091006135	included, order separately when required	\$	978.44
	Optical Connection UPGRADE License F7 Small: ENC License for one shelf of type FSP 3000R7		
1091007015	small UPGRADE from 12.X or higher to next major release	\$	135.38
	Optical Connection UPGRADE License F7 Medium: ENC License for one shelf of type FSP		
1091007025	3000R7 UPGRADE from version 12.X or higher to next major release	\$	812.33
	Outiral Connection LIDCRADE Linears FO Corolly FAIC Linears for one small modules shalf of FCD		
1091007055	Optical Connection UPGRADE License F8 Small: ENC License for one small modular shelf of FSP 3000 C (1HU or 2HU or Teraflex) UPGRADE from 12.X or higher to next major release	\$	270.79
1091007033	Optical Connection UPGRADE License F8 Medium: ENC License for one compact shelf of FSP	J	270.73
1091007065	3000 C (3HU or 4HU) UPGRADE from 12.X or higher to next major release	\$	992.84
	Optical Connection UPGRADE License F8 Large: ENC License for one large shelf of FSP 3000 C	•	
1091007075	(12HU) UPGRADE from 12.X or higher to next major release	\$	2,707.79
	ENC UPGRADE License for one High Speed Mux Card, such as QuadFlex (MP-2B4CT) and its		
	variants and Teraflex sleds (e.g. MP-2D12CT or T-MP-2D8CT or T-MP-2D3DT) and its variants,		
1091007085	or OpenFab1200 (OF-2D16DCT) from 12.X or higher to next major release	\$	1,489.30
	Optical Connection License ACC Small: ENC License for one shelf of type FSP 3000 ACC small		
1091007115	UPGRADE from 12.X or higher to next major release	\$	153.42
1001007135	Optical Connection License ACC Medium: ENC License for FSP 3000 ACC UPGRADE from 12.X or		F96 70
1091007125	higher to next major release Optical Connection License ACC Large: ENC License for one large shelf type ESD 2000ACC	\$	586.70
1091007135	Optical Connection License ACC Large: ENC License for one large shelf type FSP 3000ACC UPGRADE from 12.X or higher to next major release	\$	992.84
1031007133	Packet Connection Upgrade License Eth Extra Small: ENC License for a tiny network element of	7	332.04
1091007215	type FSP 150 (GE101Pro) UPGRADE from 12.X or higher to next major release	\$	14.43
	Packet Connection Upgrade License Eth Small: ENC License for a small network elements of		
	type FSP 150 (Gx102Pro, GE11x[Pro], GE104, GE201) OS606 or HN400, UPGRADE from 12.X or		
1091007225	higher to next major release	\$	27.11
	Packet Connection Upgrade License Eth Medium: ENC License for a network elements of type		
	FSP 150CP, CC, MX, GE206, XG1xx[Pro], XG304 or OS900 series, UPGRADE from 12.X or higher		
1091007235	to next major release	\$	45.13
	Packet Connection Upgrade License Eth Large: ENC License for a network element of type FSP		
1091007245	150CM, XG210, XG308, XG312, XG404, XG418, HN 4000 or OS9000 series, UPGRADE from 12.X or higher to next major release	\$	180.52
1091007243	of flighter to flext fliajor release	J	100.52
	Packet Connection Upgrade License Eth Extra Large: ENC License for a network element of type		
1091007255	FSP150 XG480, EG-Z4806, EG-X or EG-M, UPGRADE from 12.X or higher to next major release	\$	466.67
	Sync Connection Upgrade License OSA Extra Small: ENC License for a network elements of type		
1091007315	OSA540x or OSA5410 or 5411 UPGRADE from 12.X or higher to next major release	\$	30.22
	Sync Connection Upgrade License OSA Small: ENC License for a network elements of type		
1091007325	OSA542x or OSA5412 UPGRADE from 12.X or higher to next major release	\$	50.36
	Sync Connection Upgrade License OSA Medium: ENC License for a network elements of type		
1091007335	PTP GM and NTP Server OSA 5430 and PTP GM OSA 5331 UPGRADE from 12.X or higher to next major release	\$	201.45
1091007333	Sync Connection Upgrade License OSA Large: ENC License for a network elements of type	ې	201.43
1091007345	Cesium Clock UPGRADE from 12.X or higher to next major release	\$	302.18
200 200 / 0 / 0	Sync Connection Upgrade License OSA Extra Large: ENC License for a network elements of type	*	002.20
	OSA 5548C SSU/TSG (E200/E60), OSA5335 PTP GM and OSA 5440 UPGRADE from 12.X or		
1091007355	higher to next major release	\$	644.64
	Fiber Connection Upgrade License ALM Medium: ENC License for one shelf of FAS ALM or 96-		
1091007435	port extender shelf UPGRADE from 12.X or higher to next major release	\$	176.30
	Optical Connection License F7 Small: ENC License for one shelf of type FSP 3000R7 small only;		
BC00001088	including Ensemble Optical Director Connection License; for release 13 and higher	\$	1,321.39
PC00001080	Optical Connection License F7 Medium: ENC License for FSP 3000R7; including Ensemble	خ	E 040 00
BC00001089	Optical Director Connection License; for release 13 and higher	\$	5,848.80

BC00001090	Optical Connection License F7 Large: ENC License for one shelf of type FSP 3000R7 large (9 HU); including Ensemble Optical Director Connection License; for release 13 and higher	\$ 9,889.04
BC00001091	Optical Connection License F8 Small: ENC License for one slimline shelf of FSP 3000 C (1HU or 2HU); including Ensemble Optical Director Connection License; for release 13 and higher	\$ 1,862.99
BC00001092	Optical Connection License F8 Medium: ENC License for one compact shelf of FSP 3000 C (3HU or 4HU); including Ensemble Optical Director Connection License; for release 13 and higher	\$ 6,570.81
BC00001093	Optical Connection License F8 Large: ENC License for one large shelf of FSP 3000 C (12HU); including Ensemble Optical Director Connection License; for release 13 and higher Fiber Connection License ALM Medium: ENC License for one shelf of FAS ALM; incl Ensemble	\$ 16,026.87
BC00001098	Fiber Director Connection License; for release 13 and higher	\$ 1,125.17
BC00001099	Fiber Connection License ALM Large: ENC License for one shelf of FAS ALM 64; incl Ensemble Fiber Director Connection License; for release 13 and higher	\$ 2,426.67
BC00001100	Packet Connection License Eth Extra Small: ENC License for a tiny network element of type FSP 150 (GE101Pro); including Packet Director Connection License; for release 13 and higher Packet Connection License Eth Small: ENC License for a small network elements of type FSP	\$ 93.87
BC00001101	150 (GO102Pro, GE1xx(pro), GE 201) OS606 or HN400; including Packet Director Connection License; for release 13 and higher Packet Connection License Eth Medium: ENC License for a network elements of type FSP	\$ 173.30
BC00001102	150CP, CC, MX, XG1xx(pro), XG304 or OS900 series; including Packet Director Connection License; for release 13 and higher Packet Connection License Eth Large: ENC License for a network element of type FSP 150CM,	\$ 288.83
BC00001103	XG210, XG308, HN 4000 or OS9000 series; including Packet Director Connection License; for release 13 and higher Packet Connection License Eth Extra Large: ENC License for a network element of type FSP	\$ 1,047.01
BC00001104	XG400, Z4806, EG-X or EG-M; including Packet Director Connection License; for release 13 and higher	\$ 2,737.78
BC00001105	Sync Connection License OSA Extra Small: ENC License for a network elements of type OSA540x or OSA541x; including Sync Director Connection License; for release 13 and higher	\$ 212.92
BC00001106	Sync Connection License OSA Small: ENC License for a network elements of type OSA542x; including Sync Director Connection License; for release 13 and higher Sync Connection License OSA Medium: ENC License for a network elements of type PTP GM	\$ 515.67
BC00001107	and NTP Server OSA 5430 and PTP GM OSA 5331; including Sync Director Connection License; for release 13 and higher Synch Connection License OSA Large: ENC License for a network elements of type Cesium	\$ 1,238.24
BC00001108	Clock; including Sync Director Connection License; for release 13 and higher Sync Connection License OSA Extra Large: ENC License for a network elements of type OSA	\$ 1,772.71
BC00001109	5548C SSU/TSG (E200/E60), OSA5335 PTP GM and OSA 5440; including Sync Director Connection License; for release 13 and higher Sync GNSS Assurance Connection UPGRADE from 12.X or higher to next major release License	\$ 3,620.09
1091009455	OSA Extra Large: for a network elements of type OSA 5548C SSU/TSG (E200/E60), OSA5335 PTP GM and OSA 5440, TP5000 (Microsemi) Fiber Connection Upgrade License ALM Large: ENC License for one shelf of FAS ALM 64	\$ 248.79
1091007445	UPGRADE from 12.X or higher to next major release	\$ 352.59
1091007905	3rd Party Connection Upgrade License Generic SNMP: ENC License for Generic SNMP NE UPGRADE from 12.X or higher to next major release Connection Upgrade License FSP 1500: ENC License for a network element of type FSP 1500,	\$ 54.15
1091007915	UPGRADE from 12.X or higher to next major release	\$ 57.56
1091008015	Upgrade license for an ENC server for stand-by server usage UPGRADE from 12.X or higher to next major release	\$ 5,415.56

1091008025	Streaming Replication HA UPGRADE for ENC server UPGRADE from 12.X or higher to next major release	\$ 2.30
1091008035	Upgrade Ensemble ConnectGuard Director UPGRADE from 12.X or higher to next major release	\$ 3,971.41
1091008045	Upgrade of Ensemble Bandwidth Manager UPGRADE from 12.X or higher to next major release	\$ 3,971.41
1091008055	Upgrade of Ensemble Command Based Manager UPGRADE from 12.X or higher to next major release	\$ 4,489.33
1091008115	Upgrade for Ensemble Director T-API SDN northbound interface License UPGRADE from 12.X or higher to next major release	\$ 48,138.15
1091008135	Optional license per ENC server for north bound MTOSI interface UPGRADE from 12.X or higher to next major release	\$ 48,138.15
1091008315	Ensemble Sync Assurance Manager for GNSS Upgrade License: Upgrade for Ensemble Assurance for GNSS Manager from 12.X or higher to next major release	\$ 1,564.87
1091008325	Ensemble Sync Assurance Manager for PTP Upgrade License: Upgrade for Ensemble Assurance for PTP Manager from 12.X or higher to next major release	\$ 1,611.56
1091008915	Ensemble Optical Director Upgrade License: Upgrade for Ensemble Optical Director License for Active WDM Provisioning from 12.X or higher to next major release	\$ 6,498.68
1091008925	Ensemble Packet Director Upgrade License: Upgrade for Ensemble Packet Director License for Active Ethernet Provisioning from 12.X or higher to next major release	\$ 9,151.33
1091008935	Ensemble Sync Director Upgrade License: Upgrade for Ensemble Sync Director Server License from 12.X or higher to next major release	\$ 1,611.56
1091008945	Ensemble Fiber Director Upgrade License: Upgrade for Ensemble Fiber Director from 12.X or higher to next major release	\$ 1,047.41
1091009225	Packet Director Upgrade Connection Licenses Small: Required for one Ethernet device of size S, UPGRADE from 12.X or higher to next major release	\$ 16.25
1091009245	Packet Director Upgrade Connection Licenses Large: Required for one Ethernet device of size L, UPGRADE from 12.X or higher to next major release	\$ 81.21
400400000	Sync Director Connection Upgrade License Small: Required to upgrade one Sync device of size S	70.55
1091009325	and for any sync-capable Ethernet device of size S from 12.X or higher to next major release	\$ 78.55
1091009345	Sync Director Connection Upgrade License Large: Required to upgrade one Sync device of size L and for any sync-capable Ethernet device of size L from 12.X or higher to next major release	\$ 141.02
1091009415	Sync GNSS Assurance Connection UPGRADE License from 12.X or higher to next major release OSA Extra Small: ENC License for a network elements of type OSA540x or OSA5410 or OSA5411 Sync GNSS Assurance Connection UPGRADE from 12.X or higher to next major release License	\$ 46.80
1091009425	OSA Small: ENC License for a network elements of type OSA542x or OSA5412 Sync GNSS Assurance Connection UPGRADE from version 12.X or higher to next major release.	\$ 139.76
1091009435	License OSA Medium: ENC License for a network elements of type OSA 5430	\$ 202.41
1091008941	Ensemble Fiber Editor Application License for one client	\$ 2,127.26
1091007450	Fiber Connection License ALM Extra Large: ENC License for one shelf of FAS ALM 384 port extender, applicable to ENC 14 and later versions	\$ 2,820.74
1091003133-02	ENC Install Media version 13.3.2	\$ 161.16
1091003132-02	ENC Install Media version 13.2.2	\$ 161.16
1091009403	Ensemble Fiber Director connection License for one ALM unit extra large (384 port extender), applicable to ENC 14 and later versions	\$ 1,866.67
1091009408	Ensemble Fiber Director connection License for one extra large ALM unit, UPGRADE from 14.X (or higher) to next major release	\$ 461.48
1091009401	Ensemble Fiber Director connection License for one ALM unit medium or 96-port extender shelf, applicable to ENC 13.1 and later versions Ensemble Optical Director Connection Licenses for one large shelf of type FSP3000, applicable	\$ 414.81
1091009130	to ENC 13.1 and later versions	\$ 5,195.78

1091003124-02	ENC Install Media Version 12.4.2	\$	161.16
1091003124-01	FSP Network Manager Install Media Version 12.4.1	\$	161.16
	Sync GNSS Assurance Connection UPGRADE from 12.X or higher to next major release License		
1091009465	for 3rd party devices	\$	140.00
	Fiber Connection Upgrade License ALM Large: ENC License for one shelf of FAS ALM 384 port		
1091007455	extender UPGRADE from 14.X or higher to next major release	\$	700.00
	Sync Director Connection License Extra Small: Required for one Sync device of size XS and for		
1091009310	any sync-capable Ethernet device of size XS, applicable to ENC 13.1 and later versions	\$	92.07
	Sync Director Connection License Small: Required for one Sync device of size S and for any sync-		
1091009321	capable Ethernet device of size S, applicable to ENC 13.1 and later versions	\$	314.22
	Come Director Compacting Linears Madison, Descriped for one Come device of size Manual for one		
1091009330	Sync Director Connection License Medium: Required for one Sync device of size M and for any sync-capable Ethernet device of size M, applicable to ENC 13.1 and later versions	\$	432.44
1031003330	Ensemble Fiber Director connection License for one ALM unit large, applicable to ENC 13.1 and	Ÿ	132.11
1091009402	later versions	\$	1,005.93
1091020023	Ensemble Simulator license for F7 software release R21.x.	\$	7,259.26
1091003133-03	ENC Install Media version 13.3.3	\$	161.16
1091020033	Ensemble Simulator license for F8 software release R4.x.	\$	7,259.26
	Optical Connection License F8 Extra Small: ENC License for one extra small shelf of FSP 3000 C		
1091007040	(AccessFlex), only applicable from ENC 15.x onwards	\$	258.22
1001007045	Optical Connection UPGRADE License F8 Extra Small: ENC License for one extra small shelf of	<u>,</u>	64.04
1091007045	FSP 3000 C (AccessFlex) UPGRADE from 15.X or higher to next major release ENC Instance Upgrade License to upgrade from release 14.X to 15.X; any OS; Media is NOT	\$	64.81
1091006155	included	\$	1,022.93
1091020041	Ensemble Simulator license for F4 software release R19.x.	\$	4,148.13
	Ensemble Controller Server License (any OS) Release 15.x, license shipped in electronic form,	•	,
1091006150	Media is NOT included	\$	4,091.72
1091008040	Ensemble Bandwidth Manager, applicable to ENC 12.1 and later versions	\$	15,885.66
	FSP Network Manager Connection License for one TeraFlex Sled (MP-2D12CT), license shipped		
91003560	in paper form, applicable to ENC 11.3 and prior versions	\$	5,879.88
1091001124	Ensemble Controller Server License (Windows Server 2008/2012) Release 11.x, license shipped in paper form, Media (DVD) is NOT included, order separately when required	\$	3,646.73
1091020022	Ensemble Simulator license for F7 software release R20.x.	\$	7,259.26
1091003132-01	ENC Install Media version 13.2.1	ڊ ذ	161.16
1031003132-01	Ensemble Simulator application license for release 2.x; includes rights to simulate one NE SW	ب	101.10
1091020002	release; simulation of up to 10 NE's. Unlimited users.	\$	25,925.93
1091003133-01	ENC Install Media version 13.3.1	\$	161.16
1091003131-02	ENC Install Media version 13.1.2	\$	161.16
	Packet Director Connection License Medium: Required for one Ethernet device size M,		
1091009230	applicable to ENC 13.x and later versions	\$	108.31
1001000050	Packet Director Connection License Extra Large: Required for one Ethernet device size XL,		074.44
1091009250	applicable to ENC 13.x and later versions Packet Director Connection License Large: Required for one Ethernet device size L, applicable	\$	871.11
1091009241	to ENC 13.x and later versions	\$	324.93
	Ensemble Controller Server License (any OS) Release 14.x, license shipped in electronic form,	•	
1091006140	Media is NOT included, order separately when required	\$	4,091.72
	ENC Instance Upgrade License to upgrade from release 13.X to 14.X; any OS; Media is NOT		
1091006145	included, order separately when required	\$	1,022.93
1091007015-12	Optical Connection UPGRADE License F7 Small: ENC License for one shelf of type FSP 3000R7 small UPGRADE to 12.X	\$	129.51
103100,013 12	Optical Connection UPGRADE License F8 Small: ENC License for one slimline shelf of FSP 3000C	ب	129.91
1091007055-12	(1HU or 2HU) UPGRADE to 12.X	\$	258.99

	Sunch Connection License OSA Larger FNC License for a network elements of time Cosium		
1091007340	Synch Connection License OSA Large: ENC License for a network elements of type Cesium Clock, applicable to ENC 12.1 and later versions	\$	1,208.67
1031007010	Ensemble Sync Assurance Manager for PTP License: this is intended to monitor clock recovery	Ψ	1,200.07
	quality (time error and time interval error, TE/TIE) of Boundary clocks and PTP Slaves,		
1091008320	applicable to ENC 12.1 and later versions	\$	6,446.22
	Sync Connection License OSA Extra Small: ENC License for a network elements of type		
1091007310	OSA540x or OSA5410 or OSA5411, applicable to ENC 12.1 and later versions	\$	120.86
	Sync GNSS Assurance Connection License OSA Extra Small: ENC License for a network elements		
1091009410	of type OSA540x or OSA5410 or OSA5411, applicable to ENC 12.1 and later versions	\$	186.67
1001000430	Sync GNSS Assurance Connection License OSA Small: ENC License for a network elements of	۲.	558.76
1091009420	type OSA542x or OSA5412, applicable to ENC 12.1 and later versions Optional license per ENC server for north bound MTOSI interface, applicable to ENC 12.1 and	\$	558.76
1091008130	later versions	\$	192,553.45
1031000130	Fiber Connection License ALM Large: ENC License for one shelf of FAS ALM 64, applicable to	Y	132,333.43
1091007440	ENC 12.1 and later versions	\$	1,420.74
	3rd Party Connection License Generic SNMP: ENC License for Generic SNMP NE, for 3rd party,	•	,
1091007900	applicable to ENC 12.1 and later versions	\$	216.62
	Sync Director Connection License Large: Required for one Sync device (L or XL) and for any sync		
1091009340	capable Ethernet device (XL), applicable to ENC 12.x	\$	702.18
	Sync Connection License OSA Extra Large: ENC License for a network elements of type OSA		
	5548C SSU/TSG (E200/E60), OSA5335 PTP GM and OSA 5440, applicable to ENC 12.1 and later		
1091007350	versions	\$	2,578.49
	Ensemble Sync Ass. Manager for GNSS License: used for PTP Grand Masters or/and ePRTC, that		
1091008310	use GNSS as primary sync source. This include data history collection and analysis in a big scale, AI/ML, etc., applicable to ENC 12.1 and later versions	\$	6,259.56
1091008310	Sync GNSS Assurance Connection License OSA Extra Large: for a network elements of type OSA	٦	0,239.30
	5548C SSU/TSG (E200/E60), OSA5335 PTP GM and OSA 5440, TP5000 (Microsemi), applicable		
1091009450	to ENC 12.1 and later versions	\$	995.14
	Sync GNSS Assurance Connection License OSA Medium: ENC License for a network elements of	•	
1091009430	type OSA 5430, applicable to ENC 12.1 and later versions	\$	808.89
	Ensemble Optical Director License: Serves for active WDM Provisioning, applicable to ENC 12.1		
1091008910	and later versions	\$	25,994.37
1091008035-12	Upgrade Ensemble ConnectGuard Director UPGRADE to 12.X	\$	3,798.67
	Optical Connection UPGRADE License F8 Large: ENC License for one large shelf of FSP 3000 C		
1091007075-12	(12HU) UPGRADE to 12.X	\$	2,590.00
	Ensemble Sync Assurance Manager for GNSS Upgrade License: Upgrade for Ensemble		
1091008315-12	Assurance for GNSS Manager to 12.X	\$	1,309.39
1091008055-12	Upgrade of Ensemble Command Based Manager UPGRADE to 12.X	\$	4,489.33
1091008115-12	Upgrade for Ensemble Director T-API SDN northbound interface License UPGRADE to 12.X	\$	46,044.44
1091008113-12	Optical Connection License ACC Small: ENC License for one shelf of type FSP 3000 ACC small	٦	40,044.44
1091007115-12	UPGRADE to 12.X	\$	146.77
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1091007125-12	Optical Connection License ACC Medium: ENC License for FSP 3000 ACC UPGRADE to 12.X	\$	561.17
	Optical Connection License ACC Large: ENC License for one large shelf type FSP 3000ACC		
1091007135-12	UPGRADE to 12.X	\$	949.67
	Optical Connection UPGRADE License F7 Large: ENC License for one shelf of type FSP 3000R7		
1091007035-12	big (9 HU) UPGRADE to 12.X	\$	1,122.34
1091008020	Streaming Replication HA for ENC server, applicable to ENC 13.3 and later versions	\$	2.30
	Fiber Connection Upgrade License ALM Medium: ENC License for one shelf of FAS ALM		
1091007435-12	UPGRADE to 12.X	\$	126.62
1001000100	Ensemble Optical Director Connection Licenses for one shelf of type FSP3000, applicable to	Ļ	2 400 40
1091009100	ENC 12.x	\$	2,486.40

1091008946	Ensemble Fiber Editor Application License UPGRADE for one client	\$	746.68
1091009105-12	Ensemble Optical Director Connection Licenses for one shelf of type FSP3000, UPGRADE to 12.X	\$	621.60
1091009110	Ensemble Optical Director Connection Licenses for one small shelf of type FSP3000, applicable to ENC 13.1 and later versions	\$	779.84
1091009341	Sync Director Connection License Large: Required for one Sync device of size L and for any sync- capable Ethernet device of size L, applicable to ENC 13.1 and later versions		564.04
1091009221	Packet Director Connection License Small: Required for one Ethernet device size S, applicable to ENC 13.x and later versions	\$	64.98
1031003221	Sync Director Connection Upgrade License Extra Small: Required to upgrade one Sync device of	Ţ	04.38
1091009315	size XS and for any sync-capable Ethernet device of size XS from 12.X or higher to next major release	\$	23.02
1091009135	Ensemble Optical Director Connection Licenses for one large shelff of type FSP3000, UPGRADE from 12.X or higher to next major release	\$	1,299.73
1091009120	Ensemble Optical Director Connection Licenses for one medium shelf of type FSP3000, applicable to ENC 13.1 and later versions	\$	2,599.48
1091009215	Packet Director Upgrade Connection Licenses Extra Small: Required for one Ethernet device of size XS, UPGRADE from 12.X or higher to next major release	\$	9.04
	Packet Director Upgrade Connection Licenses Extra Large: Required for one Ethernet device of		
1091009255	size XL, UPGRADE from 12.X or higher to next major release Ensemble Optical Director Connection Licenses for one small shelf of type FSP3000, UPGRADE	\$	217.78
1091009115	from 12.X or higher to next major release Ensemble Optical Director Connection Licenses for one medium shelf of type FSP3000,	\$	194.95
1091009125	UPGRADE from 12.X or higher to next major release Sync GNSS Assurance Connection License for 3rd party devices, applicable to ENC 12.1 and	\$	649.87
1091009460	later versions	\$	560.00
1091008025-12	Streaming Replication HA UPGRADE for ENC server UPGRADE to 12.X	\$	2.30
1091009225-12	Packet Director Upgrade Connection Licenses Small: Required for one Ethernet device (XS, S or M), UPGRADE to 12.X	\$	15.54
1091008010	Optional license per ENC server for stand-by server usage, applicable to ENC 12.1 and later versions	\$	21,662.27
	Fiber Connection License ALM Medium: ENC License for one shelf of FAS ALM or 96-port		
1091007430	extender shelf, applicable to ENC 12.1 and later versions	\$	710.37
1091008940	Ensemble Fiber Director License: Serves for Geographical Management of Fibers in connection with ALM devices, applicable to ENC 12.1 and later versions	\$	4,189.63
1091009400	Ensemble Fiber Director connection License for one ALM unit, applicable to ENC 12.x	\$	239.44
1091007905-12	3rd Party Connection Upgrade License Generic SNMP: ENC License for Generic SNMP NE UPGRADE to 12.X	\$	51.81
	Sync Connection Upgrade License OSA Small: ENC License for a network elements of type	*	02.02
1091007325-12	OSA542x UPGRADE to 12.X Packet Connection License Eth Extra Large: ENC License for a network element of type FSP150	\$	50.36
1091007250	XG480, Z4806, EG-X or EG-M, applicable to ENC 12.1 and later versions	\$	1,866.67
1091007010	Optical Connection License F7 Small: ENC License for one shelf of type FSP 3000R7 small only, applicable to ENC 12.1 and later versions	\$	541.56
1091007065-12	Optical Connection UPGRADE License F8 Medium: ENC License for one compact shelf of FSP 3000 C (3HU or 4HU) UPGRADE to 12.X	\$	949.67
	Packet Connection Upgrade License Eth Large: ENC License for a network element of type FSP		
1091007245-12	150CM, XG210, XG308, XG404, XG418, HN 4000 or OS9000 series, UPGRADE to 12.X Packet Connection Upgrade License Eth Extra Large: ENC License for a network element of type	\$	172.67
1091007255-12	FSP XG480, Z4806, EG-X or EG-M, UPGRADE to 12.X	\$	466.67
1091008030	Ensemble ConnectGuard Director, applicable to ENC 12.1 and later versions Ensemble Packet Director License for Ethernet Service Management on PV Client, license	\$	15,885.66
1091002750	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	35,914.67

	Ensemble Packet Director Upgrade License: Upgrade for Ensemble Packet Director License for		
1091008925-12	Active Ethernet Provisioning to 12.X	\$	9,151.33
	Packet Director Upgrade Connection License Large: Required for one Ethernet device (L or XL),		
1091009245-12	UPGRADE to 12.X	\$	77.70
	Packet Director Connection License Extra Small: Required for one Ethernet device size XS,		
1091009210	applicable to ENC 13.x and later versions	\$	36.10
	Ensemble Fiber Director connection License for one medium ALM unit or 96-port extender	_	
1091009406	shelf, UPGRADE from 12.X (or higher) to next major release	\$	82.96
1091009407	Ensemble Fiber Director connection License for one large ALM unit, UPGRADE from 12.X (or higher) to next major release	\$	248.90
1031003407	Sync Director Connection Upgrade License Extra Large: Required to upgrade one Sync device of	۲	246.90
	size XL and for any sync-capable Ethernet device of size XL from 12.X or higher to next major		
1091009355	release	\$	260.41
	Sync Director Connection Upgrade License Medium: Required to upgrade one Sync device of	•	
	size M and for any sync-capable Ethernet device of size M from 12.X or higher to next major		
1091009335	release	\$	107.20
1001000350	Sync Director Connection License Extra Large: Required for one Sync device of size XL and for	<u>,</u>	4.044.60
1091009350	any sync-capable Ethernet device of size XL, applicable to ENC 13.1 and later versions	\$	1,041.60
1091009235	Packet Director Upgrade Connection Licenses Medium: Required for one Ethernet device of size M, UPGRADE from 12.X or higher to next major release	\$	27.11
1091003141-01	ENC Install Media version 14.1.1 Ensemble Optical Director Upgrade License: Upgrade for Ensemble Optical Director License for	\$	168.49
1091008915-12	Active WDM Provisioning to 12.X	\$	6,216.00
1031000313 12	Optical Connection License F8 Medium: ENC License for one compact shelf of FSP 3000 C (3HU	Ų	0,210.00
1091007060	or 4HU), applicable to ENC 12.1 and later versions	\$	3,971.35
	Ensemble Controller Server License (any OS) Release 12.x, license shipped in electronic form,	•	•
1091006120	Media (DVD) is NOT included, order separately when required	\$	3,913.78
	Optical Connection UPGRADE License MP: ENC License for one High Speed Muxponder Card,		
1091007085-12	such as QuadFlex (MP-2B4CT) or TeraFlex (MP-2D12CT) UPGRADE to 12.X	\$	1,424.50
	Optical Connection License F8 Large: ENC License for one large shelf of FSP 3000 C (12HU),		
1091007070	applicable to ENC 12.1 and later versions	\$	10,831.11
	Ensemble Packet Director Connection License for one Small Ethernet device large Ethernet		
1001002770	device (OS-V20/XG308, XG312, OP-X, Z4806) in PV client, license shipped in paper form,	<u>د</u>	624.60
1091002770	applicable to ENC 11.3 and prior versions	\$	621.60
1091020001	Ensemble Simulator application license for release 1.x; includes rights to simulate one NE SW release; simulation of up to 10 NE's. Unlimited users.	\$	25,925.93
1031020001	Ensemble Controller Connection License for one large AccessConnect shelf (OD-32, OD-48).	Ų	23,323.33
1091002130	License shipped in paper form, applicable to ENC 11.3 and prior versions	\$	3,646.73
		•	,
	Ensemble Controller Server License (RedHat Enterprise Linux Server) Release 11.x, license		
1091001324	shipped in paper form, Media (DVD) is NOT included, order separately when required	\$	3,646.73
	Upgrade to Ensemble Controller Version 11.x. SW for Linux (Red Hat Enterprise Server), license		
1091001724	shipped in paper form, Media (DVD) is NOT included, order separately when required	\$	1,519.47
1001007020	Optical Connection License F7 Medium: ENC License for FSP 3000R7, applicable to ENC 12.1	\$	3,249.33
1091007020	and later versions Packet Connection Upgrade License Eth Extra Small: ENC License for a tiny network element of	۲	3,249.33
1091007215-12	type FSP 150 (GE101Pro) UPGRADE to 12.X	\$	13.81
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	Packet Connection Upgrade License Eth Small: ENC License for a small network elements of		
1091007225-12	type FSP 150 (GO102Pro, GE1xx(Pro), GE 201) OS606 or HN400, UPGRADE to 12.X	\$	25.91
	Fiber Connection Upgrade License ALM Large: ENC License for one shelf of FAS ALM 64		
1091007445-12	UPGRADE to 12.X	\$	253.24

	Connection Ungrade License FCD 1500, FNC License for a naturally element of type FCD 1500		
1091007915-12	Connection Upgrade License FSP 1500: ENC License for a network element of type FSP 1500, UPGRADE to 12.X	\$	57.56
1091008045-12	Upgrade of Ensemble Bandwidth Manager UPGRADE to 12.X	\$	3,798.67
1091008135-12	Optional license per ENC server for north bound MTOSI interface UPGRADE to 12.X	\$	46,044.44
1091008325-12	Ensemble Sync Assurance Manager for PTP Upgrade License: Upgrade for Ensemble Assurance for PTP Manager to 12.X	\$	1,611.56
1031000323 12	Sync GNSS Assurance Connection UPGRADE License OSA Extra Small: ENC License for a	Ψ	1,011.30
1091009415-12	network elements of type OSA540x or OSA541x	\$	13.24
1001000425 12	Sync GNSS Assurance Connection UPGRADE License OSA Small: ENC License for a network	Ļ	26.46
1091009425-12	elements of type OSA542x Sync GNSS Assurance Connection UPGRADE License OSA Medium: ENC License for a network	\$	26.46
1091009435-12	elements of type OSA 5430	\$	47.48
1001000155 12	Sync GNSS Assurance Connection UPGRADE License OSA Extra Large: for a network elements	<u>,</u>	00.50
1091009455-12	of type OSA 5548C SSU/TSG (E200/E60), OSA5335 PTP GM and OSA 5440, TP5000 (Microsemi)		80.58
1091020021	Ensemble Simulator license for F7 software release R19.x.	\$	7,259.26
1091020031	Ensemble Simulator license for F8 software release R2.x.	\$	7,259.26
1091020032	Ensemble Simulator license for F8 software release R3.x.	\$	7,259.26
	Additional NE software simulation licenses; one license required per additional simulated NE.		
1091020040	10 NE simulation licenses are included in the base simulator license package.	\$	766.37
1091007235-12	Packet Connection Upgrade License Eth Medium: ENC License for a network elements of type FSP 150CP, CC, MX, XG1xx(Pro), XG304 or OS900 series, UPGRADE to 12.X	\$	15.56
	Optical Connection License F7 Large: ENC License for one shelf of type FSP 3000R7 large (9		
1091007030	HU), applicable to ENC 12.1 and later versions	\$	4,693.27
	Ensemble Director T-API SDN northbound interface License, applicable to ENC 12.1 and later		
1091008110	versions	\$	192,553.66
1091008930	Ensemble Sync Director License: Serves for Active management of Synchronization Networks, applicable to ENC 12.1 and later versions	\$	6,446.22
	Sync Director Connection Upgrade License Small: Required to upgrade one Sync device (XS, S		
1091009325-12	or M) and for any sync-capable Ethernet device (XS, S, M and L) to 12.X	\$	39.42
	Sync Connection Upgrade License OSA Medium: ENC License for a network elements of type		
1091007335-12	PTP GM and NTP Server OSA 5430 and PTP GM OSA 5331 UPGRADE to 12.X	\$	201.45
1091007315-12	Sync Connection Upgrade License OSA Extra Small: ENC License for a network elements of type OSA540x or OSA541x UPGRADE to 12.X	\$	30.22
1091007313-12	Upgrade for Ensemble Packet Director License for Ethernet Service Management on PV Client	۲	30.22
1091002755	UPDATE, license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	12,086.67
	Ensemble Packet Director Connection License for one small Ethernet device (OS606, OS9xx,		
	OS9xxx, OS-V8/XG304) in PV client, license shipped in paper form, applicable to ENC 11.3 and		
1091002760	prior versions	\$	62.16
	Ensemble Packet Director Connection License for one small Ethernet device (OS606, OS9xx,		
1001002765	OS9xxx, OS-V8/XG304) in PV client, UPGRADE, license shipped in paper form, applicable to ENC		20.72
1091002765	11.3 and prior versions Ensemble Packet Director Connection License for one Small Ethernet device large Ethernet	\$	20.73
	device (OS-V20/XG308, XG312, OP-X, Z4806) in PV client, UPGRADE license shipped in paper		
1091002775	form, applicable to ENC 11.3 and prior versions	\$	207.20
1091003123-01	FSP Network Manager Install Media (DVD) Version 12.3.1	\$	161.16
	Ensemble GEO Manager Connection Licenses for a network element of type FAS ALM 64,	•	
1091002880	license shipped in paper form, applicable to ENC 11.3 and prior versions	\$	394.83
	Ensemble GEO Manager Server License, license shipped in paper form, applicable to ENC 11.3		
1091002850	and prior versions	\$	3,038.93
1001003070	Ensemble GEO Manager Connection Licenses for a network element of type FAS ALM, license		407.00
1091002870	shipped in paper form, applicable to ENC 11.3 and prior versions	\$	197.99

	Franchia Dealist Director Licenses Comparing Ethomast Duccining and licely at FNC		
1091008920	Ensemble Packet Director License: Serves for Active Ethernet Provisioning, applicable to ENC 12.1 and later versions	\$	36,605.33
	Packet Director Connection License Large: Required for one Ethernet device (L or XL),		·
1091009240	applicable to ENC 12.x	\$	552.53
	Packet Connection License Eth Medium: ENC License for a network elements of type FSP 150CP, CC, MX, GE206, XG1xx[Pro], XJ128, XG304 or OS900 series, applicable to ENC 12.1 and		
1091007230	later versions	\$	180.52
1001001624	Upgrade to Ensemble Controller Version 11.x. SW for Windows Server (2008/2012), license	ć	1 510 47
1091001624	shipped in paper form, Media (DVD) is NOT included, order separately when required Optical Connection License ACC Small: ENC License for one shelf of type FSP 3000 ACC small	\$	1,519.47
1091007110	only, applicable to ENC 12.1 and later versions	\$	613.76
	Optical Connection License ACC Medium: ENC License for FSP 3000 ACC, applicable to ENC 12.1		
1091007120	and later versions	\$	2,346.65
1091007130	Optical Connection License ACC Large: ENC License for one large shelf type FSP 3000ACC, applicable to ENC 12.1 and later versions	\$	3,971.35
1091008945-12	Ensemble Fiber Director Upgrade License: Upgrade for Ensemble Fiber Director to 12.X	\$	748.22
1091009405-12	Ensemble Fiber Director connection License for one ALM unit, UPGRADE to 12.X	\$	59.85
	Packet Connection License Eth Extra Small: ENC License for a tiny network element of type FSP		
1091007210	150 (GE101Pro), applicable to ENC 12.1 and later versions	\$	57.76
1091009220	Packet Director Connection License Small: Required for one Ethernet device (XS, S or M), applicable to ENC 12.x	\$	62.16
1031003220	Sync Director Connection Upgrade License Large: Required to upgrade one Sync device (L or	Y	02.10
1091009345-12	XL) and for any sync-capable Ethernet device (XL) to 12.X	\$	141.02
1001007255 12	Sync Connection Upgrade License OSA Extra Large: ENC License for a network elements of type		644.64
1091007355-12	OSA 5548C SSU/TSG (E200/E60), OSA5335 PTP GM and OSA 5440 UPGRADE to 12.X Sync Connection Upgrade License OSA Large: ENC License for a network elements of type	\$	644.64
1091007345-12	Cesium Clock UPGRADE to 12.X	\$	302.18
1001000035 13	Franchia Cura Director Harrada Licanos Harrada for Franchia Cura Director Computicana	ć	1 (11 5(
1091008935-12 1091008050	Ensemble Sync Director Upgrade License: Upgrade for Ensemble Sync Director Server License Ensemble Command Based Manager, applicable to ENC 12.1 and later versions	\$ \$	1,611.56 17,957.33
1031008030	Packet Connection License Eth Small: ENC License for a small network elements of type FSP	Ş	17,957.55
	150 (Gx102Pro, GE11x[Pro], GE104, GE201) OS606 or HN400, applicable to ENC 12.1 and later		
1091007220	versions	\$	108.31
	Packet Connection License Eth Large: ENC License for a network element of type FSP 150CM, XG210, XG308, XG312, XG404, XG418, HN 4000 or OS9000 series, applicable to ENC 12.1 and		
1091007240	later versions	\$	722.07
	ENC Instance Upgrade License to upgrade from release 11.x or prior to 12.x: Upgrade to		
1091006125	Release 12.x, any OS, Media (DVD) is NOT included, order separately when required	\$	978.44
1091009320	Sync Director Connection License Small: Required for one Sync device (XS, S or M) and for any sync-capable Ethernet device (XS, S, M and L), applicable to ENC 12.x	\$	84.03
1091003320	FSP Network Manager Install Media (DVD) Version 11.3.2	\$	151.94
1091008015-12	Upgrade license for an ENC server for stand-by server usage UPGRADE to 12.X	\$	5,180.00
	Ensemble Controller Server License (any OS) Release 13.x, license shipped in electronic form,	,	0,200.00
1091006130	Media is NOT included, order separately when required	\$	3,913.78
1091905919-01	GNSS Assurancve SW License, applicable to ENC 11.3 and prior versions	\$	5,318.13
1091003142-01	ENC Install Media version 14.2.1	\$	161.16
1091007320	Sync Connection License OSA Small: ENC License for a network elements of type OSA542x or OSA5412, applicable to ENC 12.1 and later versions	\$	201.45
	Optical Connection License F8 Small: ENC License for one small modular shelf of FSP 3000 C	Ψ.	201.43
1091007050	(1HU or 2HU or Teraflex shelf), only applicable from ENC 12.x onwards	\$	1,083.14
	ENC License for one High Speed Muxponder Card, such as QuadFlex (MP-2B4CT) and its		
1091007080	variants and Teraflex sleds (e.g. MP-2D12CT or T-MP-2D8CT or T-MP-2D3DT) and its variants, or OpenFab1200 (OF-2D16DCT) applicable to ENC 12.1 and later versions	\$	5,956.76
	The second of th	~	2,330.70

	Sync Connection License OSA Medium: ENC License for a network elements of type PTP GM		
1091007330	and NTP Server OSA 5430 and PTP GM OSA 5331, applicable to ENC 12.1 and later versions Optical Connection UPGRADE License F7 Medium: ENC License for one shelf of type FSP	\$	805.78
1091007025-12	3000R7 UPGRADE to 12.X	\$	777.01
	GNSS Assurance SW Connection License for one medium/big network element like Medium/Large PTP GMs and SSU/TSGs, i.e. OSA 542x and OSA5430 (medium PTP GM),		
	OSA5548C/5335 and OSA5440 (large GM /SSU), TP5000, applicable to ENC 11.3 and prior		
1091905921-01	versions	\$	105.90
01003660	FSP Network Manager Connection License for one TeraFlex Sled (MP-2D12CT), license shipped	<u> </u>	1 060 24
91003660	in paper form, applicable to ENC 11.3 and prior versions GNSS Assurance SW Connection License for one small network elements like Edge PTP GM	\$	1,960.34
1091905920-01	(OSA541x and OSA540x), applicable to ENC 11.3 and prior versions	\$	52.95
	Ensemble Controller Connection License for one small AccessConnect or FiberDriver shelf (OD-		
	4, OD-6, NM316BU-4, NM316BU-3, NM316BU-2) UPGRADE. License shipped in paper form,		
1091002115	applicable to ENC 11.3 and prior versions	\$	204.90
	Ensemble Controller Connection License for one medium AccessConnect or FiberDriver shelf (OD-12, OD-16, NM316BU-16). License shipped in paper form, applicable to ENC 11.3 and prior		
1091002120	versions	\$	2,279.20
	Ensemble Controller Connection License for one medium AccessConnect or FiberDriver shelf (OD-12, OD-16, NM316BU-16) UPGRADE. License shipped in paper form, applicable to ENC		
1091002125	11.3 and prior versions	\$	751.67
4004000405	Ensemble Controller Connection License for one large AccessConnect shelf (OD-32, OD-48)		4 242 42
1091002135	UPGRADE. License shipped in paper form, applicable to ENC 11.3 and prior versions	\$	1,212.12
1091003113-01	FSP Network Manager Install Media (DVD) Version 11.3.1 Ensemble Controller Connection License for one small AccessConnect or FiberDriver shelf (OD-	\$	151.94
	4, OD-6, NM316BU-4, NM316BU-3, NM316BU-2). License shipped in paper form, applicable to		
1091002110	ENC 11.3 and prior versions	\$	592.83
1091003143-01	ENC Install Media version 14.3.1	\$	161.16
1078904726-01	GE114Pro (HE) hot swappable PSUs and environmental inputs	\$	1,211.25
1091904690-01	ETHERJACK OS, CC-GE11x, PBB LIC KEY	\$	43.63
1091904757-01	ETHERJACK OS, CC-GE11xPro, PTP EXT Slave KEY	\$	102.00
1091904758-01	ETHERJACK OS, CC-GE11x, EOMPLS LIC KEY	\$	102.00
1091904756-01	ETHERJACK OS, CC-GE11x, PROBE EXT LIC KEY	\$	102.00
1091904692-01	ETHERJACK OS, GE11xPRO, IPFIX License key	\$	102.00
1091904691-01	ETHERJACK OS, CC-GE11x, MiniGM and BC LIC KEY	\$	102.00
	GO102Pro Pole Mounting kit with Solar Shield for reducing the heating effect of direct sunlight.		
1013904023	Includes 2x Jubilee band for nominal 145mm diameter poles. Alternative bands could be obtained from an external source if other sizes are required.	\$	181.77
1013904030	Screw-in IP-67 Power Connector Cap	\$	14.55
1013904029	PF13.5 Cable Outlet Cap	\$	14.55
1013904024	PF13.5 Cable Gland. For cable diameters 5 - 9mm.	\$	30.30
	GO102Pro Wall Mounting kit with Solar Shield, includes Solar Shield for reducing the heating effect of direct sunlight in hot climates. Includes mounting materials required for solid	*	
1013904031	concrete/brick walls and wood applications.	\$	145.42
	GO102Pro (SP). Outdoor, water proof, 2 access port 1 net port, sync, PoE PSE and integrated		
1078904822-01	AC PSU	\$	1,721.25
1078904824-01	GO102Pro (SP). Outdoor, water proof, 2 access port 1 net port, sync, PoE PSE and integrated DC PSU	\$	1,581.00
25. 550 152 1 62	GO102Pro (S). Outdoor, water proof, 2 access port 1 net port, sync and integrated DC (-48VDC	Ÿ	1,501.00
1078904823-01	or +24VDC) and PoE PD PSU	\$	1,491.75
1078904821-01	GO102Pro (S). Outdoor, water proof, 2 access port 1 net port, sync and integrated AC PSU	\$	1,355.75

	GO102Pro Pole Mounting kit, includes 2x Jubilee band for nominal 145mm diameter poles.		
1013904022	Alternative bands could be obtained from an external source if other sizes are required.	\$	109.05
	GO102Pro Wall Mounting kit, Includes mounting materials required for solid concrete/brick		
1013904021	walls and wood applications.	\$	65.43
1078904722-01	GE114Pro (C). MACsec and integrated AC PSU	\$	2,975.00
1078904723-01	GE114Pro (C). MACsec and integrated -48VDC PSU	\$	2,975.00
1091904754-01	ETHERJACK OS, CC-GE11xPRO, OF LIC KEY	\$	102.00
1091904753-01	ETHERJACK OS, CC-GE11xPRO, L3 LIC KEY	\$	102.00
1091904755-01	ETHERJACK OS, CC-GE11xPRO, VRF-EXT LIC KEY	\$	51.00
1091904788-01	ETHERJACK OS, GE11x, EOMPLSoGRE LIC KEY	\$	102.00
1091904774-01	ETHERJACK OS, GE100Pro, VxLAN GATEWAY LIC KEY	\$	42.50
	GE102Pro H with dual, integrated AC PSUs, for head-end deployments where EFMOMA		
1078904890-01	management is used	\$	688.50
4.070004004.04	GE102Pro H with dual, integrated AC PSUs, for tail-end deployments where EFMOMA	.	602.75
1078904891-01	management is used GE102Pro H with dual, integrated DC PSUs, for tail-end deployments where EFMOMA	\$	692.75
1078904893-01	management is used	\$	684.25
1091904880-01	ETHERJACK OS, CC-GX10xPRO, PRE-INSTALLED SW, R9.6.1	\$	42.50
1031304000 01	GE102Pro H with dual, integrated DC PSUs, for head-end deployments where EFMOMA	Y	42.50
1078904892-01	management is used	\$	680.00
1091904772-03	GX10xPRO, PRE-INSTALLED SW, R9.5.3	\$	42.50
1078904820-01	GE101Pro micro NID	\$	480.25
1078904722-02	GE114Pro (C). MACsec and integrated AC PSU	\$	2,975.00
1078904723-02	GE114Pro (C). MACsec and integrated -48VDC PSU	\$	2,975.00
1091904778-01	GX10xPRO, PRE-INSTALLED SW, R10.1.1	\$	42.50
1078904725-02	GE114Pro (CSH) MACsec+, sync and hot swappable PSUs	\$	5,100.00
1091904772-04	ETHERJACK OS, CC-GX10xPRO, PRE-INSTALLED SW, R9.5.4	\$	42.50
1091904880-02	GX10xPRO, PRE-INSTALLED SW, R9.6.2	\$	42.50
1013904035-01	GO102Pro Mini (Sm) Wall Mount	\$	65.43
1040904062-01	AC PSU to 12VDC External IP67 with captive AC Cable for GO102Pro (Sm):EU	\$	169.65
1091901008-01	FSP 150-XJ128, Base KEY, Must be ordered with each Hardware chassis.	\$	204.02
1091901070-01	FSP 150-XJ128 Pre-installed SW, R13.1.1	\$	-
	XJ128 (SH), with 2 SFP28 Network and 4 Access ports (J45/SFP/SFP+,SFP28), dual PSUs	*	
1078901090-01	pluggable, I-Temp	\$	3,255.50
1091904880-03	GX10xPRO, PRE-INSTALLED SW, R9.6.3	\$	42.50
1091901071-01	FSP 150-XJ128 Pre-installed SW, R13.5.1	\$	-
1091904887-02	GE11xPRO, PRE-INSTALLED SW, R11.5.2	\$	-
1091904008-04	GEX10XPRO, PRE-INSTALLED SW, R9.6.4	\$	-
1091904888-02	GX10xPRO, PRE-INSTALLED SW, R11.5.2	\$	_
1091905009-01	GE104, PRE-INSTALLED SW, R13.7.1	\$	-
1091901106-01	FSP 150-XG108, FSP 150-XO106, Pre-installed SW, R13.7.1	\$	_
1091901043-01	GX10XPRO, PRE-INSTALLED SW, R13.7.1	\$	_
1091901072-01	FSP 150-XJ128 Pre-installed SW, R13.7.1	\$	_
1091901042-01	GE11xPRO, PRE-INSTALLED SW, R13.7.1	\$	-
1091904797-01	GX10XPro, Base Key, must be ordered with each HW Sales item	\$	42.50
1091905007-01	GE104, PRE-INSTALLED SW, R13.1.1	\$	-
1091901105-01	FSP 150-XG108, FSP 150-XO106, Pre-installed SW, R13.6.1	\$	_
1078904906-01	GE104(E) with integrated DC -48V PSU	\$	799.00
10.000.000.01	5-15 (1-) min integrated 50 101 100	Y	, 55.00

1091905005-01	GX10xPRO, PRE-INSTALLED SW, R13.1.1	\$	-
1078904905-01	GE104(E) with integrated AC PSU	\$	765.00
1091904778-03	Preinstalled Rel.10.1.3 software on the GX10XPRO products. Includes a Base Key.	\$	42.50
1091904779-03	Preinstalled Rel.10.1.3 software on the GE11XPRO Products. Includes Base Key.	\$	102.00
1091901052-01	XO106, XG108, XJ128, SR-MPLS-EDGE License	\$	102.00
1091901055-01	XO106, XG108, XJ128, MiniGM and BC LIC KEY	\$	204.02
1091901005-01	FSP 150-XG10X, Base KEY, Must be ordered wiith each Hardware item.	\$	204.02
1078901070-01	XG108 with 4 SFP 100/1GE, 4 SFP+ 1/10GE, AC PSU integrated	, \$	1,644.75
1078901071-01	XG108 with 4 SFP 100/1GE, 4 SFP+ 1/10GE, DC -48V PSU integrated	\$	1,797.75
1091904890-02	GE104, PRE-INSTALLED SW, R11.1.2	\$	
1091905006-01	GE11xPRO, PRE-INSTALLED SW, R13.1.1	\$	_
1091905002-02	GE104, PRE-INSTALLED SW, R11.6.2	\$	_
1078901100-01	XO106 10G Outdoor Device, 6 ports (4x1G/10G and 2x1G). Dual AC Input.	\$	3,719.87
1078901101-01	XO106 10G Outdoor Device, 6 ports (4x1G/10G and 2x1G). Dual DC Input.	\$	3,817.62
1091904888-01	GX10xPRO, PRE-INSTALLED SW, R11.5.1	\$	3,017.02
BC00000975	· · · · · · · · · · · · · · · · · · ·		618.50
	GE101Pro micro NID with AC power adapter and AC Power Cable, India	\$	
1078901081-01	XG108(SH), with 4 SFP 100/1GE, 4 SFP+ 1/10GE, Sync, dual PSUs pluggable, I-Temp	\$	2,248.25
1091901010-01	FSP 150-XG108, Pre-installed SW, R13.1.1	\$	-
1091905003-02	GE11xPRO, PRE-INSTALLED SW, R11.6.2	\$	-
1091904885-02	GE11xPRO, PRE-INSTALLED SW, R11.1.2	\$	-
1091904882-03	ETHERJACK OS, CC-GX10xPRO, PRE-INSTALLED SW, R10.5.3	\$	42.50
1078904900-01	GE104 with integrated AC PSU	\$	739.50
1091901040-01	GE11xPRO, PRE-INSTALLED SW, R13.5.1	\$	-
1078904724-02	GE114Pro (SH) Sync and hot swappable PSUs	\$	1,993.25
1078904721-02	GE114Pro with integrated DC PSU	\$	1,143.25
1078904720-02	GE114Pro with integrated AC PSU	\$	1,058.25
1091904882-01	ETHERJACK OS, CC-GX10xPRO, PRE-INSTALLED SW, R10.5.1	\$	42.50
1091904778-02	GX10xPRO, PRE-INSTALLED SW, R10.1.2	\$	42.50
1078901080-01	XG108(H), with 4 SFP 100/1GE, 4 SFP+ 1/10GE, dual PSUs pluggable, I-Temp	\$	1,721.25
1091905001-01	GX10xPRO, PRE-INSTALLED SW, R11.6.1	\$	-
1091905002-01	GE104, PRE-INSTALLED SW, R11.6.1	\$	-
1091905003-01	GE11xPRO, PRE-INSTALLED SW, R11.6.1	\$	-
1091901053-01	XO106, XG10X, EOMPLS License	\$	85.00
1091901054-01	XO106, XG108, XJ128 , Elephant Flows Control	\$	102.00
1091905001-02	GX10xPRO, PRE-INSTALLED SW, R11.6.2	\$	-
1091901040-02	GE11xPRO, PRE-INSTALLED SW, R13.5.2	\$	-
1091901041-01	GX10XPRO, PRE-INSTALLED SW, R13.5.1	\$	-
1091901014-01	FSP 150-XG108, Pre-installed SW, R13.5.1	\$	-
1078904701-02	GE112Pro with integrated AC PSU, no DIN connector for second external PSU	\$	884.00
1078904702-02	GE112Pro with integrated -48VDC PSU, no DIN connector for second external PSU	\$	973.25
1078904705-02	GE112Pro (H) with hot swappable PSUs, no DIN connector for second external PSU	\$	918.00
1091901100-01	FSP 150-XO106, Base SW features, Must order one License for each chassis	\$	204.02
1091904766-03	FSP 150CC-GE11x, PRE-INSTALLED SW, R9.1.3	\$	102.00
1091904883-03	ETHERJACK OS, CC-GE11xPRO, PRE-INSTALLED SW, R10.5.3	\$	102.00
1091904887-01	GE11xPRO, PRE-INSTALLED SW, R11.5.1	\$	-
1091904891-01	GE104, PRE-INSTALLED SW, R11.5.1	\$	-
1040904063-01	AC PSU to 12VDC External IP67 with captive AC Cable for GO102Pro (Sm):NA	\$	169.65

1078904901-01	GE104 with integrated DC -48V PSU	\$ 743.75
1091905008-01	GE104, PRE-INSTALLED SW, R13.5.1	\$ -
1091904882-02	GX10xPRO, PRE-INSTALLED SW, R10.5.2	\$ 42.50
1091904772-05	GX10xPRO, PRE-INSTALLED SW, R9.5.5	\$ 42.50
1040904066-01	External AC PSU to 12VDC for GE101Pro	\$ 47.60
1078904825-02	GO102Pro (Sm). Waterproof IP65, 2 Access port 1 Net Port, Sync. EMC Class B	\$ 1,177.25
1091904796-01	GE11x, Base Key, must be ordered with each HW Sales item	\$ 102.00
1091904886-02	GX10xPRO, PRE-INSTALLED SW, R11.1.2	\$ -
1078904119-01	FSP 150CC-GE206 and XG116PRO Fan Module	\$ 153.00
1091904818-01	GE206V, PRE-INSTALLED SW, R13.7.1	\$ -
1091904817-03	GE206V, PRE-INSTALLED SW, R13.1.3	\$ -
1091904428-01	ETHERJACK OS, XGPRO, IPFIX License	\$ 110.17
1091904429-01	ETHERJACK OS, XGPRO, L3 License	\$ 110.17
1091904430-01	ETHERJACK OS, XGPRO, VRF License	\$ 110.17
1091904431-01	ETHERJACK OS, XGPRO, EOMPLS License	\$ 110.17
1013904435-01	Filler Card, AC PSU - XG120Pro chassis	\$ 7.65
1013904436-01	Filler Card, DC PSU - XG120Pro chassis	\$ 7.65
1013904439-01	XG120Pro Fan Tray Module-filter cage, DC	\$ 12.75
1013904441-01	XG120Pro Fan Tray Module-filter cage, AC	\$ 8.50
1013904438-01	XG120Pro Fan Tray Module-filter replacement, DC	\$ 3.40
1013904440-01	XG120Pro Fan Tray Module-filter replacement, AC	\$ 1.70
1042004437-01	XG120Pro Fan Tray Module-Exhaust flow	\$ 213.35
1078904852-01	NFV Server Filler Card	\$ 34.00
1091904427-01	XG100PRO, PRE-INSTALLED SW, R9.1.1	\$ 391.00
1091904789-01	ETHERJACK OS, XGPRO, Elephant Flows Control	\$ 157.25
1091904432-02	XG100PRO, PRE-INSTALLED SW, R9.2.2	\$ 391.00
1091904435-01	XG100PRO, PRE-INSTALLED SW, R9.6.1	\$ 391.00
1042004438-01	XG116ProH Fan Tray Module-Exhaust f	\$ 213.35
1078904455-01	XG116Pro (H) Chassis	\$ 2,842.40
1091904437-01	XG100PRO, PRE-INSTALLED SW, R10.1.1	\$ 391.00
1091904435-02	ETHERJACK OS, XGPRO, PRE-INSTALLED SW, R9.6.2	\$ 391.00
1091904461-01	XG118PRO (CSH), Base Key must be ordered with each HW Sales item	\$ 918.00
1091904463-01	XG118PRO (CSHG), Base Key must be ordered with each HW Sales item	\$ 4,675.00
1078904460-03	XG120Pro Basic Chassis - AC	\$ 3,141.60
1078904471-02	XG118Pro (SH) Basic Chassis - AC	\$ 4,153.10
1078904481-02	XG120Pro (SH) Basic Chassis - AC	\$ 3,489.25
1091904468-01	XG116PRO/XG120PRO, PRE-INSTALLED SW, R13.7.1	\$ -
1061903300-01	Pluggable form fit 10GE NID 1310 Short distance (10km)	\$ 476.00
1091903301-01	NIDPLUG, PRE-INSTALLED SW, R22.1.1	\$ -
1091904448-02	XG116PRO/XG120PRO, PRE-INSTALLED SW, R11.5.2	\$ -
1091904464-02	XG116PRO/XG120PRO, PRE-INSTALLED SW, R13.1.2	\$ -
1091904467-01	XG118PRO (CSH-G), PRE-INSTALLED SW, R21.5.1	\$ -
1091901128-01	FSP 150-XO126 Elephant LIC KEY.One license per system.	\$ 102.00
1091904465-03	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R13.1.3	\$ -
1091904464-03	XG116PRO/XG120PRO, PRE-INSTALLED SW, R13.1.3	\$ -
1091901129-01	FSP 150-XO106/XO126 EoMPLS LIC KEY. One license per system.	\$ 42.50
1091904466-01	XG118PRO (CSH), PRE-INSTALLED SW, R21.5.1	\$ -

1078904473-01	XG118Pro (CSH) AC Chassis	\$	25,500.00
1091903300-01	NIDPLUG, Base Key must be ordered with each HW Sales item	\$	170.00
1091904442-01	XG116PRO/XG120PRO, PRE-INSTALLED SW, R11.1.1	\$	-
1091904445-01	Base Key must be ordered with each HW Sales item	\$	391.00
1091904455-02	XG116PRO/XG120PRO, PRE-INSTALLED SW, R12.1.2	\$	-
1091904480-01	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R13.7.1	\$	-
1091901102-01	FSP 150-XO126 PTP LIC KEY.One license per system.	\$	204.02
1078904472-01	XG118Pro (CSH) DC Chassis	\$	25,500.00
1091904458-02	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R11.6.2	\$	-
1091904457-02	XG116PRO/XG120PRO, PRE-INSTALLED SW, R11.6.2	\$	-
1091904464-01	XG116PRO/XG120PRO, PRE-INSTALLED SW, R13.1.1	\$	-
1091904470-01	XG116PRO/XG120PRO, PRE-INSTALLED SW, R11.7.1	\$	-
1091904448-01	XG116PRO/XG120PRO, PRE-INSTALLED SW, R11.5.1	\$	-
1078904867-01	NFV Server with Xeon 8 Cores 32G RAM, I-Temp	\$	6,597.70
1078904475-01	XG118Pro (CSH) AC Chassis	\$	17,000.00
1091901120-01	XO126, PRE-INSTALLED SW, R22.1.1	\$	-
1078901121-01	XO126 Dual AC 100W, Out-door device, with dual AC input, 8 x 1G/10G bps traffic fiber ports	\$	8,458.62
	XO126 Dual DC -48V 100W Input, Out-door device, with dual DC -48V input, 8 x 1G/10G bps		
1078901122-01	traffic fiber ports	\$	8,382.12
1091901126-01	FSP 150-XO126, Base SW features, Must order one License for each chassis	\$	204.02
1091901127-01	FSP 150-XO126 25G LIC KEY. One license per system.	\$	102.00
1078901123-01	XO126 Dual AC 200W, Out-door device, with dual AC input, 8 x 1G/10G bps traffic fiber ports	\$	9,147.12
4070004404.04	XO126 Dual DC -48V 200W Input, Out-door device, with dual DC -48V input, 8 x 1G/10G bps		0.070.60
1078901124-01	traffic fiber ports	\$	9,070.62
1091904465-01	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R13.1.1	\$	-
1091901059-01	FSP 150-XG1XXCSH Elephant Flows Control License Key. Must order one License for each chassis	\$	157.25
1091904449-02	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R11.5.2	\$	_
1091904456-02	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R12.1.2	\$	_
1078904474-01	XG118Pro (CSH) DC Chassis	\$	17,000.00
1078904470-02	XG118Pro (SH) DC Chassis. Supports SyncE capable electrical SFP	\$	3,986.50
1078904480-02	XG120Pro (SH) Basic Chassis only for DC. Supports SyncE capable electrical SFP	\$	3,665.20
1091901058-01	FSP 150-XG1XXCSH SYNC-E and PTP LIC KEY	\$	238.00
1091904471-01	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R11.7.1	\$	-
1078904471-03	XG118Pro (SH) Basic Chassis - AC. Supports SyncE capable electrical SFP	\$	4,153.10
1078904481-03	XG120Pro (SH) Basic Chassis - AC. Supports SyncE capable electrical SFP	\$	3,489.25
1091904449-01	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R11.5.1	\$, -
1078904868-01	NFV Server with Xeon 12 Cores 32G RAM, I-Temp	\$	8,041.00
1078904871-01	I-Temp 512G SSD for NFV Servers	\$	1,944.80
1078904460-02	XG120Pro Basic Chassis only for AC	\$	3,141.60
1042004470-01	XG118Pro (SH)/DC/FAN	\$	254.15
1078904471-01	XG118Pro (SH) AC Chassis	\$	4,153.10
1078904470-01	XG118Pro (SH) DC Chassis	\$	3,986.50
1013904473-01	Filler Card, DC FAN - XG118Pro (SH) chassis	\$	18.70
1042004471-01	XG118Pro (SH)/AC/FAN	\$	291.53
1091904440-01	ETHERJACK OS, XG118PRO (SH) and XG120Pro (SH), PTP License	\$	238.00
		7	200.00

1091904439-01	XG118PRO (SH), PRE-INSTALLED SW, R10.6.1	\$	391.00
1091904438-01	XG100PRO, PRE-INSTALLED SW, R10.5.1	\$	391.00
1078904450-02	XG116Pro with integrated AC/DC PSU and fan assembly	\$	2,917.20
1078904461-02	XG120Pro Basic Chassis only for DC	\$	3,339.65
1078904462-02	XG120Pro Chassis KIT (AC)	\$	4,087.65
1078904463-02	XG120Pro Chassis KIT (DC)	\$	3,942.30
1091904438-04	XGPRO, PRE-INSTALLED SW, R10.5.4	\$	391.00
1091904447-01	XG100, SR-MPLS License	\$	102.00
1091904455-01	XG116PRO/XG120PRO, PRE-INSTALLED SW, R12.1.1	\$	-
1091904456-01	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R12.1.1	\$	-
1091904457-01	XG116PRO/XG120PRO, PRE-INSTALLED SW, R11.6.1	\$	-
1091904458-01	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R11.6.1	\$	_
1091904465-02	XG118PRO (SH)/XG120PRO (SH), PRE-INSTALLED SW, R13.1.2	\$	-
1078904480-01	XG120Pro (SH) Basic Chassis only for DC	\$	3,665.20
1078904869-01	NFV Server with Xeon 16 Cores 64G RAM, C-Temp	\$	12,581.70
1091904438-03	XG100PRO, PRE-INSTALLED SW, R10.5.3	\$	391.00
1078904481-01	XG120Pro (SH) Basic Chassis only for AC	\$	3,489.25
1091904438-02	XG100PRO, PRE-INSTALLED SW, R10.5.2	\$	391.00
1078904794-01	HS Fan Tray Module-Exhaust flow	\$	351.40
1078904426-01	Filler Card, PSU - XG chassis	\$	36.35
1091904454-01	XG210, PRE-INSTALLED SW, R13.71	\$	-
1091904453-03	XG210, PRE-INSTALLED SW, R13.1.3	\$	-
1091904453-01	XG210, PRE-INSTALLED SW, R13.1.1	\$	-
DC42003003 04	FSP 150-XG304/AC - Ethernet Services Demarcation - 8 ports 10G/1G 1U 9.5" switch with SFP+		1 205 12
BC48003003-04	ports enabled as 1G, AC PSU and US power cable, SW Rel.21.1.1 preinstalled, ADVA branded	\$	1,385.13
	FSP 150-XG304/AC - Ethernet Services Demarcation - 8 ports 10G/1G 1U 9.5" switch with SFP+		
BC48003002-04	ports enabled as 1G, AC PSU and EU power cable, SW Rel.21.1.1 preinstalled, ADVA branded	\$	1,383.43
	FSP 150-XG304U/F - Modular Ethernet Services Demarcation - 8 ports 10G/1G 1U 19"		
BC48003500-04	OptiSwitch-V with a 10G license to enable the 10G SFP+ ports, with 10G OAM module and one slot for service module, SW Rel.21.1.1 preinstalled, ADVA branded	ċ	3,457.78
BC46005300-04	AC hot swappable power supply for FSP 150-XG304U, FSP 150-XG304U/F, FSP 150-XG308 and	\$	3,437.76
BC48005103-04	FSP 150-XG308/F (90-240V AC), with US power cable, ADVA branded	\$	308.45
	NFV server module for FSP 150-XG304U and FSP 150-XG304U/F, with 8xCore X86 Xeon-D,		
1048004960-04	32GB DDR4 and 1TB SSD, ADVA branded	\$	10,740.30
	FSP 150-XG304/DC - extended temperature Ethernet Services Demarcation - 8 ports 10G/1G		
BC48004050-04	1U 9.5" switch with SPF+ ports enabled as 1G and with DC PS, SW Rel.21.1.1 preinstalled, ADVA branded	\$	1,899.67
BC40004030 04	FSP 150-XG304/F/AC - Ethernet Services Demarcation - 8 ports 10G/1G 1U 9.5" switch with a	Ţ	1,033.07
	10G license to enable the 10G SFP+ ports, with 10G OAM module, AC PSU and EU power cable,		
BC48003102-04	SW Rel.21.1.1 preinstalled, ADVA branded	\$	2,732.67
	FSP 150-XG304/F/AC - Ethernet Services Demarcation - 8 ports 10G/1G 1U 9.5" switch with a		
BC48003103-04	10G license to enable the 10G SFP+ ports, with 10G OAM module, AC PSU and US power cable, SW Rel.21.1.1 preinstalled, ADVA branded	\$	2,734.37
BC40003103 04	Rack Mounting Kit 19" for devices with 217.6 mm width. Used to mount a single device on 1RU		2,734.37
1048005299-04	into a 19" rack. ADVA branded	\$	18.63
	DC hot extended temperature swappable power supply for FSP 150-XG304U, FSP 150-		
1048005550-04	XG304U/F, FSP 150-XG308 and FSP 150-XG308/F (-48V DC), ADVA branded	\$	704.23
1048005401-04	Rack Mounting Kit 19" for devices with 438.66 mm width. ADVA branded	\$	22.35

BC48003050-04	FSP 150-XG304/DC - Ethernet Services Demarcation - 8 ports 10G/1G 1U 9.5" switch with SPF+ ports enabled as 1G and with DC PS, SW Rel.21.1.1 preinstalled, ADVA branded FSP 150-XG304/F/DC - Ethernet Services Demarcation - 8 ports 10G/1G 1U 9.5" switch with a	\$ 1,521.20
BC48003150-04	10G license to enable the 10G SFP+ ports, with 10G OAM module and with DC PS, SW Rel.21.1.1 preinstalled, ADVA branded	\$ 2,870.48
BC48003400-04	FSP 150-XG304U - Modular Ethernet Services Demarcation - 8 ports 10G/1G - 1U 19" with one slot for service module, SPF+ ports enabled as 1G, SW Rel.21.1.1 preinstalled, ADVA branded FSP 150-XG304/AC - extended temperature Ethernet Services Demarcation - 8 ports 10G/1G	\$ 2,115.30
BC48004003-04	1U 9.5" switch with SFP+ ports enabled as 1G, AC PSU and US power cable, SW Rel.21.1.1 preinstalled, ADVA branded FSP 150-XG308 - Ethernet Services Demarcation 20 ports 10G/1G - 1U 19" switch with SFP+	\$ 1,947.50
BC48003700-04	ports enabled as 1G, SW Rel.21.1.1 preinstalled, ADVA branded	\$ 3,150.08
BC48005502-04	AC hot swappable extended temperature power supply for the OptiSwitch V Modular (90-240V AC), with EU power cable, ADVA branded FSP 150-XG304/F/AC - extended temperature Ethernet Services Demarcation - 8 ports 10G/1G	\$ 588.72
BC48004102-04	1U 9.5" switch with a 10G license to enable the 10G SFP+ ports, with 10G OAM module, AC PSU and EU power cable, SW Rel.21.1.1 preinstalled, ADVA branded FSP 150-XG304/AC - extended temperature Ethernet Services Demarcation - 8 ports 10G/1G	\$ 3,314.45
BC48004002-04	1U 9.5" switch with SFP+ ports enabled as 1G, AC PSU and EU power cable, SW Rel.21.1.1 preinstalled, ADVA branded FSP 150-XG304U - modular extended temperature Ethernet Services Demarcation - 8 ports	\$ 1,945.78
BC48004400-04	10G/1G - 1U 19" OptiSwitch-V with one slot for service module with SPF+ ports enabled as 1G, SW Rel.21.1.1 preinstalled, ADVA branded FSP XG304/FC/DC/EXT - extended temperature Ethernet Services Demarcation - 8 ports	\$ 2,332.02
BC48004150-04	10G/1G 1U 9.5" switch with a 10G license to enable the 10G SFP+ ports, with 10G OAM module and with DC PS, SW Rel.21.1.1 preinstalled, ADVA branded	\$ 3,268.38
BC48005503-04	AC hot swappable extended temperature power supply for the OptiSwitch V Modular (90-240V AC), with US power cable, ADVA branded FSP 150-XG304U/F - modular extended temperature Ethernet Services Demarcation - 8 ports	\$ 590.42
BC48004500-04	10G/1G, 1U 19" with a 10G license to enable the 10G SFP+ ports, with 10G OAM module and one slot for service module, SW Rel.21.1.1 preinstalled, ADVA branded FSP 150 XG304/F/AC/EXT - extended temperature Ethernet Services Demarcation - 8 ports	\$ 3,693.88
BC48004103-04	10G/1G 1U 9.5" switch with a 10G license to enable the 10G SFP+ ports, with 10G OAM module, AC PSU and US power cable, SW Rel.21.1.1 preinstalled, ADVA branded	\$ 3,316.17
BC48003800-04	FSP 150-XG308/F - Ethernet Services Demarcation 20 ports 10G/1G - 1U 19" switch with a 10G license to enable the 10G SFP+ ports and with 10G OAM module, SW Rel.21.1.1 preinstalled, ADVA branded.	\$ 5,891.25
BC48005102-04	AC hot swappable power supply for FSP 150-XG304U, FSP 150-XG304U/F, FSP 150-XG308 and FSP 150-XG308/F (90-240V AC), with EU power cable, ADVA branded	\$ 306.75
1048004970-04	NFV server module for FSP 150-XG304U and FSP 150-XG304U/F, with 12xCore X86 Xeon-D, 32GB DDR4 and 1TB SSD, ADVA branded	\$ 13,032.47
1048005150-04	DC hot swappable power supply for FSP 150-XG304U, FSP 150-XG304U/F, FSP 150-XG308 and FSP 150-XG308/F (-48V DC), ADVA branded	\$ 676.07
1048004950-04	NFV server module for FSP 150-XG304U and FSP 150-XG304U/F, with 8xCore X86 Xeon-D, 16GB DDR4 and 256GB SSD, ADVA branded	\$ 10,675.17
1048005400-04	Fan Tray (including Filter) for FSP 150-XG308 and FSP 150-XG308/F models, ADVA branded Optional desktop AC (90-240V AC) to 12VDC power supply for OS-V8 series - 1pin connector,	\$ 470.60
BC48005202-01	with EU power cable Optional desktop AC (90-240V AC) to 12VDC power supply for OS-V8 series - 1pin connector,	\$ 148.13
BC48005203-01	with US power cable	\$ 149.85
1091480141-01	10GE License for the OS-V8 SFP+ ports	\$ 918.52
1091480142-01	10GE License for the OS-V20 SFP+ ports	\$ 2,314.47

1091480154-01	Layer-3 IPv4 and IPv6 License for 1G OptiSwitch 9xx and OS-Vx Series. Supporting both Layer-3 IPv4 and IPv6 protocol stack with OSPFv2, OSPFv3, ISIS, BGP4, BGP4	\$	551.35
	MPLS License for 1G OptiSwitch 9xx and OS-Vx Series. Supporting MPLS and Layer-3 IPv4 /		
	IPv6, with L3 and L2VPN/VPLS protocols stacks, with OSPFv2, OSPFv3, ISIS, BGP4, BGP4, LDP		
1091480150-01	RSVP, RSVP-TE and signaling over BGP	\$	826.42
1091480156-01	Layer-3 IPv4 and IPv6 License for 10G OptiSwitch 9xx and OS-Vx Series. Supporting both Layer-3 IPv4 and IPv6 protocol stack with OSPFv2, OSPFv3, ISIS, BGP4, BGP4	\$	1,652.85
	MPLS License for 10G OptiSwitch 9xx and OS-Vx Series. Supporting MPLS and Layer-3 IPv4 / IPv6, with L3 and L2VPN/VPLS protocols stacks, with OSPFv2, OSPFv3, ISIS, BGP4, BGP4, LDP		
1091480155-01	RSVP, RSVP-TE and signaling over BGP NFV server module for FSP 150-XG304U and FSP 150-XG304U/F, with 16xCore X86 Xeon-D,	\$	2,478.05
1048004980-04	64GB DDR4 and 1TB SSD, ADVA branded	\$	21,374.63
1091480497-01	FSP 150-XG300 Pre-installed SW, Rel.20.1.1	\$	=
1091480498-01	FSP 150-XG300 Pre-installed SW, Rel.20.2.1	Ś	_
1091480500-01	FSP 150-XG300 Pre-installed SW, Rel.22.1.1	¢	
1091480300-01	NFV server module for FSP 150-XG304U and FSP 150-XG304U/F, with 16xCore X86 Xeon-D,	ڔ	-
1048004975-04	32GB DDR4 and 256GB SSD, ADVA branded	\$	18,040.28
1091480496-03	FSP 150-XG300 Pre-installed SW, Rel.19.6.3	\$	10,010.20
1091460490-03	NFV server module for FSP 150-XG304U and FSP 150-XG304U/F, with 16xCore X86 Xeon-D,	Ş	-
1048004976-04	32GB DDR4 and 512GB SSD, ADVA branded	\$	9,642.90
1091480497-02	FSP 150-XG300 Pre-installed SW, Rel.20.1.2	\$	-
1091480437-02	FSP 150-XG312/F - Extended temperature, Ethernet Services aggregation device: 40x ports of	Ą	
	1G and 12 ports of 1/10G - 2U 19" switch with 10G license and OAM module. Includes basic		
1078901501-01	chassis, one PSU filler and 19" brackets.	\$	6,361.37
1048005510-01	XG312 Fan EXH Module	\$	993.53
1091480495-01	FSP 150-XG300 Pre-installed SW, Rel.19.5.1.	\$	-
1091480496-02	FSP 150-XG300 Pre-installed SW, Rel.19.6.2	¢	_
1051400430 02	Pluggable Module for FSP 150-XG304U and FSP 150-XG304U/F, with 4C X86 CPU and 5G/LTE	Ţ	
1048005040-01	modem for wireless backup	\$	4,155.55
	License for XG308 to enable all 8 SFP+/10GE ports at 10G speed. W/o this license, ports are	•	,
1091480201-01	just with 1G speed	\$	2,314.47
	License for 1G, XG300 enables MPLS with LDP RSVP, RSVP-TE and signaling over BGP		
1091480220-01	.F150/XG300/1G-L3/KEY is mandatory to use this key	\$	275.40
	License for 1G, XG300 enables Layer-3 IPv4 / IPv6 protocol stacks, with OSPFv2, OSPFv3, ISIS		
1091480221-01	and BGP4.	\$	550.80
	License for 10G, XG300 enables MPLS with LDP RSVP, RSVP-TE and signaling over BGP.		
1091480222-01	F150/XG300/10G-L3/KEY is mandatory to use this key	\$	826.20
1001400222-01	License for 10G, XG300 enables Layer-3 IPv4 / IPv6 protocol stacks, with OSPFv2, OSPFv3, ISIS	ċ	1 (52 40
1091480223-01	and BGP4.	\$	1,652.40
1091480200-01	License for XG304 to enable all 4 SFP+/10GE ports at 10G speed. W/o this license, ports are just with 1G speed	\$	918.52
1051400200 01	FSP 150-XG304H/F - Extended temperature, Ethernet Services demarcation device: 4 ports of	Ţ	310.32
	1G and 4 ports of 1/10G - 1U 19" switch with SFP+ enabled as 1G and OAM module. ETSI 300		
1048004201-01	depth. Includes basic chassis, one PSU filler and 19" brackets	\$	2,932.77
	FSP 150-XG308H/F - Extended temperature, Ethernet Services demarcation device: 12 ports of	•	ŕ
	1G and 8 ports of 1/10G - 1U 19" with SFP+ enabled as 1G and OAM module. ETSI 300 depth.		
1048003901-01	Includes basic chassis, one PSU filler and 19" brackets.	\$	3,478.17
1091480496-01	FSP 150-XG300 Pre-installed SW, Rel.19.6.1	\$	-
1091480499-01	FSP 150-XG300 Pre-installed SW, Rel.21.1.1	\$	-
1013900001	FSP 150-XG480 Filler Card, PSU slot	\$	35.70
1040904080-01	FSP 150-XG480/XG312 750Watt AC power supply	, \$	555.90
1013900002	FSP 150-XG480 Fan Tray Module-filter replacement	\$	11.90
1013300002	131 130 AUTOUT ATT Tray Module Titlet Teplacement	ب	11.50

1040904081-01	FSP 150-XG480/XG312 750Watt DC power supply	\$	555.90
1078901001-01	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 4x100G (QSF28)	\$	19,143.70
1091901031-01	FSP 150-XG480 Full Capacity LIC KEY	\$	3,570.00
1078901002-01	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 8x25G + 2x100G (QSFP28) FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 4x100G (QSF28) NEBS	\$	19,595.90
1078901010-01	variant with rear DC inlet	\$	19,350.25
1042201000-01	FSP 150-XG480 Fan Tray Module	\$	442.85
1091901001-01	FSP 150-XG480, Base SW features, Must order one License for each XG480 chassis FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 8x25G + 2x100G (QSFP28)	\$	2,890.00
1078901011-01	NEBS variant with rear DC inlet	\$	19,805.85
1091901035-01	FSP 150-XG4XX EoMPLS LIC KEY	\$	2,040.00
1091901033-01	FSP 150-XG4XX L3 LIC KEY	\$	2,040.00
1091901032-01	FSP 150-XG4XX SYNC-E and PTP LIC KEY	\$	2,040.00
1091901009-01	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.2.1	\$	-
1091901056-01	XG4XX Multicast Routing (PIM) Control License Key.	\$	2,805.00
1091901057-01	XG4XX Segment Routing License Key.	\$	2,040.00
	FSP 150-XG418 Carrier Ethernet Aggregation Device 1RU 12 x SFP+ 4 x SFP28 and 2 x CFP2, C-		
1078901056-02	Temp	\$	10,167.78
1078901001-02	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 4x100G (QSF28)	\$	19,143.70
1078901003-01	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 4x100G (2xQSF28+2xCFP2) FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 4x100G (2xQSF28+2xCFP2),	\$	20,105.90
1078901012-01	NEBS variant with rear DC inlet	\$	20,315.85
1091901011-01	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R20.1.1	\$	-
	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 8x25G + 2x100G (QSFP28)	•	
1078901011-02	NEBS variant with rear DC inlet	\$	19,805.85
1078901003-02	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 4x100G (2xQSF28+2xCFP2)	\$	20,105.90
407004050 04	FSP 150-XG490 Carrier Ethernet Aggregation Device 1RU 4x25G + 22x100G(QSFP28) + 4x400G		26.025.65
1078901060-01	(QSFDD), dual PSUs pluggable, 3 pluggable Fan Trays, C-Temp	\$	26,935.65
1091901013-03	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.7.3	Ş	-
1078901002-02	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 8x25G + 2x100G (QSFP28)	\$	19,595.90
1091901016-01	FSP 150-XG480,XG404,XG418 and XG490 Pre-installed SW, R23.1.1	\$	-
1091901012-01	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.6.1	\$	-
1091901012-02	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.6.2	\$	-
1013901010-01	Airflow Module to attach to XG404/418 Chassis	\$	28.05
1091901013-01	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.7.1	\$	-
1091901013-02	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.7.2	\$	-
1078901052-01	FSP 150-XG418 Carrier Ethernet Aggregation Device 1RU 12 x SFP+ 4 x SFP28 and 2 x CFP2	\$	10,413.35
1091901050-01	FSP 150-XG404 and XG418, Base SW features, Must order one License for each chassis	\$	1,615.00
1091901004-01	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.1.1	\$	-
1091901036-01	FSP 150-XG4XX Control PLane LIC KEY	\$	3,910.00
1091901007-01	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.5.1	\$, · · · · · -
-	FSP 150-XG418 Carrier Ethernet Aggregation Device 1RU 12 X SFP+ 4 X SFP28 and 2 x QSF28, C-		
1078901057-01	Temp	\$	9,689.15
1078901053-02	FSP 150-XG418 Carrier Ethernet Aggregation Device 1RU 12 X SFP+ 4 X SFP28 and 2 x QSF28	\$	8,523.40

	FSP 150-XG418 Carrier Ethernet Aggregation Device 1RU 12 X SFP+ 4 X SFP28 and 2 x QSF28, C-		
1078901057-02	Temp	\$	9,295.48
1070001010 03	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 4x100G (QSF28) NEBS	¢	10 250 27
1078901010-02	variant with rear DC inlet	\$	19,350.27
1091901015-01	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R22.1.1	\$	-
1091901051-01	XG404/XG418 Elephant Flows Control License Key. Must order one License for each chassis	\$	2,040.00
	FSP 150-XG480 Carrier Ethernet Aggregation Device 2RU 52x10G + 4x100G (2xQSF28+2xCFP2),		
1078901012-02	NEBS variant with rear DC inlet	\$	20,315.85
1078901052-02	FSP 150-XG418 Carrier Ethernet Aggregation Device 1RU 12 x SFP+ 4 x SFP28 and 2 x CFP2	\$	9,229.87
1091901011-02	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R20.1.2	\$	-
1078901053-01	FSP 150-XG418 Carrier Ethernet Aggregation Device 1RU 12 X SFP+ 4 X SFP28 and 2 x QSF28	\$	9,548.90
	FSP 150-XG418 Carrier Ethernet Aggregation Device 1RU 12 x SFP+ 4 x SFP28 and 2 x CFP2, C-		
1078901056-01	Temp	\$	10,416.75
1091901004-02	FSP 150-XG480,XG404 and XG418 Pre-installed SW, R19.1.2	\$	-
1013901001-01	Airflow Module to attach to NEBS XG480 Chassis	\$	77.35
1091901003-01	FSP 150-XG480, Pre-installed SW, R18.5.1	\$	-
1091901011-03	FSP 150-XG480, XG404 and XG418 Pre-installed SW, R20.1.3	\$	-
	FSP 150-XG404 Carrier Ethernet Aggregation Device 1RU 2x100G (QSF28) and 2 x 100G(CFP2),		
1078901055-02	C-Temp	\$	9,743.32
1078901051-02	FSP 150-XG404 Carrier Ethernet Aggregation Device 1RU 2x100G (QSF28) and 2 x 100G(CFP2)	\$	8,101.80
	FSP 150-XG404 Carrier Ethernet Aggregation Device 1RU 2x100G (QSF28) and 2 x 100G(CFP2),		
1078901055-01	C-Temp	\$	10,024.05
1078901050-01	FSP 150-XG404 Carrier Ethernet Aggregation Device 1RU 4x100G (QSF28)	\$	9,334.70
1078901051-01	FSP 150-XG404 Carrier Ethernet Aggregation Device 1RU 2x100G (QSF28) and 2 x 100G(CFP2)	\$	10,024.05
1078901054-01	FSP 150-XG404 Carrier Ethernet Aggregation Device 1RU 4x100G (QSF28), C-Temp	\$	9,330.45
1078901054-02	FSP 150-XG404 Carrier Ethernet Aggregation Device 1RU 4x100G (QSF28), C-Temp	\$	9,050.15
1078901050-02	FSP 150-XG404 Carrier Ethernet Aggregation Device 1RU 4x100G (QSF28)	\$	7,474.77
	Standalone 1RU 40-Channel DWDM MUX and DeMUX, C-Band 100GHz Channels #21-60 , with		
1048000508-01	monitor ports, industrial temperature -40C to +85C	\$	23,758.59
	Bundle of QuadFlex-S (F8/MP-2B4CT-S, single fiber working) and port license for one client		
BC00000690	port (1P). Quadflex: QPSK or 16QAM format, 1 QSFP28 clients with any combination of OTU-4/100GE services	\$	E2 000 11
			52,880.11
1063804321-02	Amplifier Single Stage >23dBm, Low gain, integrated OSC, C-Band. IN-APR Shelf 12HU. For DC front, AC or mixed. Includes PFMF with 8xSubD 2W2 connectors and 19"	\$	13,148.11
	rack adaptor brackets (EIA/Weco), ETSI and 23" rack adapters, side air shields, Upper Shelf		
1078800021-02	Front Cover, Shelf Front Cover Extension and ground cable	\$	9,609.52
1040800066-01	Power Supply Module, 1200W, AC 110/220V with dual decoupled inlet for A/B for SH12	\$	1,520.90
1013800066-01	Kit containing air filter pads for SH1R	\$	30.50
1013800067-01	19"/23" and ETSI Guide Rail kit for SH1R with 4 post racks 400 to 534mm post distance	\$	317.05
1013800068-01	19"/23" and ETSI Guide Rail kit for SH1R with 4 post racks 534 to 800mm post distance	\$	316.95
1013800070-01	Breakout Tray-BOX 1HU -Multimode 50u, 4 x MPO24 fan out to 96 x LC	\$	2,984.90
1013800069-01	Breakout Tray-BOX 1HU - Singlemode, 4 x MPO24 fan out to 96 x LC	\$	3,372.34
BC00000483	Shelf Kit SH1R with Base License, CEM-6, 2 x PSM-AC3, 3 x FTM-3, ECM-6, SC-XCM3	\$	7,938.11
1040800021-01	Power Supply Module, 1200W, DC 48/60V for SH12	\$	1,449.98
1042800022-01	Fan Tray Module for SH12	\$	773.98
1063801091-01	Slot cover for FCM/SCM clot	\$	37.20
1063801092-01	Slot cover for ECM/SCM slot	\$	37.30

	Open fabric 400G: 2xQSFP28 OTU4; client: 2xQSFP28, 3xQSFP+ IF, 20x10GE/OTU2/OTU2e/STM64/OC192/8GFC; 2xOTU4, 6x25GE/32GFC, 4x40GE, 2x100GE,		
1063802161-01	12x16GFC. No encryption.	\$	12,661.77
1042800054-01	Fan Tray Module for SH4R	\$	538.72
1091802104-01	Right to use one F8/MP-2B4CT (Quadflex) or F8/MP-2B4CT-S (Quadflex-S) client port	\$	12,878.90
1013800024-01	Air filter pads for SH12: Kit containg 10 air filter pads for card cage and for PSMs	\$	200.46
1013800054-01	Air filter pads for SH4R: Kit contains 10 sets of air filters supporting 10 replacement cycles	\$	29.79
1063801093-01	Slot cover for PSM	\$	16.21
1091806131-01	SW to configure one non-ADVA QSFP 10/14/28. CAUTION! Ensure that 3rd party QSFP comply with all relevant standards to prevent damages and accidents. The operating organization has the responsibility for the laser safety of the end-to-end system.	\$	1,059.56
	Right to use per Fiber Channel/FICON client service for FSP 3000R7 and FSP 3000 C (selected		
1091701905	cards).	\$	218.42
1063805131-01	Filter mux/demux 48 channels DWDM with MPO connectors, C-Band, 100GHz spacing, single slot line card	\$	11,852.42
1040800054-01	Power Supply Module, 800W, DC 48/60V for SH4R	\$	1,274.99
1040800034-01	Power Supply Module, 1450W, AC 110/220V for SH4R, with integrated fan, can be mixed with	ڔ	1,274.33
1040800065-01	PSM-AC4, DC4	\$	1,164.15
	1HU Fiber tray with 200mm deep drawer, for use above or below SH4R, below SH3, below		
1013800065-01	SH2*, or below Teraflex: supporting 19", 23" and ETSI normal or revers mountable brackets	\$	251.33
1013800060-01	19"/23" and ETSI brackets for 2 post mid mount position for SH1R (complies with ETSI 300 119-6/7 new standard 210mm bracket /rack distance); used for 2 post instead of guide rail kit (4 post)	\$	60.48
1013800000-01	Cryptomux OTN ADM Line: 2xQSFP28 OTU4 Client: 2xQSFP28, 3xQSFP10 IF, 20x10GE OTU2,	ڔ	00.48
	OTU2e, STM64, OC192; 4x40GE, 6xFC-32G, 12xFC-16G,6x25GE, 2x100GE, OTU4, with		
1063802171-01	encryption	\$	53,157.83
	Bundle of QuadFlex (F8/MP-2B4CT. HW2.01) and card license for four client ports (4P).		
BC00000317	Quadflex: Any line format, 4 QSFP28 clients with any combination of OTU-4/100GE services.	\$	68,229.05
1013800062-02	Guide Rail kit for 4 post racks 400570mm post distance	\$	375.14
1013800064-02	Guide Rail kit for 4 post racks 570800mm post distance	\$	376.42
1078800052-01	Shelf 4HU 600mm depth, rear access for power, 19" adaptor brackets (EIA), shelf front cover, shelf front cover extension and grounding cable included, Modification for longer fiber fingers; with DC 2W2 connectors at back side	\$	3,406.97
1070000032 01	Amplified filter module for 40 DWDM channels providing low gain pre-amplification and	Ţ	3,400.37
	DWDM multiplexing and de-multiplexing with integrated measurement of chromatic		
1063804391-01	dispersion. Interstage access for DC modules	\$	22,464.84
1063804311-01	Booster amplifier with integrated tunable dispersion compensation and OSC function	\$	18,457.16
1063804122-01	Preamplifier, high gain, no interstage, with integrated OSC, for boosterless operation, C-Band	\$	10,979.33
1001902109 01	Right to use (a) cross connection between the line ports (as for add-drop or OTN XC function) or (b) cross connections between line ports and OTU4 client ports on OpenFabric family F8/MA-	ċ	2 520 52
1091802108-01	2C5LT,F8/MA-B5CLT F8/MA-2C2C3LT-A,F8/MA-B2C3LT-A,F8/OF-2D16DCT.	\$	2,529.52
	Bundle of QuadFlex (F8/MP-2B4CT. HW2.01) and card license for two client ports (2P).		
BC00000371	Quadflex: Any line format, 2 QSFP28 clients with any combination of OTU-4/100GE services.	\$	52,936.23
BC00000326	Bundle of QuadFlex (F8/MP-2B4CT. HW2.01) with 4 MicroMux and 4 Client Port RTUs	\$	139,274.15
	Bundle of QuadFlex (F8/MP-2B4CT. HW2.01) and card license for one client port (1P).		
BC00000318	Quadflex: Any line format, 1 QSFP28 clients with any combination of OTU-4/100GE services.	\$	43,861.41

1063801098-01	Slot cover for ECM-3/SCM-3 slot in SH1R shelf	\$	32.21
1042800083-01	Fan Tray Module for SH1R	\$	246.82
1040800093-01	Power Supply Module, 480W, AC 110V/240V for SH1R	\$	535.09
	Shuffle Module with single mode fiber shuffle with 7 MPO12 connectors, with power	•	
1063803171-01	monitoring	\$	11,650.15
	16x8 passive Splitter & Combiner for Route and Select ROADM, 16 Clients for 8 directions, with		
1063803161-01	Monitoring diodes, LC connectors	\$	9,203.70
1063803172-01	Shuffle Module with single mode MPO12 breakout to 12 LCs with power monitoring	\$	4,001.10
1063801073-01	Shelf Controller Module for SH1R	\$	1,982.48
1040800083-01	Power Supply Module, 480W, DC 48/60V for SH1R	\$	464.88
1063801099-01	Slot cover for PSM slot in SH1R	\$	46.44
	Switchable Gain low gain EDFA amplifier with integrated Raman amplifier and OSC function for		
1063804351-01	extended reach application	\$	33,712.25
	Bundle of QuadFlex-S (F8/MP-2B4CT-S, single fiber working) and port licenses for two client ports (2P). Quadflex: QPSK or 16QAM format, 2 QSFP28 clients with any combination of OTU-		
BC00000689	4/100GE services	\$	63,456.19
	Bundle of QuadFlex-S (F8/MP-2B4CT-S, single fiber working) and port licenses for four client	•	,
	ports (4P). Quadflex: QPSK or 16QAM format, 4 QSFP28 clients with any combination of OTU-		
BC00000688	4/100GE services	\$	79,320.38
1063801096-01	slot cover for SH3 Power supply slot	\$	47.45
	CH2 21111 200 mars door shalf with 4 high manuar slote with Frank Access for AC on DC DCM. FTM		
1078800022-01	SH3 3HU 300mm deep shelf with 4 high power slots with Front Access for AC or DC PSM, FTM, ECM, includes 19", ETSI and 23" Brackets, side air shields, Front Cover and Grounding cables	\$	2,347.79
1040800055-01	Power Supply Module 900W, DC 48/60V for SH3	\$	906.21
1042800023-01	Fan Tray Module for SH3	\$	647.47
1091800031-01	SW for Release 3.1.1 preinstalled	۶ \$	047.47
1091802117-01		\$	11,420.88
	Right to use the submarine mode on TeraFlex Multiplexers (T-MP-2D8CT).	۶ \$,
1040800057-01	Power Supply Module, 1450W, DC 48/60V for SH4R-3 OpenFabric1200: Line: 2xCFP2-DCO; Client/Line: 2xQSFP56-DD, 6xQSFP28; Client: 4xSFP56-DD,	Ş	1,593.85
1063802173-01	4xSFP28. Max capacity Clients: 600G, Line: 600G	\$	30,244.32
1091800055-01	SW for Release 5.5.1 preinstalled	\$, -
1091800045-02	SW for Release 4.5.2 preinstalled	\$	_
1063805139-01	8ch 200GHz WDM Mux/demux with AUX port, LC connectors	\$	3,200.00
1063800022-03	Common Equipment Module for SH12	, \$	1,583.92
	1HU Fiber tray with 200mm deep drawer, for optional use below Teraflex with frontcover T-SA		_,
	COVER: supporting 19",23" and ETSI normal or revers mountable brackets and accessory kit		
1063801101-01	for mounting below Teraflex Shelf T-SH1R-2 with front cover.	\$	442.23
1063801080-01	Teraflex Element Controller Module, Main shelf/NE controller module. for T-SH1R-2	\$	2,644.78
1042800087-01	Teraflex Fan Tray Module for T-SH1R-2	\$	280.11
	TeraFlex bundle including TeraFlex 1200G Multiplexer (T-MP-2D12CT with 2x Integrated C-		
DC00000747	Band Tunable Line Ports and 12x QSFP28 Client Ports), and card licenses (RTU/T-MP-	Ļ	102 256 00
BC00000747	2D12CT/CLIENT PORT) for 12 client ports.	\$	103,356.88
1040800097-01	Teraflex Power Supply Module, 990W, AC 110/220V, HVDC 240V for T-SH1R-2	\$	1,401.68
1063801094-01	Traffic Module Slot Cover for FSP 3000 C 1HU TeraFlex Shelf ToraFlex hundle including ToraFlex 12006 Multiplexer /T MP 2D12CT with 2x Integrated C	\$	732.44
	TeraFlex bundle including TeraFlex 1200G Multiplexer (T-MP-2D12CT with 2x Integrated C-Band Tunable Line Ports and 12x QSFP28 Client Ports), and card licenses (RTU/T-MP-		
BC00000746	2D12CT/CLIENT PORT) for two client ports.	\$	66,443.28
			•
1091802109-01	Right to use one client port on F8/T-MP-2D12CT and F8/T-MP-2D8CT (TeraFlex Multiplexer)	\$	4,433.85
1063801022-03	Shelf Controller Module	\$	1,936.59
1063801080-02	Teraflex Element Controller Module, Main shelf/NE controller module. for T-SH1R-2	\$	2,571.85

	Shelf 1HU 600mm deep for DC or AC rear access. Includes rack adaptor brackets, Grounding		
1078800081-02	cables and air filters.	\$	2,129.10
1063801066-01	Element controller module, Main shelf/NE controller module. for SH1R. 8x4 passive Splitter & Combiner for Route and Select ROADM, 8 Clients for 4 directions, with	\$	2,270.00
1063803163-01	monitoring diodes, LC connectors EdgeFlex 2HU shelf with air filter over -5 to +55°C, with 3x QSFP OTU4/100G network	\$	6,400.00
1078800111-01	interfaces and 10GE, 25GE, 100GE client interfaces	\$	14,632.00
1062902152 01	4-Degree ROADM Module for FSP 3000 C, WSS-Based, Flexgrid Extended C-Band, Broadcast & Select with Integrated OCM, with 1x LC Duplex Network Connector and 4x LC Duplex Client Connectors	\$	15,733.33
1063803152-01	Connectors	ڔ	13,733.33
1063008905-01	Mini patch panel module - SM fiber, 12 LC to 12 LC, 1-slot module for SH1HU/LGX shelves 32-Degree ROADM Module for FSP 3000 C, WSS-Based, Flexgrid Extended C-Band, with Route & Select Twin WSS and Integrated OCM, with 1x LC Duplex Network Connector and 32x Duplex	\$	800.00
1063803153-01	SN Client Connectors 8x8 passive Splitter & Combiner for Route and Select ROADM, 8 Clients for 8 directions, with	\$	48,000.00
1063803164-01	monitoring diodes, LC connectors	\$	6,933.33
1040800098-01	Teraflex Power Supply Module, 1100W, DC 48/60V for T-SH1R-2	\$	2,076.55
	TeraFlex bundle including TeraFlex 800G Multiplexer (T-MP-2D8CT with 2x Integrated C-Band Tunable Line Ports and 8x QSFP28 Clients), and card licenses (RTU/MP-2D12CT/CLIENT PORT)		
BC00001014	for eight client ports.	\$	89,914.90
1063804101-02	Amplifier Single Stage >23dBm, high gain, integrated OSC, C-Band. IN-APR.	\$	13,247.81
	TeraFlex bundle including TeraFlex 800G CoreChannel Multiplexer (F8/T-MP-M8DCT with 800G Line Port and 8xQSFP28, 2x QSFP56-DD Client Ports), and card licenses (F8/RTU/T-		
BC00001123	100G/CAPACITY) for 8 client ports (8x 100G or 2x 400G). S-Flex with 1xCFP2 400G network interface and 19 client interfaces with encryption. Full	\$	89,787.18
1063802124-01	technical compliance with BSI security Profile acc. to VS-NfD 200G client capacity , license required for upgrade to 400G client capacity	\$	87,125.33
1003802124-01	Flexible trans/muxponder for aggregation of GbE and 10G services, 1RU with dual PSUs	۲	67,123.33
1078800100-01	pluggable, passively cooled, extended temp supported (-40C to +65C).	\$	2,613.33
	S-Flex with 1xCFP2 400G network interface and 19 client interfaces with encryption. Includes	•	,
BC00001162	license required for 400G client capacity	\$	90,444.00
	TeraFlex bundle including TeraFlex 800G FlexClient Multiplexer (F8/T-MP-2D8DCT with 2x400G		
	Line Ports and 8xQSFP28, 2x QSFP56-DD Client Ports), and card licenses (F8/RTU/T-		
BC00001122	100G/CAPACITY) for 4 client ports (4x 100G or 1x 400G).	\$	71,457.60
	S-Flex with 1xCFP2 400G network interface and 19 client interfaces with encryption. Full		
BC00001163	technical compliance with BSI security Profile acc. to VS-NfD. Includes license required for 400G client capacity	\$	120,592.00
500001103	TeraFlex bundle including TeraFlex 800G FlexClient Multiplexer (F8/T-MP-2D8DCT with 2x400G Line Ports and 8xQSFP28, 2x QSFP56-DD Client Ports), and card licenses (F8/RTU/T-	7	120,332.00
BC00001124	100G/CAPACITY) for 8 client ports (8x 100G or 2x 400G).	\$	89,787.18
Beeddolle !	SW to configure one non-ADVA SFP+, SFP28 or SFP56. CAUTION! Ensure that 3rd party QSFP	Ψ	03,707.10
	comply with all relevant standards to prevent damages and accidents. The operating		
1091806133-01	organization is responsible for the laser safety of the end-to-end system.	\$	338.63
	S-Flex with 1xCFP2 400G network interface and 19 client interfaces with encryption - 200G		
1063802123-01	client capacity , license required for upgrade to 400G client capacity	\$	56,977.33
1063801054-02	Common Equipment Module for SH4R	\$	1,071.85
	TeraFlex bundle including TeraFlex 1200G Multiplexer (T-MP-2D12CT with 2x Integrated C-Band Tunable Line Ports and 12x QSFP28 Client Ports), and card licenses (RTU/T-MP-		
BC00001172	2D12CT/CLIENT PORT) for 12 client ports + 12x non-approved pluggables QSFP LIC	\$	127,118.50
1013800076-01	19"/23" and ETSI Guide Rail kit for SH1R with 4 post racks 684 to 950mm post distance 1HU slimline shelf w/ management connectivity for 1x 2-slot or 2x 1-slot passive OLS modules	\$	316.95
1078800084-01	with fiber management	\$	453.33

	48 channel filter C-Band with 100GHz spacing, 2HU shelf with IN-APR 1510nm loop, LC		
1063805132-01	connectors	\$	7,112.29
	EdgeFlex 1HU shelf for street cabinet (no air filter) -40 to +65°C, with 3x QSFP OTU4/100G		
1078800110-01	network interfaces and 10GE, 25GE, 100GE client interfaces RTU to use FibreChannel and /or Coupling Link on S-Flex (SF-D19DCT-A and SF-D19DCT-G). One	\$	14,632.00
1091802122-01	license per card needed.	\$	2,364.00
	Right to use 100G client port capacity on TeraFlex Multiplexer cards supporting mix of	,	_,
1091802118-01	100GE/OTU4 and 400GE clients: F8/T-MP-2D8DCT, F8/T-MP-M8DCT.	\$	4,846.40
	RTU to upgrade capacity of F8/SF-D19DCT-A/200G or F8/SF-D19DCT-G/200G from 200G to		
1091802121-01	400G	\$	36,666.67
1063801081-02	Teraflex Shelf Controller Module for T-SH1R-2	\$	2,121.87
1078800086-02	FSP 3000 C 1RU TeraFlex Shelf with Integrated CEM, Rear Access, 600 mm Deep, with fix brackets for mounting into guide rails, and Grounding Cable	\$	3,415.66
1070000000 02	OpenFabric+: Line: 1xCFP2-DCO 8/16QAM/QPSK; client: 2xQSFP28, 3xQSFP+ IF,	Ţ	3,413.00
	20x10GE/OTU2/OTU2e/STM64/OC192/8GFC; 2xOTU4, 6x25GE/32GFC, 4x40GE, 2x100GE,		
1063802162-02	12x16GFC. Max capacity Clients: 200G, Line: 200G. No encryption.	\$	16,870.42
1091800032-00	SW for Release 3.2.0 preinstalled	\$	-
1091800041-02	SW for Release 4.1.2 preinstalled	\$	-
1091800043-01	SW for Release 4.3.1 preinstalled	\$	-
1013800025-01	Fan Air Cleansing Filter Metallic for SH12	\$	272.36
	System software license per SH12. Access to Maintenance, Minor and Major Releases is		
1091801204-01	subject to a valid Maintenance agreement covering this product.	\$	7,608.88
1091801504-01	System software license per SH4R. Access to Maintenance, Minor and Major Releases is subject to a valid Maintenance agreement covering this product.	\$	2,529.52
1031801304-01	System software license per SH1R. Access to Maintenance, Minor and Major Releases is	Ţ	2,323.32
1091801805-01	subject to a valid Maintenance agreement covering this product.	\$	751.75
	SW to configure one non-ADVA QSFP 56 or 10/14/28. CAUTION! Ensure that 3rd party QSFP		
	comply with all relevant standards to prevent damages and accidents. The operating		
1091806132-01	organization is responsible for the laser safety of the end-to-end system.	\$	2,119.10
1091802113-01	Per wavelength external connection license per end for ROADM or Terminal with fixed mux/demux	\$	1,005.70
1031002113 01	Per 12.5GHz block of spectrum external connection license per end for ROADM or Terminal	Ţ	1,003.70
1091802114-01	with colorless/flexgrid multiplexing	\$	497.77
1013800063-01	Kit containing air filter pads for SH3	\$	27.05
	Bundle for 6 x 12.5GHz external connection licenses per end for ROADM or Terminal with		
BC00001114	colorless/flexgrid multiplexing, equivalent to 75GHz spectrum	\$	2,986.65
	TeraFlex bundle including TeraFlex 800G CoreChannel Multiplexer (F8/T-MP-M8DCT with 800G		
BC00001121	Line Port and 8xQSFP28, 2x QSFP56-DD Client Ports), and card licenses (F8/RTU/T-100G/CAPACITY) for 4 client ports (4x 100G or 1x 400G).	\$	71,457.60
1091800042-01	SW for Release 4.2.1 preinstalled	\$	
1091800034-01	SW for Release 3.4.1 preinstalled	\$	_
1031000034 01	19"/23" and ETSI Bracket kit for SH1R with 2 post racks with threaded holes; front mount and	Y	
	mid mount option (complies with ETSI 300 119-6/7); used for 2 post racks instead of guide rail		
1013800053-01	kit (4 post)	\$	546.48
	Dual amplifier each with single accessible Stage, 23dBm, integrated OSC, C-Band, IN-APR.		
1063804323-02	Integrated OCM, OTDR for monitoring of all traffic ingress/egress ports, AM-2S23-M, HW Rev 2.01. New HW revision (PCN 5996)	\$	41,333.33
1003004323-02	Cryptomux+: Line: 1xCFP2-DCO 8/16QAM/QPSK 2xOTU4; client: 2xQSFP28, 3xQSFP+ IF,	ب	41,333.33
	20x10GE OTU2, OTU2e, STM64, OC192; 4x40GE, 6xFC-32G; 6x25GE, 12xFC-16G, 2x100GE,		
1063802172-02	OTU4, with encryption	\$	59,380.55
1091800033-01	SW for Release 3.3.1 preinstalled	\$	-

	S-Flex with 1xCFP2 400G network interface and 19 client interfaces - 400G client capacity.		
	Requires a license (F8/RTU/SF-D19DCT/FC-CL) per card for FibreChannel and Coupling link		
1063802125-01	application.	\$	42,666.67
	Shelf 4HU 600mm depth, rear access for power, 19" adaptor brackets (EIA), shelf front cover,		
1078800053-01	shelf front cover extension and grounding cable included, Modification for longer fiber fingers; DC 2W2 connectors on PSM-DC5.	\$	3,221.12
1063801097-01	Slot cover for PSM-AC8 slot in case only one power supply is used; for SH2 and SH2R	\$	48.78
1013800055-01	Kit containing air filter pads for SH2R, SH2, SH2R-2, SH2-2	\$	22.36
1063801100-01	Teraflex passive Shelf Front cover with optional air filter for 19", 23" and ETSI racks	\$	835.12
1003001100 01	Dual single stage EDFA amplifier, +20dBm, low variable gain range, single integrated OSC, XFP	Y	033.12
1063804352-01	OTDR, C-Band	\$	15,333.33
	32-Degree ROADM Module for FSP 3000 C, WSS-Based, Flexgrid Extended C-Band, with Route		
	& Select Twin WSS and Integrated OCM, with 1x LC Duplex Network Connector and 6x MPO12		
1063803151-01	Duplex Client Connectors	\$	52,307.12
1063803162-01	16x4 passive Splitter & Combiner for Route and Select ROADM, 16 Clients for 4 directions, with Monitoring diodes, LC connectors	\$	7,833.87
1061804371-01	XFP EDFA, C-Band, 17dBm output	\$	3,473.39
1061804372-01	XFP EDFA, 10dB gain, +12dBm, C-Band	\$	3,473.39
1001804372-01	Power Supply Module AC, 400W, AC 110V/240V and DC 240V, rear power feeding, for SH2R	۲	3,473.33
1040800068-01	and SH2R-2	\$	589.45
	Element Controller Module, Main shelf/NE controller module. For SH2 and SH2R, SH2-2 and		
1063801068-01	SH2R-2	\$	2,584.69
	TeraFlex bundle including TeraFlex 1200G Multiplexer (MP-2D3DT with 2x Integrated C-Band		
BC00000810	Tunable Line Ports and 3x QSFP-DD Client Ports), and card licenses (RTU/MP-2D3DT/CLIENT PORT) for one client port.	ć	79,437.98
BC00000810	TeraFlex bundle including TeraFlex 1200G Multiplexer (MP-2D3DT with 2x Integrated C-Band	\$	73,437.30
	Tunable Line Ports and 3x QSFP-DD Client Ports), and card licenses (RTU/MP-2D3DT/CLIENT		
BC00000811	PORT) for three client ports.	\$	102,975.31
1091802111-01	Right to use one client port on F8/MP-2D3DT (TeraFlex Multiplexer for 400G clients)	\$	17,584.21
	48 channel filter C-Band with 100GHz spacing and wide passband for high Baud rate coherent		
1063805134-01	transmission, 1HU shelf with IN-APR 1510nm loop, LC connectors	\$	8,595.39
1062905122-01	2HU shelf with 64 channel filter C-Band with 75GHz spacing for high Baud rate coherent	Ļ	12 645 41
1063805133-01	transmission, IN-APR 1510nm loop TeraFlex bundle for submarine application: including TeraFlex 800G Multiplexer (T-MP-2D8CT	\$	12,645.41
	with with extended tuning range), card licenses (RTU/MP-2D12CT/CLIENT PORT) for eight		
BC00001299	client ports and license for submarine mode (RTU/TF-SUBMARINE).	\$	106,111.64
	Shelf 2HU 450mm deep for AC and DC rear access, 4 traffic slots; Max power 60W per slot. 19"		
1078800082-01	and ETSI 600mm and 23" bracket, front cover and grounding cable included	\$	2,480.76
1052222452 24	1x2 passive Splitter and Combiner for multi-passband with fixed filters, LC connectors, IN-APR		4 200 24
1063803160-01	1510nm loop	\$	4,289.24
1063805130-01	33 channel filter, C-Band with 150GHz spacing, coherent transmission, 1RU shelf, IN-APR 1510nm loop with power monitoring	\$	6,156.80
	65 channel filter, C-Band with 75GHz spacing, coherent transmission according to IOF 400G ZR	Ψ.	0,200.00
1063805135-01	grid, narrow passband, 2HU shelf, IN-APR 1510nm loop with power monitoring	\$	14,878.93
	Common Equipment Module for SH1R with 2xRJ45 and 2x SFP Ethernet front access, no		
1063801084-01	Display	\$	944.78
1001001701 01	System software license per SH2, SH2R. Access to Maintenance, Minor and Major Releases is	<u>,</u>	4 005 70
1091801704-01	subject to a valid Maintenance agreement covering this product.	\$	1,005.70
1063801102-01	Teraflex 10x filters for front and 10x filters for top cover	\$	34.99
1091801901-01	System software license per T-SH1R. Access to Maintenance, Minor and Major Releases is subject to a valid Maintenance agreement covering this product.	\$	1,005.70
	Dual amplifier each with single accessible Stage, 23dBm, integrated OSC, C-Band, IN-APR.	7	_,000.70
	Integrated OCM, OTDR for monitoring of all traffic ingress/egress ports, AM-2S23-M, HW Rel		
1063804323-01	1.01	\$	49,254.40

BC00001261	line format, , including tunable optical filter, suitable for colorless add/drop; 2 QSFP28 clients with any combination of OTU-4/100GE services.	\$	56,744.78
BC00001260	line format, , including tunable optical filter, suitable for colorless add/drop; 2 QSFP28 clients with any combination of OTU-4/100GE services. Bundle of QuadFlex (F8/MP-2B4CT-CG) and card license for one client port (1P). Quadflex: Any	\$	47,017.07
	Bundle of QuadFlex (F8/MP-2B4CT-CG) and card license for one client port (1P). Quadflex: Any	•	
1091800045-03	SW for Release 4.5.3 preinstalled	\$	-
1063803165-01	without monitoring diodes, LC connectors	\$	1,706.67
1040800067-01	Power Supply Module AC, 900W, AC 110V/240V, HVDC 240V for SH3 8x1 passive Splitter & Combiner for Route and Select ROADM, 8 Clients for 1 directions,	\$	710.11
1091800031-05	SW for Release 3.1.5 preinstalled	\$ ¢	740 44
1013800056-01	bracket)	\$	64.02
1042800024-02	5495) Bracket kit for SH2R, SH2, SH2R-2 and SH2-2 (19'`and ETSI bracket and 23'' (EIA/Weco)	\$	847.01
	Fan Tray Module for SH2 and SH2R, SH2-2 and SH2R-2. eUSB Flash for database mirroring (PCN		
1013800075-01	19"/23" and ETSI Bracket and Guide Rail kit for T-SH1R-2 with 2 post racks with threaded holes for mid mount option.	\$	317.85
1063805101-01	options with integrated inband filters and two SFP cages for pilot signals	\$	7,178.67
1003001030-02	Generic Optical Path Protection Switch Module: 1+1 protection based on various trigger	ڔ	013.70
1063801056-02	Common Equipment Module for SH3	۶ \$	819.70
BC00000935	Bundle for 8 x 12.5GHz external connection licenses per end for ROADM or Terminal with colorless/flexgrid multiplexing, equivalent to 100GHz spectrum	\$	3,982.19
BC00000934	Bundle for 4 x 12.5GHz external connection licenses per end for ROADM or Terminal with colorless/flexgrid multiplexing, equivalent to 50GHz spectrum	\$	1,991.09
1078800083-01	Shelf 2HU 300mm deep for front access, 4 traffic slots; Max power 60W per slot. 19" and ETSI 600mm and 23" bracket, side air seal, front cover and grounding cable included	\$	2,165.45
1063801074-01	Shelf Controller Module for SH2 and SH2R, SH2-2 and SH2R-2	\$	2,252.11
1063803150-01	12-Degree ROADM Module for FSP 3000 C, WSS-Based, Flexgrid Extended C-Band, with Route & Select Twin WSS and Integrated OCM, with 1x LC Duplex Network Connector and 12x LC Duplex Client Connectors	\$	30,784.00
1091800041-01	SW for Release 4.1.1 preinstalled	\$	-
1091800032-01	SW for Release 3.2.1 preinstalled	\$	-
1091800031-06	SW for Release 3.1.6 preinstalled	\$	-
1091801604-01	System software license per SH3. Access to Maintenance, Minor and Major Releases is subject to a valid Maintenance agreement covering this product.	\$	1,513.66
BC00001013	Tunable Line Ports and 8x QSFP28 Clients), and card licenses (RTU/MP-2D12CT/CLIENT PORT) for two client ports.	\$	61,764.80
BC00001343	Line Ports and 8xQSFP28, 2x QSFP56-DD Client Ports), and card licenses (F8/RTU/T-100G/CAPACITY) for 2 client ports (2x 100G). TeraFlex bundle including TeraFlex 800G Multiplexer (T-MP-2D8CT with 2x Integrated C-Band	\$	61,764.80
1063804361-01	XFP carrier card module. 6 XFP cages for pluggable EDFAs TeraFlex bundle including TeraFlex 800G FlexClient Multiplexer (F8/T-MP-2D8DCT with 2x400G	\$	2,000.00
1063801012-02	Element Controller Module. Main shelf/NE controller module. For SH12, SH4R and SH3	\$	2,626.84
1063802971-01	Optical Channel Monitoring Module with 4 Monitoring Ports for Monitoring the Power Spectrum	\$	7,534.55
1013800074-01	19"/23" and ETSI Bracket and Guide Rail kit for SH4R with 2 post racks with threaded holes for front and mid mount option.	\$	234.90
1091800051-01	Band SW for Release 5.1.1 preinstalled	\$ \$	7,733.33
1040800065-02 1063804353-01	mixed with PSM-AC4, DC4 Single stage EDFA amplifier, +20dBm, low variable gain range, integrated OSC, XFP OTDR, C-	\$	1,174.90 7,733.33
	Power Supply Module, 1450W, AC 110/220V, HV DC240V for SH4R, with integrated fan, can be		

	Bundle of QuadFlex (F8/MP-2B4CT-CG) and card license for one client port (1P). Quadflex: Any line format, , including tunable optical filter, suitable for colorless add/drop; 2 QSFP28 clients		
BC00001262	with any combination of OTU-4/100GE services.	\$	73,137.89
	Optical Amplifier for Booster application, Single Stage 20dBm max. output power, gain	7	
1063709050-03	controlled (C-Band) with Dual Monitor	\$	3,234.91
	Raman amplifier with variable Raman pump power and up to 10dB gain on G.652 fiber (C-		
1063709060-03	band)	\$	10,816.11
	40-port MUX/DMX Channel Splitter, C-Band, integrated in separate passive shelf with dual		
1063708850-01	monitoring point	\$	5,196.57
1063708865-01	Passive 8 channel terminal filter DWDM for usage with 5GSM	\$	1,887.05
1063709278-01	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 160km True Wave Reduced Slope Fiber for 50GHz channel spacing in the C-band	\$	7,619.12
1003709278-01	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 240km True Wave	۲	7,019.12
1063709280-01	Reduced Slope Fiber for 50GHz channel spacing in the C-band	\$	7,619.12
0042700001-04	Fan Module for SH7HU	\$	995.39
1091703081-01	SW for Release 18.1.1 preinstalled	\$	_
1040700005-01	Power Supply Module (800W) DC for SH7HU	, \$	828.69
1040700006-01	Power Supply Module (800W) AC for SH7HU and SH9HU	\$	822.46
1040700011-01	Power Supply Module (200W) AC for SH1HU-R/PF	\$	550.38
1091703072-02	SW for Release 17.2.2 preinstalled on all applicable HW in the related shipment	\$	-
1031703072 02	3W for release 17.2.2 prenistance on an applicable five in the related simplification	Ţ	
1063708380-01	Terminal module with pre-amplifier and add/drop splitter for 96ch DWDM to the MROADM	\$	10,503.81
	Terminal module with pre-amplifier, booster-amplifier and add/drop splitter for 96ch DWDM		
1063708381-01	to the MROADM	\$	17,299.70
1013700009-01	Mechanical kit to increase cabling space for 7HU and 9HU shelves	\$	15.92
1063708336-01	8-port Power Splitter Module	\$	1,440.61
BC00000638	F7/5WCA-PCN-16GU and one High-Speed port-license	\$	2,356.21
1091701923	High-Speed port license. Right to use for one client port for 4WCC, 5WCA, 6WCA, 9TCE	\$	300.38
1091701970	Software license to use SDN type northbound interfaces (NETCONF, gRPC)	\$	1,513.66
1063708338-01	16 x 4 splitter / combiner module used for colorless terminal and add/drop of coherent signals	\$	6,054.78
1063708328-01	ROADM 9 degree, Flexgrid in C-Band, WSS based, route and select architecture with integrated optical channel monitor	\$	24,304.78
1003700320 01	Combined Network Element and Shelf Control Unit for SH1HU deployments, 2.5 HU high, 2 x	Ţ	24,304.70
1063708429-01	RJ45 Ethernet ports and 1 x serial interface	\$	1,480.99
63709901	Dummy card 5HU	\$	29.14
63709902	Dummy card 2,5HU	\$	75.66
1063708431-01	Utility Module, 2.5 HU high for slot B in slimline shelves only	\$	597.73
BC00000637	F7/4WCC-PCN-10G and one High-Speed port-license	\$	3,873.37
40700001	Power Supply Module (400W) DC for 7HU Shelf	\$	546.29
40700010	Power Supply Module (120W) AC for SH1HU-R	\$	416.34
63708701	4-port Channel Splitter, with upgrade port	\$	1,449.90
63708702	4-port Channel Splitter, with upgrade port	\$	1,543.64
63708703	4-port Channel Splitter, with upgrade port	\$	1,548.57
63708704	4-port Channel Splitter, with upgrade port	\$	1,548.57
63708705	4-port Channel Splitter, with upgrade port	\$	1,543.64
63708706	4-port Channel Splitter, with upgrade port	\$	1,533.77
63708707	4-port Channel Splitter, with upgrade port	\$	1,533.77
63708708	4-port Channel Splitter, with upgrade port	\$	1,533.77
78700061	1HU Slimline Shelf for rear access power supply modules, unequipped	۶ \$	1,078.25
,0,0001	The similar shell for real access power supply modules, unequipped	Ų	1,070.23

63708802	4-port CWDM Channel Splitter Module	\$	1,095.26
63708803	4-port CWDM Channel Splitter Module	\$	1,080.46
63708805	8-port CWDM Channel Splitter Module	\$	2,403.92
63708806	Band splitter 1310nm/1470nm to 1610nm/1510nm to 1570	\$	1,443.01
63708901	Single-port Protection Module Single Mode	\$	585.90
63708902	Single-port Protection Module Multimode	\$	609.83
63708903	2-port Protection Module Single Mode	\$	820.11
63708904	2-port Protection Module Multimode	\$	849.47
63708502	2-port Red/Blue Splitter C-Band	\$	967.52
63708508	8-port Group Splitter C-Band	\$	2,886.59
63708601	4-port Channel Splitter	\$	1,016.06
63708602	4-port Channel Splitter	\$	1,070.32
63708603	4-port Channel Splitter	\$	1,075.28
63708604	4-port Channel Splitter	\$	1,075.28
63708605	4-port Channel Splitter	\$	1,070.32
63708606	4-port Channel Splitter	\$	1,080.19
63708607	4-port Channel Splitter	\$	1,080.19
63708608	4-port Channel Splitter	\$	1,065.41
	Fan Air Cleansing Filter Set (10 Pcs) for FSP 3000R7 (SH7HU and SH9HU) and FSP 150EG (CH-	•	,
13700002	10U)	\$	124.55
	40-port MUX/DMX Channel Splitter, C-Band, integrated in separate shelf, for Dual Client add		
1078708792-01	drop application with 8ROADM-C80/0/OPM only	\$	8,287.01
1091700025-01	Right to use Multiplexing function on 5TCE card types	\$	2,021.58
1063708414	Utility Module	\$	1,057.70
1063708440	Passive Shelf Control Unit	\$	494.51
1063708481	Optical Supervisory Channel Filter Module	\$	790.91
1063708510	Interleaver for DWDM 50GHz C-Band	\$	6,246.46
1063708720	4-port Channel Splitter for channel 19590 to 19560, with upgrade port	\$	1,914.88
1063708721	4-port Channel Splitter for channel 19550 to 19520, with upgrade port	\$	1,957.12
1063708722	4-port Channel Splitter for channel 19510 to 19480, with upgrade port	\$	1,947.26
1063708723	4-port Channel Splitter for channel 19470 to 19440, with upgrade port	\$	1,952.19
1063708724	4-port Channel Splitter for channel 19430 to 19400, with upgrade port	\$	1,927.52
	Optical Amplifier, Double Stage 20 dBm maximum output power, variable gain controlled (C-		
1063709051	Band) with Dual Monitor	\$	5,327.47
1063709223	Managed DCM using dispersion compensating fiber (DCF), compensating 30km Standard Single Mode Fiber	\$	2 110 76
1005/09225	Managed DCM using dispersion compensating fiber (DCF), compensating 50km Standard Single		3,110.76
1063709225	Mode Fiber	\$	3,816.70
	Managed DCM using dispersion compensating fiber (DCF), compensating 70km Standard Single		,
1063709227	Mode Fiber	\$	3,905.50
	Managed DCM using dispersion compensating fiber (DCF), compensating 90km Standard Single		
1063709229	Mode Fiber	\$	4,136.90
1063709258	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 80km Standard Single Mode Fiber for 100GHz channel spacing in the C-band	\$	3,539.43
			221.35
1078700062	Passive Unmanged 1HU Slimline Shelf, no power supplies and no SCU required Passive Unmanged 1HU Slimline Shelf with optional fiber tray, no power supplies and no SCU	\$	221.33
1078700065	required	\$	242.30
1078700144	1HU Slimline Shelf High Power with redundant DC Power Feed	\$	1,549.71
	40-port MUX/DMX Channel Splitter for 50 GHz interleaved channels in C-Band, integrated in		
1078708791	separate shelf to save slots in master shelf	\$	3,079.05

63708753	16-port Channel Splitter - Single Fiber Working, C-Band, location A	\$	6,860.38
63708754	16-port Channel Splitter - Single Fiber Working, C-Band, location B	\$	6,846.48
63708771	Optical Supervisory Channel Filter Module - Single Fiber Working, location A	\$	958.69
63708772	Optical Supervisory Channel Filter Module - Single Fiber Working, location B	\$	896.51
63708811	Band splitter 1310nm/1470nm to 1610nm	\$	923.52
63708881	Power Splitter Module 95% / 5%	\$	514.97
78700101	7HU Shelf	\$	1,447.98
	Managed DCM using dispersion compensating fiber (DCF), compensating 10km Standard Single		
63709221	Mode Fiber	\$	2,499.03
63709222	Managed DCM using dispersion compensating fiber (DCF), compensating 20km	\$	2,804.90
63709224	Managed DCM using dispersion compensating fiber (DCF), compensating 40km Standard Single Mode Fiber	\$	3,421.56
	Managed DCM using dispersion compensating fiber (DCF), compensating 60km Standard Single		
63709226		\$	3,939.56
63709228	Managed DCM using dispersion compensating fiber (DCF), compensating 80km Standard Single Mode Fiber	\$	3,905.50
	Managed DCM using dispersion compensating fiber (DCF), compensating 100km Standard	•	- ,
63709230	Single Mode Fiber	\$	4,136.90
	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 60km Standard Single		
63709256	· · ·	\$	3,174.36
63709260	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 100km Standard Single Mode Fiber for 100GHz channel spacing in the C-band	\$	3,914.36
	Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf,		
89000565	100km	\$	15,061.47
000005.64	Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf,	Ċ	F 050 47
89000561	20km Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf,	\$	5,959.47
89000562	40km	\$	8,312.67
	Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf,		,
89000563	60km	\$	10,443.87
00000564	Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf,		40.760.50
89000564	80km	\$	12,762.53
1040700003	Power Supply Module (600W) DC for SH7HU Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf,	\$	848.84
89000566	120km	\$	16,630.27
	Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf,	•	,
89000567	140km	\$	17,404.80
00000560	Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf,		10 716 67
89000568	160km	\$	18,746.67
89000569	Unmanaged Dispersion Compensation for Large Effective Area Fiber, stand-alone 1HU shelf, 180km	\$	19,634.67
	Unmanaged Dispersion Compensation for True Wave Reduced Slope Fiber, stand-alone 1HU		
89000582	shelf, 40km	\$	7,104.02
89000583	Unmanaged Dispersion Compensation for True Wave Reduced Slope Fiber, stand-alone 1HU shelf, 60km	\$	8,362.00
	Unmanaged Dispersion Compensation for True Wave Reduced Slope Fiber, stand-alone 1HU	•	,
89000584	shelf, 80km	\$	10,508.00
	Unmanaged Dispersion Compensation for True Wave Reduced Slope Fiber, stand-alone 1HU	_	10.106
89000585	shelf, 100km	\$	12,180.40
89000586	Unmanaged Dispersion Compensation for True Wave Reduced Slope Fiber, stand-alone 1HU shelf, 120km	\$	13,778.80

	Right to use CWDM using Access Channel Cards, pure PCA-Ethernet Access and for Converter		
91700005	solutions - use if no DWDM filter/channels and no Core or Enterprise cards are in the system	\$	-
91700010	Right to use CWDM and DWDM using Access and Core cards	\$	1,371.43
	Right to use CWDM and DWDM in an GDPS environment along with Core, Access and		
91700020	Enterprise cards	\$	8,838.08
1063708725	4-port Channel Splitter for channel 19390 to 19360, with upgrade port	\$	1,892.99
1063708726	4-port Channel Splitter for channel 19350 to 19320, with upgrade port	\$	1,952.19
1063708727	4-port Channel Splitter for channel 19310 to 19280, with upgrade port	\$	1,952.19
1063708728	4-port Channel Splitter for channel 19270 to 19240, with upgrade port	\$	1,957.12
1063708729	4-port Channel Splitter for channel 19230 to 19200, with upgrade port	\$	1,957.12
1063708871	Passive 8-port CWDM Channel Splitter Module with Dual Monitoring points	\$	2,151.62
1063708873	Passive 8-port CWDM Channel Splitter Module with upgrade port and Dual Monitoring points	\$	2,835.09
1063708882	4-port Optical Power Control Module	\$	3,827.01
1091700015	Right to use Add-Drop or Dual Terminal configuration on channel cards	\$	284.44
1091700035	Right to use Fiber Channel, FICON or Infiniband as client services	\$	284.44
1063708758-01	16-port Passive Channel Filter 1HU Shelf- Single Fiber Working, C-Band, Location B	\$	3,596.61
1063708757-01	16-port Passive Channel Filter 1HU Shelf- Single Fiber Working, C-Band, Location A	\$	3,604.00
1078708800-01	Compact 96-port MUX/DMX Channel Splitter, C-Band, with individual port LEDs, integrated in separate shelf	\$	9,309.89
1063700023-01	100G Channel Card Core Type, pluggable network and pluggable client interface	\$	6,455.96
1091703063-01	SW for Release 16.3.1 preinstalled on all applicable HW in the related shipment	\$	-
1063708463-03	Optical Supervisory Channel Module with 2 pluggable network ports	\$	1,972.17
	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 320km True Wave	*	_,
1063709282-01	Reduced Slope Fiber for 50GHz channel spacing in the C-band	\$	7,865.79
	Optical amplifier, high variable gain EDFA with up to 20dBm output power, incl. OSFM		
1063709072-01	add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band,	\$	8,231.39
1063709072-01	Fiber Map Detector High output power Booster-Amplifier with input/output monitor ports and integrated	Ş	8,231.39
1063709058-01	1528.77nm OSC add/drop filter ports	\$	16,453.56
	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 20km Standard Single		
1063709262-01	Mode Fiber for 50GHz channel spacing in the C-band	\$	3,109.49
1062700264-04	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 40km Standard Single	<u>,</u>	2 254 22
1063709264-01	Mode Fiber for 50GHz channel spacing in the C-band High output power Booster-Amplifier with input/output monitor ports and integrated 1510nm	\$	3,351.22
1063709059-01	OSC add/drop filter ports	\$	17,183.83
	100G TDM Card Enterprise Type (10 x 10G) with AES256 encryption, pluggable client and	·	,
1063700073-01	network interface. Full technical compliance with BSI security Profile acc. to VS-NfD	\$	54,924.51
1063701002-01	10G Channel Card Core Type with 4 pluggable network and 4 pluggable client interfaces	\$	6,413.33
1091703071-01	SW for Release 17.1.1 preinstalled on all applicable HW in the related shipment	\$	-
1091703062-02	SW for Release 16.2.2 preinstalled on all applicable HW in the related shipment	\$	-
1078700145-01	1HU Slimline Shelf High Power with redundant DC Power Feed, extended temperature range	\$	1,739.37
1042700020-01	Fan Module for SH1HU-R/PF	\$	204.42
	1HU Slimline Shelf with exchangeable fan unit (not inlcuded) for rear access power supply		
1078700060-01	modules	\$	1,940.84
1078700066	Passive Unmanged 1HU Fiber Management Tray	\$	359.58
1042700011	Fan Module for SH9HU	\$	326.78
1063701044-01	16-port 10G ADM TDM Card Core Type, pluggable client and network IF, Network Ports are fully G.709 enabled	\$	8,341.94

1078700121	9HU Shelf	\$	2,008.15
1040700041	Power Supply Module (1000W) DC for SH9HU	\$	844.25
1063708416	Common Equipment Module for SH9HU	\$	1,118.32
1091701900	Right to use Multiplexing function on 5TCE card types	\$	2,021.58
	40-port MUX/DMX Channel Splitter for 50 GHz interleaved channels in C-Band, integrated in		
1078708797-01	separate shelf to save slots in master shelf	\$	2,971.54
	Fan Air Cleansing Filter Set for SH1HU-R/PF (10 pcs.) and for PSU/1HU-R-AC-200 or PSU/1HU-		
1013700021-01	DC-200 (20 pcs.)	\$	359.75
1013700012-01	Kit to upgrade SH9HU to NEBS complience	\$	20.04
1001701005	Software license to use Coherent Virtual Transponder in combination with the ENC Ensemble		1,300.32
1091701985	Optical Director Software license to use Virtual Transponder in combination with the ENC Ensemble Optical	\$	1,300.32
1091701980	Director	\$	650.15
1091701910	Right to use Coupling Link	\$	1,264.76
	Passive 2 x 4 port CWDM Splitter Module for Single Fiber Working terminal applications.		,
1063708762-01	Terminal West connects to east-side of corresponding add/drop filters	\$	1,378.02
	Passive 2 x 4 port CWDM Splitter Module for Single Fiber Working terminal applications.		
1063708761-01	Terminal East connects to west-side of corresponding add/drop filters	\$	1,378.02
1063708766-01	Passive Single Channel Add/Drop CWDM Splitter Module Single Fiber Working	\$	864.19
1062709270 01	Add/Drop splitter and terminal module for 80ch DWDM to connect ACS amplifier to the MROADM	<u> </u>	1 040 21
1063708370-01	Add/Drop splitter and terminal module for 40ch DWDM to connect ACS amplifier to the	\$	1,949.31
1063708371-01	MROADM	\$	1,847.30
1063708763-01	Passive Single Channel Add/Drop CWDM Splitter Module Single Fiber Working	, \$	864.19
1063708764-01	Passive Single Channel Add/Drop CWDM Splitter Module Single Fiber Working	\$	864.19
1063708765-01	Passive Single Channel Add/Drop CWDM Splitter Module Single Fiber Working	\$	864.19
1063708335	5-port Power Splitter Module	\$	1,464.55
2000/00000	Optical Amplifier, Double Stage 20 dBm maximum output power, variable low gain controlled		2, 10 1100
1063709052	(C-Band), dual monitoring ports	\$	5,635.24
1013700007-01	Front Cover for 40CSM/2HU and 40CSM-FL/2HU	\$	58.38
	40-port MUX/DMX Channel Splitter, C-Band, integrated in separate shelf to save slots in mast		
1078708789-01	shelf	\$	2,971.54
1089000645	Unmanaged Dispersion Compensation for MetroCor Fiber, stand-alone 1HU shelf, 60km	\$	5,476.00
1091703061-03	SW for Release 16.1.3 preinstalled on all applicable HW in the related shipment	\$	-
1013700006-01	Fiber Management for 40CSM-FL/2HU	\$	36.88
1063708730-01	5-port Group Splitter C-Band	\$	7,404.04
1063708731-01	8-port Channel Splitter	\$	2,171.90
1063708732-01	8-port Channel Splitter	\$	2,407.73
1063708733-01	8-port Channel Splitter	\$	2,136.40
1063708734-01	8-port Channel Splitter	\$	2,358.40
1063708735-01	8-port Channel Splitter	\$	2,058.44
1091703061-04	SW for Release 16.1.4 preinstalled on all applicable HW in the related shipment	\$	-
	4x 10G transpoder and up to 9x GbE TDM Enterprise type, pluggable client and network		
1063707680-01	interface.	\$	3,311.83
1062707675 01	4x 10G transpoder and up to 9x GbE TDM Enterprise type card with AES256 encryption, pluggable client and network interface.	ć	17,204.10
1063707675-01	·	\$,
1063700048-01	10-port 100G TDM Card Core Type, pluggable client and network interface	\$	10,280.51
	Passive Single Channel CWDM Splitter Y-Cable with high isolation upgrade port. A transceiver		
1051002599	can be directly connected to the upgrade port. ALM is supported on the upgrade port	\$	282.19

1063703210-01	10G Channel Card Access Type with 5 pluggable network and 5 pluggable client interfaces	\$	3,599.71
1063700027-01	100G Channel Card Core Type with AES256 encryption, pluggable client and network interface. Full technical compliance with FIPS. FIPS seals included.	\$	27,777.68
1003700027 01	100G TDM Card Enterprise Type (10 x 10G) with AES256 encryption, pluggable client and	Y	27,777.00
1063700077-01	network interface. Full technical compliance with FIPS. FIPS seals included.	\$	47,611.81
1063700021-01	100G Channel Card Core Type, pluggable network and pluggable client interface	\$	8,264.17
1063708879-01	2-way Power Splitter Module 95% / 5%	\$	695.39
1063700071-02	100G TDM Card Enterprise Type (10 x 10G), pluggable client and network interface	\$	9,970.99
1013700010-01	Mechanical upgrade kit to increase cabling space for 7HU and 9HU shelves	\$	143.94
	4x 10G transpoder and up to 9x GbE TDM Enterprise type card with AES256 encryption,		
1063707672-01	pluggable client and network interface. Full technical compliance with FIPS. FIPS seals included.	\$	27,818.08
1013700027-01	Mechanical kit to increase cabling space for 9HU shelves	\$	56.29
1013700026-01	Mechanical kit to increase cabling space for 7HU shelves	\$	51.73
1089000640	Unmanaged Dispersion Compensation for MetroCor Fiber, stand-alone 1HU shelf, 10km	\$	3,354.65
1089000641	Unmanaged Dispersion Compensation for MetroCor Fiber, stand-alone 1HU shelf, 20km	\$	3,774.00
1089000642	Unmanaged Dispersion Compensation for MetroCor Fiber, stand-alone 1HU shelf, 30km	\$	4,193.33
1089000643	Unmanaged Dispersion Compensation for MetroCor Fiber, stand-alone 1HU shelf, 40km	\$	4,637.33
1089000644	Unmanaged Dispersion Compensation for MetroCor Fiber, stand-alone 1HU shelf, 50km	\$	5,056.67
	Optical amplifier (line in RAMAN/line out EDFA) with variable Raman gain and low variable gain		
	EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual monitor		
1063709071-01	ports, VOA at the output, 96 channels in C-band, Fiber Map Detect	\$	25,414.19
	Optical amplifier (line in RAMAN/line out EDFA) with variable Raman gain and high variable		
	gain EDFA with up to 20dBm output power, incl. OSFM add&drop filter (1528.77nm), dual		
1063709070-01	monitor ports, VOA at the output, 96 channels in C-band, Fiber Map Detect	\$	25,478.29
1091703071-02	SW for Release 17.1.2 preinstalled on all applicable HW in the related shipment	\$	-
1063700072-03	100G TDM Card Enterprise Type (10 x 10G) with AES256 encryption, pluggable client and network interface	ć	38,621.05
1091703063-02	SW for Release 16.3.2 preinstalled on all applicable HW in the related shipment	\$ \$	36,021.03
1063708471-01	HD shelf connection unit with 2 pluggable ports	۶ \$	1,000.44
1063708392-01	Micro amplifier including pre- amplifier and OSC	۶ \$	10,181.22
1063708391-01	Micro amplifier including pre-amplifier, booster amplifier and OSC	۶ \$	16,846.55
1063708423-01	Shelf Control Unit for high availability set-up, 2.5 HU high for small slots	\$	1,049.94
1063708413-01	Network Element Control Unit for high availability set-up, full 5HU module size	\$	1,814.25
1013700004-01	Fiber Management for 40CSM/2HU	۶ \$	36.88
1013700004-01		۶ \$	50.70
1013700005-01	Adapter Set for SH1HU/PASSIVE/FT rear plane rack mounting Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 60km Standard Single	Ş	50.70
1063709266-01	Mode Fiber for 50GHz channel spacing in the C-band	\$	3,622.55
	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 80km Standard Single		
1063709268-01	Mode Fiber for 50GHz channel spacing in the C-band	\$	3,943.22
	Managed DCM using Chirped Fiber Bragg Gratings (CFG), compensating 100km Standard Single		
1063709270-01	Mode Fiber for 50GHz channel spacing in the C-band	\$	4,318.15
	4x 10G transpoder and up to 9x GbE TDM Enterprise type card with AES256 encryption, pluggable client and network interface. Full technical compliance with BSI security Profile acc.		
1063707670-01	to VS-NfD	\$	29,492.06
1091703062-01	SW for Release 16.2.1 preinstalled on all applicable HW in the related shipment	\$	-
1063708482-01	Optical Supervisory Channel Filter Module with integrated WDM Coupler for the ALM.	\$	1,805.31

1051002593	Passive Single Channel CWDM Splitter Y-Cable with upgrade port. ALM is supported on the upgrade port	\$	282.19
	Passive Single Channel CWDM Splitter Y-Cable with upgrade port. ALM is supported on the		
1051002596	upgrade port	\$	282.19
1051002592	Passive Single Channel CWDM Splitter Y-Cable with upgrade port. ALM is supported on the upgrade port	\$	282.19
1031002332	Passive Single Channel CWDM Splitter Y-Cable with upgrade port. ALM is supported on the	Ų	202.19
1051002594	upgrade port	\$	282.19
	Passive Single Channel CWDM Splitter Y-Cable with upgrade port. ALM is supported on the		
1051002595	upgrade port	\$	282.19
4054000504	Passive Single Channel CWDM Splitter Y-Cable with upgrade port. ALM is supported on the		202.40
1051002591	upgrade port Passive Single Channel CWDM Splitter Y-Cable with upgrade port. ALM is supported on the	\$	282.19
1051002598	upgrade port	\$	282.19
	Passive Single Channel CWDM Splitter Y-Cable with upgrade port. ALM is supported on the	•	
1051002597	upgrade port	\$	282.19
	Optical amplifier, low variable gain EDFA with up to 20dBm output power, incl. OSFM		
1062700072 01	add&drop filter (1528.77nm), dual monitor ports, VOA at the output, 96 channels in C-band,	Ļ	0 160 46
1063709073-01	Fiber Map Detector	\$	8,160.46
1040700012-01	Power Supply Module (200W) DC for SH1HU-R/PF	\$	910.78
1040700042-01	Power Supply Module (1000W) AC for SH9HU 1 x 4 splitter / combiner module used for colorless terminal and add/drop of coherent signals,	\$	751.39
1063708337-01	2.5 HU high	\$	894.51
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1063700025-02	100G Channel Card Core Type with AES256 encryption, pluggable client and network interface	\$	27,155.22
1063708905-01	2-port Protection Module Multimode OM3	\$	1,237.43
1091703032-02	SW for Release 13.2.2 preinstalled on all applicable HW in the related shipment	\$	-
1091701924	Low-Speed port license. Right to use for one client port for 4WCC, 5WCA, 6WCA, 9TCE	\$	93.89
BC0000640	9TCE-PCN-10GU+AES10G-G and one High-Speed port-license	\$	25,763.58
BC00000642	9TCE-PCN-10GU+AES10G-F and one High-Speed port-license. FIPS seals included.	\$	24,259.18
BC00000641	9TCE-PCN-10GU+AES10G-G and one Low-Speed port-license	\$	25,585.54
BC00000639	F7/5WCA-PCN-16GU and one Low-Speed port-license	\$	2,356.21
BC0000644	9TCE-PCN-10GU+AES10G and one High-Speed port-license	\$	14,706.51
BC00000643	9TCE-PCN-10GU+AES10G-F and one Low-Speed port-license. FIPS seals included.	\$	24,081.09
BC00000646	9TCE-PCN-10GU+10G and one High-Speed port-license	\$	2,288.84
BC00000647	9TCE-PCN-10GU+10G and one Low-Speed port-license	\$	2,165.12
BC00000645	9TCE-PCN-10GU+AES10G and one Low-Speed port-license	\$	14,528.46
1063708881-01	8ch passive DWDM MUX/DMX with upgrade port	\$	2,175.30
1091703091-01	SW for Release 19.1.1 preinstalled	\$	-
	100G Channel Card Core Type with AES256 encryption, pluggable client and network interface.		
1063700028-01	Full technical compliance with BSI security Profile acc. to VS-NfD.	\$	47,536.32
1013700024-01	Optional fan air cleansing filter set (10 Pcs) for SH1HU+F/E+TEMP/PF.	\$	91.09
1091703111-01	SW for Release 21.1.1 preinstalled	\$	-
1040700013-01	Power Supply Module (230W) DC for SH1HU-F/E+TEMP/PF. Power cords must be ordered separately. Please refer to the Compatibility Matrix (PSU&Cables) for details.	\$	364.30
10-10-10013-01	Breakout Module - OM3 fiber, 2 x MPO12 fan out to 2 x 8 x LC, 1-slot module for SH1HU/LGX	Y	304.30
1051002627	shelves	\$	1,440.02
	Breakout Module - SM fiber, 2 x MPO12 fan out to 2 x 8 x LC, 1-slot module for SH1HU/LGX		
1051002628	shelves	\$	1,501.58
1042700021 01	Ean Madula for SHIHIT E/ELTEMD/DE 1 for madula nor SHIHIT E/E TEMP/DE abolt	ċ	E02.00
1042700021-01	Fan Module for SH1HU-F/E+TEMP/PF. 1 fan module per SH1HU-F/E-TEMP/PF shelf required.	\$	592.00

	1HU Slimline Shelf with exchangeable fan unit FAN (not included), front access power supply		
1078700063-01	modules PSU (not included) and fan control unit FCU (included).	\$	910.78
105200054 04	8ch passive DWDM MUX/DMX with Aux/ALM port and O-band upgrade port, Single Fiber		4 000 44
1063008961-01	Working, Interleaved channelgrid, I-temp, Location A 8ch passive DWDM MUX/DMX with Aux/ALM port and O-band upgrade port, Single Fiber	\$	4,022.44
1063008962-01	Working, Interleaved channelgrid, I-temp, Location B	\$	4,022.44
1091703103-01	SW for Release 20.3.1 preinstalled	\$	-
1031703103 01	5W 16F Release 2015.1 premistance	Ψ	
1042700021-02	Fan Module for SH1HU-F/E+TEMP/PF. 1 fan module per SH1HU-F/E-TEMP/PF shelf required.	\$	615.68
1091703122-01	SW for Release 22.2.1 preinstalled	\$	-
1078700061-01	Kit to upgrade SH1HU-R/PF to NEBS complience	\$	194.06
1091703081-02	SW for Release 18.1.2 preinstalled	\$	-
1062709420 01	Combined Network Element and Shelf Control Unit for single slimline shelf applications, 2.5 HU		1 222 22
1063708430-01	high, 2 x RJ45 Ethernet LAN ports and 1x RJ45 serial interface	\$	1,333.33
1063708423-02	Shelf Control Unit for high availability set-up, 2.5 HU high for small slots . Optical Amplifier for Booster application, Single Stage 20dBm max. output power, gain	\$	924.23
1063709050-04	controlled (C-Band) with Dual Monitor	\$	3,364.30
1063708416-03	Common Equipment Module for SH9HU	\$	1,040.50
1063708391-02	Micro amplifier including pre-amplifier, booster amplifier and OSC	\$	17,520.42
2000,00002 02	Power Supply Module (230W) AC for SH1HU-F/E+TEMP/PF. Power cords must be ordered	Ψ	17,0201.2
1040700014-02	separately. Please refer to the Compatibility Matrix (PSU&Cables) for details.	\$	506.13
1063708414-03	Utility Module	\$	990.82
	1HU Slimline Shelf with exchangeable fan unit (not inlcuded) for rear access power supply		
1078700060-02	modules	\$	1,914.06
1062700051 02	Optical Amplifier, Double Stage 20 dBm maximum output power, variable gain controlled (C-	۲	F F40 FF
1063709051-03	Band) with Dual Monitor	\$	5,540.55
1063708463-04	Optical Supervisory Channel Module with 2 pluggable network ports	\$	1,722.59
1063708380-02	Terminal module with pre-amplifier and add/drop splitter for 96ch DWDM to the MROADM	\$	10,501.31
1078708781-01	48-port MUX/DMX Channel Splitter, C-Band, integrated in separate shelf	\$	5,435.89
1063708736-01	8ch DWDM MUX/DMX wide band filter 200 GHz grid, with upgrade port, single slot	\$	3,259.75
1091703112-01	SW for Release 21.2.1 preinstalled	\$	-
1091703111-03	SW for Release 21.1.3 preinstalled	\$	-
1063708392-02	Micro amplifier including pre- amplifier and OSC	\$	10,588.46
	Optical Amplifier, Double Stage 20 dBm maximum output power, variable low gain controlled		
1063709052-03	(C-Band), dual monitoring ports	\$	5,723.03
1091703082-01	SW for Release 18.2.1 preinstalled	\$	-
1063008907-01	Wall mount kit (WMK) for 1-slot LGX enclosure	\$	109.30
1063708415-02	Network Element Control Unit with ultra performance processor, 2.5 HU high, 3 x RJ45 Ethernet ports, 1x RJ45 serial interface and 1x USB 3.0 type C port	ć	1,533.33
1091703115-01	SW for Release 21.5.1 preinstalled	\$ \$	1,333.33
1063008973-01	Wall mount kit (WMK) for 1-slot LGX enclosure	\$	266.67
1078700068-01			91.09
	Kit to upgrade SH1HU-F/E+TEMP/PF for NEBS compliance	\$	
1063708449-09	General Optical Path Protection switch Module Passive Single Channel Add/Drop DWDM MUX/DMX. Single Fiber Working, I-temp, LGX form	\$	2,792.30
1063008913-01	factor, EAST/WEST	\$	1,530.08
1063008981-01	8ch passive DWDM MUX/DMX with Upgrade/ALM port, I-temp	\$	2,666.67
1063008983-01	8ch passive DWDM MUX/DMX with Upgrade/ALM port, I-temp	\$	2,666.67
1063008984-01	8ch passive DWDM MUX/DMX with Upgrade/ALM port, I-temp	\$	2,666.67
1063008985-01	8ch passive DWDM MUX/DMX with Upgrade/ALM port, I-temp	\$	2,666.67
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1063008986-01	8ch passive DWDM MUX/DMX with Upgrade/ALM port, I-temp	\$	2,666.67
1063708851-01	40-port MUX/DMX Channel Splitter, C-Band, integrated in separate passive shelf with dual monitoring point and ALM demarcation reflector	\$	4,113.71
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1063008909-01	Passive unmanaged 1HU LGX Shelf, no power supplies and no SCU required.	\$	131.14
1063008910-01	Passive unmanaged 1HU LGX Shelf, no power supplies and no SCU required. 8ch passive DWDM MUX/DMX with Aux/ALM upgrade port. Single Fiber Working, I-temp, LGX	\$	124.04
1063008951-01	form factor, Location A (WEST)	\$	3,245.20
	8ch passive DWDM MUX/DMX with Aux/ALM upgrade port. Single Fiber Working, I-temp, LGX	•	-, -
1063008952-01	form factor, Location B (EAST)	\$	3,245.58
	Passive Single Channel Add/Drop DWDM MUX/DMX. Single Fiber Working, I-temp, LGX form		
1063008911-01	factor, EAST/WEST	\$	1,530.08
1063008912-01	Passive Single Channel Add/Drop DWDM MUX/DMX. Single Fiber Working, I-temp, LGX form factor, EAST/WEST	\$	1,530.08
1003008912-01	Passive Single Channel Add/Drop DWDM MUX/DMX. Single Fiber Working, I-temp, LGX form	ڔ	1,330.06
1063008914-01	factor, EAST/WEST	\$	1,530.08
	Passive Single Channel Add/Drop DWDM MUX/DMX. Single Fiber Working, I-temp, LGX form		
1063008915-01	factor, EAST/WEST	\$	2,064.55
	Passive Single Channel Add/Drop DWDM MUX/DMX. Single Fiber Working, I-temp, LGX form		
1063008916-01	factor, EAST/WEST	\$	2,064.55
1063008917-01	Passive Single Channel Add/Drop DWDM MUX/DMX. Single Fiber Working, I-temp, LGX form factor, EAST/WEST	\$	2,064.55
1003008317-01	Passive Single Channel Add/Drop DWDM MUX/DMX. Single Fiber Working, I-temp, LGX form	ب	2,004.55
1063008918-01	factor, EAST/WEST	\$	2,064.55
1063008931-01	4ch passive DWDM MUX/DMX with integrated ALM demarcation reflector, I-temp	\$	1,762.44
1063008932-01	4ch passive DWDM MUX/DMX with integrated ALM demarcation reflector, I-temp	\$	1,835.35
1063008933-01	4ch passive DWDM MUX/DMX with integrated ALM demarcation reflector, I-temp	\$	1,841.96
1063008934-01	4ch passive DWDM MUX/DMX with integrated ALM demarcation reflector, I-temp	\$	1,901.01
1063008935-01	4ch passive DWDM MUX/DMX with integrated ALM demarcation reflector, I-temp	\$	1,894.95
1063008936-01	4ch passive DWDM MUX/DMX with integrated ALM demarcation reflector, I-temp	\$	1,908.61
1063008938-01	4ch passive DWDM MUX/DMX with integrated ALM demarcation reflector, I-temp	\$	1,888.08
	24ch passive DWDM MUX/DMX with upgrade/ALM port – Single Fiber Working, C-temp,		
1063008953-01	Location A.	\$	2,248.70
405200054.04	24ch passive DWDM MUX/DMX with upgrade/ALM port – Single Fiber Working, C-temp,		2 2 4 2 7 2
1063008954-01	Location B.	\$	2,248.70
1091703093-01	SW for Release 19.3.1 preinstalled	\$	-
	ROADM 4 degree, 96 channels in C-Band, WSS based, with integrated optical performance		
	monitor and 1x4 power splitter, directed/directionless, gridless, colored/colorless, for dual		
1063708327-02	client applications from 1 to 3 degrees. Additional dual pass through	\$	13,149.18
1091703104-01	SW for Release 20.4.1 preinstalled	\$	-
1063008982-01	8ch passive DWDM MUX/DMX with Upgrade/ALM port, I-temp	\$	2,666.67
	Power Supply Module (230W) AC for SH1HU-F/E+TEMP/PF. Power cords must be ordered		
1040700014-01	separately. Please refer to the Compatibility Matrix (PSU&Cables) for details.	\$	486.67
1063708343-01	1 x 8 splitter / combiner module used for colorless terminal and add/drop of coherent signals	\$	1,306.67
1063708737-01	9ch DWDM MUX/DMX wide band filter 200 GHz grid, with upgrade port, single slot	;	3,640.00
1091703082-04	SW for Release 18.2.4 preinstalled	\$	-
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	100G TDM Card Core Type (up to 4x client, up to 3x 32G FC) with AES256 encryption, pluggable		
1063700084-01	client and network interface. Full technical compliance with BSI security Profile acc. to VS-NfD	\$	47,430.50
1091703093-02	SW for Release 19.3.2 preinstalled	\$	-

1063708759-01	24-port Passive Channel Filter 1HU Shelf- Single Fiber Working, interleaved channel grid, C-Band, Location A	\$	3,854.93
1063708760-01	24-port Passive Channel Filter 1HU Shelf- Single Fiber Working, interleaved channel grid, C-Band, Location B	\$	3,854.93
	Breakout splitter Module - SM fiber, 2 x MPO12 fan out and 3dB combiner to 8 x LC, 1-slot		
1051002629	module for SH1HU/LGX shelves	\$	1,280.00
BC00001242	F7/6WCA-PCN-28GU and one High-Speed port-license	\$	3,139.07
1063708361-02	MicroROADM supporting 2-degree in one module, 40/80/96 channels in C-Band, LCoS based, with 2x optical performance monitor	\$	15,372.76
1063703211-01	28G Channel Card Access Type with 6 pluggable network and 6 pluggable client interfaces.	\$	4,266.67
BC00001243	F7/6WCA-PCN-28GU and one Low-Speed port-license	\$	2,954.69
1063708394-01	Micro amplifier including low gain pre-amplifier and OSC	\$	10,204.63
1078700102	SH7HU refurbish kit including cover, cover-clip, brackets (19", NEBS, ETSI), earthing and required screws	\$	181.18
1070700102	SH9HU refurbish kit including cover, cover-clip, brackets (19", NEBS, ETSI), earthing and	Υ	101.10
1078700122	required screws	\$	106.74
1063708342-01	32 splitter /combiner 1HU shelf as colorless multiplexer for coherent signals	\$	3,364.69
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1063708339-01	16 x 8 splitter / combiner module used for colorless terminal and add/drop of coherent signals	\$	8,747.31
1063708341-01	8 x 8 splitter / combiner module used for colorless terminal and add/drop of coherent signals	\$	7,321.62
	System software license per active 1HU shelf. Access to Maintenance, Minor and Major		
1091701201	Releases is subject to a valid Maintenance agreement covering this product.	\$	253.98
1063708393-01	Micro amplifier including low gain pre-amplifier, booster amplifier and OSC	\$	16,249.58
	System software license for 7HU or 9HU shelf. Access to Maintenance, Minor and Major		
1091701202	Releases is subject to a valid Maintenance agreement covering this product.	\$	1,168.25
	System software license per SH12 shelf. Access to Maintenance, Minor and Major Releases is		
1091701203	subject to a valid Maintenance agreement covering this product.	\$	7,608.88
1091701205	System software license per SH1R shelf. Access to Maintenance, Minor and Major Releases is subject to a valid Maintenance agreement covering this product.	\$	751.75
1031701203	System software license per SH4R shelf. Access to Maintenance, Minor and Major Releases is	ڔ	/31./3
1091701204	subject to a valid Maintenance agreement covering this product.	\$	2,529.52
1091703092-01	SW for Release 19.2.1 preinstalled	\$, -
	System software license per SH3 shelf. Access to Maintenance, Minor and Major Releases is		
1091701206	subject to a valid Maintenance agreement covering this product.	\$	1,513.66
1091703091-02	SW for Release 19.1.2 preinstalled	\$	-
1091703101-01	SW for Release 20.1.1 preinstalled	\$	-
	SyncE timing compliant 2-port 2.5G Channel and TDM Card Core Type with pluggable client and		
1063702201-01	network interfaces	\$	2,798.84
	Network Element Control Unit with ultra performance processor, 2.5 HU high, 3 x RJ45		
1063708415-01	Ethernet ports, 1x RJ45 serial interface and 1x USB 3.0 type C port	\$	2,218.10
1091703063-05	SW for Release 16.3.5 preinstalled on all applicable HW in the related shipment	\$	-
1063709903	Dummy card for SH1HU-R/PF rear PSU slot	\$	45.31
1091703072-03	SW for Release 17.2.3 preinstalled on all applicable HW in the related shipment	\$	-
1063008908-01	Passive unmanaged 1HU LGX Shelf, no power supplies and no SCU required.	\$	131.14
1091703111-02	SW for Release 21.1.2 preinstalled	\$	-
1063008937-01	4ch passive DWDM MUX/DMX with integrated ALM demarcation reflector, I-temp	\$	1,910.78
1091703072-04	SW for Release 17.2.4 preinstalled on all applicable HW in the related shipment	\$	-
	System software license per T-SH1R shelf. Access to Maintenance, Minor and Major Releases is		
1091701207	subject to a valid Maintenance agreement covering this product.	\$	1,005.70
1091703082-03	SW for Release 18.2.3 preinstalled	\$	-

1063708899-01	1-slot ALM WDM Coupler card w/ 8x 1650nm upgrade ports, managed, LC/APC connector to ALM processor unit, LC/PC to network and upgrade ports.	\$	2,497.41
1091703115-02	SW for Release 21.5.2 preinstalled	\$	2,437.41
1091703102-01	SW for Release 20.2.1 preinstalled	\$	-
1031/03102 01	100G TDM Card Core Type (up to 4x client, up to 3x 32G FC) with AES256 encryption, pluggable	Ψ	
1063700083-01	client and network interface	\$	25,927.39
1063701000-02	10G Channel Card Core Type with 2 pluggable network and 2 pluggable client interfaces	\$	6,230.32
	SyncE timing compliant 2-port 2.5G Channel and TDM Card Core Type with pluggable client and		
1063702201-02	network interfaces	\$	2,798.84
1063707680-02	4x 10G transponder and up to 9x GbE TDM Enterprise type, pluggable client and network interface.	\$	3,311.83
BC00000646-02	9TCE-PCN-10GU+10G and one High-Speed port-license	\$	2,288.84
BC00000647-02	9TCE-PCN-10GU+10G and one Low-Speed port-license	\$	2,165.12
0063708430-03	Shelf Control Unit, 2.5 HU high for SH1HU only	\$	548.19
1091703111-04	SW for Release 21.1.4 preinstalled	\$	_
1091703121-01	SW for Release 22.1.1 preinstalled	\$	_
1063708391-03	Micro amplifier including pre-amplifier, booster amplifier and OSC	\$	17,520.42
1063708392-03	Micro amplifier including pre- amplifier and OSC	\$	10,588.46
1063708393-02	Micro amplifier including low gain pre-amplifier, booster amplifier and OSC	\$	16,249.58
1063708394-02	Micro amplifier including low gain pre-amplifier and OSC	\$	10,204.63
1040904043-01	100 Watt -48VDC/24VDC power supply-terminal block input	\$	424.65
1036000630	AC Power Cable, US, 2.5m length, left angled equipment end	\$	23.16
1036000600	AC Power Cable, Europe, 2.5m length, left angled equipment end	\$	24.13
1036000610	AC Power Cable, UK plug with 3A fuse, 2.5m length, left angled equipment end	\$	24.13
1058009003	Standard LC Duplex Adapter, Blue, Plastic with Shutter	\$	13.47
1058009005	Standard LC (APC) Duplex Adapter, Green, Plastic with Shutter	\$	14.63
	Mounting Kit for 19", ETSI and 23" Racks and Wall Mounting for devices with 436 mm width.		
1013903001	Comes with 4 screws for rack mounting	\$	40.00
1036000601	AC Power Cable, Europe, 2.5m length, right angled equipment end	\$	24.72
1036000602	AC Power Cable, Europe, 2.5m length, straight equipment end	\$	18.63
1036000611	AC Power Cable, UK plug with 3A fuse, 2.5m length, right angled equipment end	\$	19.30
1036000615	AC Power Cable, UK plug with 5A fuse, 2.5m length, straight equipment end	\$	28.34
1036000617	AC Power Cable, UK plug with 10A fuse, 2.5m length, right angled equipment end	\$	51.49
1036000620	AC Power Cable, Switzerland, 2.5m length, left angled equipment end	\$	23.92
1036000621	AC Power Cable, Switzerland, 2.5m length, right angled equipment end	\$	140.25
1036000622	AC Power Cable, Switzerland, 2.5m length, straight equipment end	\$	31.45
1036000631	AC Power Cable, US, 2.5m length, right angled equipment end	\$	22.95
1036000687	AC Power Cable, Europe, 2.5m length, left angled C19 plug at equipment end	\$	100.95
1036000632	AC Power Cable, US, 2.5m length, straight equipment end	\$	21.31
1036000650	AC Power Cable, Australia/China, 2.5m length, left angled equipment end	\$	126.74
1036000651	AC Power Cable, Australia/China, 2.5m length, right angled equipment end	\$	29.16
1036000652	AC Power Cable, Australia/China, 2.5m length, straight equipment end	\$	21.31
1036000660	AC Power Cable, India, 2.5m length, left angled equipment end	\$	26.51
1036000661	AC Power Cable, India, 2.5m length, right angled equipment end	\$	40.69
1036000662	AC Power Cable, India, 2.5m length, straight equipment end	\$	83.54
1036000670	AC Power Cable, Japan, 2.5m length, left angled equipment end	\$	24.61
1036000671	AC Power Cable, Japan, 2.5m length, right angled equipment end	\$	146.91
1036000672	AC Power Cable, Japan, 2.5m length, straight equipment end	\$	36.65

	DC Device Colds 2 or leastly 2 of the AMCAC and /black with a conflict data to be a few to be		
1036700008	DC Power Cable, 3m length, 2 wires AWG16 red/black with overall jacket, ring terminal at equipment end	\$	41.16
103070000	DC Power Cable, 3m length, 2 wires AWG16 grey/blue with overall jacket, ring terminal at	Ÿ	12.20
1036700009	equipment end	\$	40.25
1036700011	DC Power Cable, 3m length, 2 x 2 wires AWG16 grey/blue with overall jacket	\$	103.12
	DC Power Cable, 3m length, 2 wires AWG16 blue/black with overall jacket, ring terminal at		
1036700013	equipment end	\$	36.97
1036700014	DC Power Cable, 3m length, 2 x 2 wires AWG16 blue/black with overall jacket	\$	116.29
1036700015	DC Power Cable, 3m length, 3 wires AWG14 blue/black/green-yellow with overall jacket, ring terminal at equipment end	\$	62.32
1051002511	8-fold cable bundle - Single Mode, LC, 800 cm	\$	589.43
1051002512	16-fold cable bundle - Single Mode, LC, 800 cm	\$	1,118.19
51002395	Jumper for internal cabling - Single Mode, LC, 4500 cm	\$	31.09
51002109	Jumper for internal cabling - Single Mode, LC, 2500 cm	\$	23.68
51002390	Jumper for internal cabling - Single Mode, LC, 500 cm	\$	23.12
1036000680	AC Power Cable, Extension, 2.5m length, C13 to C14	\$	20.00
1036000681	AC Power Cable, Extension, 2.5m length, C13 to C20	\$	113.33
1051002621	MPO multifibre Cable - Singlemode, MPO12, 300 cm, LSZH	\$	452.08
1058001000	Optical Loopback Connector for Duplex LC, Loss < 1DB	\$	186.48
1036000682	AC Power Cable, C14, 2.5m length, right angled equipment end	\$	68.51
1036000683	AC Power Cable, C14, 2.5m length, right angled C19 plug at equipment end	\$	43.30
1051002539	Breakout Cable - Single Mode with integrated CWDM filter, LC, 400 cm	\$	1,406.00
1051002505	Duplex Cable - Multimode 62.5, LC, 10m	\$	47.35
1013904026	DC power adapter for use with GE112Pro (m).	\$	100.00
51002049	Jumper for internal cabling - Single Mode, LC-MU, 100 cm	\$	23.68
51002092	Jumper for internal cabling - Single Mode, LC, 100 cm	\$	36.65
58001206	Optical Attenuator LC Connector	, \$	36.25
58001207	Optical Attenuator LC Connector	\$	36.25
58001208	Optical Attenuator LC Connector	\$	36.25
58001209	Optical Attenuator LC Connector	\$	36.25
58001210	Optical Attenuator LC Connector	, \$	31.09
58001211	Optical Attenuator LC Connector	\$	36.25
58001212	Optical Attenuator LC Connector	\$	31.09
58001213	Optical Attenuator LC Connector	\$	36.25
58001214	Optical Attenuator LC Connector	, \$	31.09
58001215	Optical Attenuator LC Connector	\$	36.25
58001216	Optical Attenuator LC Connector	\$	36.25
58001217	Optical Attenuator LC Connector	\$	31.09
58001218	Optical Attenuator LC Connector	\$	31.09
58001219	Optical Attenuator LC Connector	\$	31.09
58001220	Optical Attenuator LC Connector	\$	31.09
58300000	Optical Attenuator unspecified	\$	31.09
1036006010	ADAPTER for serial Connection, Male RJ45, Female RJ45, CrossOver Pin 3 - Pin 5	\$	13.33
1051002498	Duplex Cable - Single Mode, LC, 1000 cm	\$	47.35
1051002506	Duplex Cable - Single Mode, LC to SC, 1000 cm	, \$	47.35
	Mounting Kit for 19" Racks for devices with 445.4 mm width. Comes with 4 screws for rack		
1013904460	mounting	\$	9.33

1030004005	Power supply cord for front DC power feeding. AWG16 cables for NA market, color red (-	ć	21.33
1036904065	48VDC) / black (Return), 3 meter length.	\$	
1058000800	Optical Adapter LC to LC DUPLEX	\$	11.85
51000000	Jumper for internal cabling - connector, length and mode not specified	\$	23.68
51002094	Jumper for internal cabling - Single Mode, LC, 300 cm	\$	23.68
51002389	Jumper for internal cabling - Single Mode, LC, 50 cm	\$	36.65
51002396	Jumper for internal cabling - Single Mode, LC, 25 cm	\$	23.03
51002398	Jumper for internal cabling - Single Mode, LC, 30 cm	\$	23.68
51002399	Jumper for internal cabling - Single Mode, LC, 35 cm	\$	36.65
51002401	Jumper for internal cabling - Single Mode, LC, 40 cm	\$	36.65
51002402	Jumper for internal cabling - Single Mode, LC, 45 cm	\$	36.65
51002403	Jumper for internal cabling - Single Mode, LC, 110 cm	\$	23.68
51002404	Jumper for internal cabling - Single Mode, LC, 120 cm	\$	36.65
51002405	Jumper for internal cabling - Single Mode, LC, 130 cm	\$	36.65
51002406	Jumper for internal cabling - Single Mode, LC, 140 cm	\$	23.68
51002407	Jumper for internal cabling - Single Mode, LC, 160 cm	\$	23.68
51002095	Cable - Multimode 62.5, LC, 100 cm	\$	23.68
51002096	Cable - Multimode 62.5, LC, 200 cm	\$	23.68
51002097	Cable - Multimode 62.5, LC, 300 cm	\$	23.68
51002123	Duplex Cable - Multimode 62.5, LC, 500 cm	\$	57.60
51002304	Adapter Cable - Single Mode, LC to SC, 1m	\$	23.68
51002310	Adapter Cable - Single Mode, LC to SC, 2m	\$	23.68
51002316	Adapter Cable - Single Mode, LC to SC, 3m	\$	23.68
51002317	Adapter Cable - Multimode 62.5, LC to SC, 3m	\$	23.68
51002318	Adapter Cable - Single Mode, LC to MU, 35 cm	\$	23.68
51002486	Jumper for internal cabling - Single Mode, LC-MU, 230 cm	\$	23.68
58000701	Optical Attenuator MU Connector	\$	133.22
58000702	Optical Attenuator MU Connector	\$	133.22
58000703	Optical Attenuator MU Connector	\$	133.22
58000704	Optical Attenuator MU Connector	\$	133.22
51002456	Jumper for internal cabling - Single Mode, LC, 55 cm	\$	36.65
58000705	Optical Attenuator MU Connector	\$	133.22
51002457	Jumper for internal cabling - Single Mode, LC, 60 cm	\$	36.65
58000706	Optical Attenuator MU Connector	\$	133.22
51002458	Jumper for internal cabling - Single Mode, LC, 65 cm	\$	36.65
58000707	Optical Attenuator MU Connector	\$	133.22
51002459	Jumper for internal cabling - Single Mode, LC, 70 cm	\$	36.65
58000708	Optical Attenuator MU Connector	\$	133.22
51002460	Jumper for internal cabling - Single Mode, LC, 75 cm	\$	23.05
51002461	Jumper for internal cabling - Single Mode, LC, 80 cm	\$	36.65
51002462	Jumper for internal cabling - Single Mode, LC, 85 cm	\$	23.68
51002463	Jumper for internal cabling - Single Mode, LC, 90 cm	\$	36.65
51002464	Jumper for internal cabling - Single Mode, LC, 95 cm	\$	36.65
51002465	Jumper for internal cabling - Single Mode, LC, 105 cm	\$	23.68
51002466	Jumper for internal cabling - Single Mode, LC, 115 cm	\$	36.65
51002467	Jumper for internal cabling - Single Mode, LC, 150 cm	\$	23.68
51002468	Jumper for internal cabling - Single Mode, LC, 170 cm	\$	33.31

51002469	Jumper for internal cabling - Single Mode, LC, 180 cm	\$	23.68
51002470	Jumper for internal cabling - Single Mode, LC, 190 cm	\$	23.68
51002471	Jumper for internal cabling - Single Mode, LC, 210 cm	\$	36.65
51002472	Jumper for internal cabling - Single Mode, LC, 230 cm	\$	23.68
51002473	Jumper for internal cabling - Single Mode, LC, 240 cm	\$	23.68
58001201	Optical Attenuator LC Connector	\$	36.25
51002474	Jumper for internal cabling - Single Mode, LC, 280 cm	\$	23.68
58001202	Optical Attenuator LC Connector	\$	36.25
51002476	Jumper for internal cabling - Single Mode, LC, 310 cm	\$	23.68
58001203	Optical Attenuator LC Connector	\$	36.25
58001204	Optical Attenuator LC Connector	\$	36.25
58001205	Optical Attenuator LC Connector	\$	36.25
36904014	CABLE, DC POWER, MINI-FIT JR-SPADE, 3 METERS	\$	53.33
51002409	Cable - Multimode 62.5, LC, 25 cm	\$	23.68
	, ,		23.68
51002411	Cable - Multimode 62.5, LC, 30 cm	\$	
51002412	Cable - Multimode 62.5, LC, 35 cm	\$	23.68
51002413	Cable - Multimode 62.5, LC, 40 cm	\$	23.68
51002414	Cable - Multimode 62.5, LC, 45 cm	\$	23.68
58000228	Attenuator Kit 10 x 3dB, 10 x 5dB, 10 x 10dB LC	\$	946.02
51002093	Jumper for internal cabling - Single Mode, LC, 200 cm	\$	23.68
1012001152	Mounting Kit for 23" Racks for devices with 445.4 mm width. Comes with 4 screws for rack	<u>,</u>	0.22
1013904463	mounting Mounting Kit for ETSI Packs for devices with 445.4 mm width. Comes with 4 scrows for rack	\$	9.33
1013904462	Mounting Kit for ETSI Racks for devices with 445.4 mm width. Comes with 4 screws for rack mounting	\$	9.33
1010301102	DC Power Cable, 3m length, 3 wires AWG16 grey (-48VDC), blue (Ret) and yellow/green	Ÿ	3.33
1036904068	(ground), Spade connectors on both ends.	\$	26.67
	Power supply cord for front DC power feeding. AWG16 cables for ETSI market, color grey (-		
1036904064	48VDC) / blue (Return), 3 meter length.	\$	21.33
	DC Power Cable, 3m length, 3 wires AWG16 red (-48VDC), black (return), and green-yellow		
1036904070	(ground), Spade connectors on both ends.	\$	26.67
1036904035	ADAPTER, RS232, DB9(female) - RJ45 (female)	\$	20.00
1040904120	Power Supply Module I-Temp 40W AC	\$	186.67
1036000570	Interface Cable of IEEE1394 type	\$	21.31
1036000580	USB Cable 1.5m	\$	8.06
1036904031	CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE, 3 METERS, red, black and yellow/green color	\$	47.52
1051002622	MPO multifibre Cable - Singlemode, MPO12, 1000 cm, LSZH	\$	534.29
1031002022	CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE, 3 METERS, red (+), black (-) and yellow/green	Ÿ	33 1.23
1036904066	color	\$	31.45
	DC Power Cable for front DC -48VDC Powering , 2 wires AWG16, 3m length, blue (-48VDC),		
1036904067	black (Return) for EU MKT. Spade Connectors	\$	26.67
	DC Power Cable, 3m length, 3 wires AWG16 blue (-48VDC), black (Ret) and yellow/green		
1036904069	(ground), Spade connectors on both ends.	\$	26.67
1036000581	USB Cable 1.5m, USB2-Standard-A to USB2-Standard-A	\$	11.22
1036904071	Grounding cable LSZH, 3m length	\$	9.26
1051002634	Cable, Single Mode, LC to SC angled, 300 cm	\$	21.33
1051002626	Cable - Singlemode, MPO24, 1000 cm, LSZH	\$	787.35
1051002624	MPO multifibre Cable - Singlemode, MPO12, 33 cm	\$	354.02
51002477	Jumper for internal cabling - Single Mode, LC, 400 cm	\$	23.68

51002392	Jumper for internal cabling - Single Mode, LC, 10m	\$	22.95
1012002002	Mounting Kit for 19" and ETSI Racks for devices with 443 mm width. Comes with 4 screws for	ċ	05.05
1013902003	rack mounting. Sub-set of 1013902002	\$	95.05
1051002625	Cable - Singlemode, MPO24, 310 cm, LSZH	\$	724.61
1036700026	DC Power Cable, 3m length, 3 wires AWG14 (red(-48V)/black(return)/green-yellow) with overall jacket, Phoenix connector at equipment end	\$	102.86
1030700020	DC Power Cable, 3m length, 3 wires AWG14 (grey/blue/green-yellow) with overall jacket,	Ţ	102.00
1036700028	Phoenix connector at equipment end	\$	82.97
	DC Power Cable, 3m length, 3 wires AWG14 (blue/black/green-yellow) with overall jacket,		
1036700027	Phoenix connector at equipment end	\$	75.45
1051002525	Y cable for Channel card protection, 310 cm lenght, multimode 62.5 fiber, LC connector	\$	251.60
1051002523	Y cable for Channel card protection, 310 cm lenght, SM fiber, LC connector	\$	229.41
1051002522	MPO multifibre Cable - OM3 fiber, MPO24, 1000 cm, LSZH	\$	525.41
1051002526	Y cable for Channel card protection, 1000 cm lenght, multimode 62.5 fiber, LC connector	\$	273.79
1051002524	Y cable for Channel card protection, 1000 cm lenght, SM fiber, LC connector	\$	251.60
1036000609	AC Power Cable, Europe, 2.5m length, right angled C19 plug at equipment end	\$	57.58
1036000629	AC Power Cable, Switzerland, 2.5m length, right angled C19 plug at equipment end	\$	117.62
	DC Power Cable, 10m length, 3 wires AWG14 (red(-48V)/black(return)/green-yellow) with	•	_
1036700029	overall jacket, Phoenix connector at equipment end	\$	207.30
	DC Power Cable, 10m length, 2 single wires AWG10 grey (-48V)/blue (+return), SUB-D		
1036700033	connector at equipment end	\$	294.29
4005700004	DC Power Cable, 10m length, 3 wires AWG14 (grey/blue/green-yellow) with overall jacket,		207.20
1036700031	Phoenix connector at equipment end DC Rower Cable, 10m length, 3 wires AWC14 (blue/black/groop vallow) with everall insket	\$	207.30
1036700030	DC Power Cable, 10m length, 3 wires AWG14 (blue/black/green-yellow) with overall jacket, Phoenix connector at equipment end	\$	207.30
1000700000	DC Power Cable, 10m length, 2 single wires AWG10 red (-48V) / black (+return), SUB-D	Y	207.50
1036700032	connector at equipment end	\$	283.07
	DC Power Cable, 10m length, 2 single wires AWG10 blue (-48V)/black (+return), SUB-D		
1036700034	connector at equipment end	\$	283.16
1005000510			474.00
1036000619	AC Power Cable, UK plug with 10A fuse, 2.5m length, right angled C19 plug at equipment end	\$	174.93
1036000659	AC Power Cable, Australia, 2.5m length, right angled C19 plug at equipment end	\$	150.23
1051002532	Duplex Cable - Multimode 62.5, LC, 1000 cm	\$	71.62
1036000639	AC Power Cable, US, 2.5m length, right angled C19 plug at equipment end	\$	65.79
1036904049	Grounding cable for the ALM, 2.5m length	\$	6.74
1013904032	Grounding cable for OSA 5405-O / OSA 5405-MB, 1m long, 6 gauge	\$	86.40
1051002533	Y cable for Channel card protection, 310 cm lenght, SM fiber, LC to SC	\$	229.41
1051002534	Y cable for Channel card protection, 1000 cm lenght, SM fiber, LC to SC	\$	251.60
1051002514	Duplex Cable - Multimode 62.5, LC, 2m	\$	47.35
51002421	Duplex Cable - Multimode 62.5, LC, 31 cm	\$	47.35
1051002497	Duplex Cable - Single Mode, LC, 300 cm	\$	47.35
1051002499	Duplex Cable - Single Mode, LC to SC angled, 100 cm	\$	47.35
1051002502	Duplex Cable - Single Mode, LC to SC angled, 1000 cm	\$	47.35
1051002503	Duplex Cable - Single Mode, LC, 100 cm	\$	47.35
51002118	Duplex Cable - Multimode 62.5, LC, 90 cm	\$	57.60
1051002513	Duplex Cable - Single Mode, LC, 200 cm	\$	47.35
1051002610	Breakout Cable - Single Mode, 1 x MPO24 fan out to 24 x LC, 300 cm, LSZH	\$	963.10
	Mounting Kit for 19", ETSI and 23" Racks and Wall Mounting for devices with 443 mm width.		
1013902002	Comes with 4 screws for rack mounting	\$	40.00
1051002611	Breakout Cable - Single Mode, 1 x MPO24 fan out to 24 x LC, 1000 cm, LSZH	\$	1,047.47

	DC Power Cable, 10m length, 3 wires AWG16 red (-48V) / black (return)/green-yellow with		
1036904055	overall jacket, Pluggable Terminal Block at equipment end	\$	66.67
1051002612	Breakout Cable - Single Mode, 1 x MPO24 fan out to 2 x MPO12, 300 cm, LSZH	\$	819.54
1051002613	Breakout Cable - Single Mode, 1 x MPO24 fan out to 2 x MPO12, 1000 cm, LSZH	\$	918.70
	Jumper cabling LC/APC to LC/PC for connection of a 1610nm "clear channel" to the OSFMA		
1051002560	OSC filter	\$	23.12
4054000550	Jumper cabling between ALM Monitor Unit and ALM WDM Coupler - Single Mode, LC/APC,		5404
1051002559	Duplex, 310 cm	\$	54.84
1051002550	Cable, OM3 fiber, LC connector, 25 cm, LSZH	\$	23.68
1051002556	Cable, OM3 fiber, LC connector, 310 cm, LSZH	\$	23.68
1051002555	Cable, OM3 fiber, LC connector, 100 cm, LSZH	\$	23.68
1013904027	AC power adapter for use with GE101Pro.	\$	53.33
1051002551	Cable, OM3 fiber, LC connector, 30 cm, LSZH	\$	23.68
1040904050	Power Supply Module I-Temp 24W AC	\$	120.00
1040904060	Power Supply Module I-Temp 24W DC 48V	\$	120.00
1040904048-01	PSU,-48VDC, I-Temp 90W for OSA 542x, for higher temperature than 45°C (high temp from ETSI EN 300 019-1-3 Class 3.1E/3.2)	\$	532.80
	· ·	\$	353.33
1040904039	XG2x0 200Watt AC power supply DC Power Cable, 3m length, 3 wires AWG14 red (-48V) / black (return)/green-yellow with	Ş	333.33
1036700021	overall jacket, ring terminal at equipment end	\$	53.94
	DC Power Cable, 3m length, 2 single wires AWG10 red (-48V) / black (+return), SUB-D	,	
1036700020	connector at equipment end	\$	102.93
1036000694	AC Power Cable, C20, 2.5m length, left angled C19 plug at equipment end	\$	82.21
	DC Power Cable, 3m length, 3 wires AWG14 blue (-48V) / black (return) / green-yellow with		
1036700039	overall jacket, flag terminal and tab connectors at equipment end	\$	83.07
1036001622	AC Power Cable, Switzerland, 2.5m length, straight equipment end, LSZH	\$	133.33
1036001680	AC Power Cable, Extension, 2.5m length, C13 to C14, LSZH	\$	113.33
1036000669	AC Power Cable, India, 2.5m length, right angled C19 plug at equipment end	\$	134.53
1036000679	AC Power Cable, Japan, 2.5m length, right angled C19 plug at equipment end	\$	118.25
1036001600	AC Power Cable, Europe, 2.5m length, left angled equipment end, LSZH	\$	48.00
1036001615	AC Power Cable, UK plug with 5A fuse, 2.5m length, straight equipment end, LSZH	\$	58.67
1036001660	AC Power Cable, India, 2.5m length, left angled equipment end, LSZH	\$	21.33
1035004135	CARLE DC DOWER 2 DOC MINI FIT ID CRADE 2 METERS blue grouped vellow/groon color	ć	22.00
1036904136	CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE, 3 METERS, blue, grey and yellow/green color	\$	32.00
1036001670	AC Power Cable, Japan, 2.5m length, left angled equipment end, LSZH	\$	21.33
1036001630	AC Power Cable, US, 2.5m length, left angled equipment end, LSZH	\$	21.33
1036001610	AC Power Cable, UK plug with 3A fuse, 2.5m length, left angled equipment end, LSZH	\$	58.67
1036904131	CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE, 3 METERS, red, black and yellow/green color	\$	32.00
1036001611	AC Power Cable, UK plug with 3A fuse, 2.5m length, right angled equipment end, LSZH	, \$	53.33
1036001650	AC Power Cable, Australia/China, 2.5m length, left angled equipment end, LSZH	, \$	42.67
1040904042	XG2x0 200 Watt -48v power supply	\$	353.33
10 1030 10 12	DC Power Cable, 3m length, 2 single wires AWG10 grey (-48V)/blue (+return), SUB-D connector	•	333.33
1036700018	at equipment end	\$	139.35
	DC Power Cable, 3m length, 2 single wires AWG10 blue (-48V)/black (+return), SUB-D		
1036700019	connector at equipment end	\$	136.95
1036700040	DC Power Cable, 3m length, 3 wires AWG14 grey (-48V) / blue (return) / green-yellow with	<u>,</u>	02.07
1036700040	overall jacket, flag terminal and tab connectors at equipment end	\$	83.07
1036700022	DC Power Cable, 3m length, 2 x 2 wires AWG16 red (-48V) / black (return) with overall jacket	\$	103.12

1040904033	PSU, AC, 90W	\$	233.33
1040904034	PSU,-48VDC, 90W	\$	200.00
	Rack Mounting Kit 19" for devices with 220 mm width. Used to mount a single device on 1HU		
1013904010	into a 19" rack. Comes with 4 screws for rack mounting	\$	20.00
	Rack Mounting Kit 19" Dual Unit for devices with 220 mm width. Used to mount two devices		
1013904011	next to each other on 1HU into a 19" rack. Comes with 4 screws for rack mounting	\$	40.00
	Mounting Kit ETSI and 23" extension adapters for devices with 220 mm width. Must be		
1012001012	ordered additionally to 1013904010 or 1013904011. Comes with 4 screws to fasten to	<u> </u>	20.00
1013904012	extender adaptor.	\$	20.00
1013904013	Wall Mounting Kit for devices with 220 mm width. Comes with 2 brackets and 4 screws	\$	13.33
1036904052	DC Power Cable, 3m length, 3 wires AWG16 red (-48V) / black (return)/green-yellow with overall jacket, Pluggable Terminal Block at equipment end	\$	41.35
1030304032	DC Power Cable, 3m length, 3 wires AWG16 grey, blue and yellow/green, Pluggable Terminal	Ų	41.55
1036904053	Block at equipment end	\$	42.67
	DC Power Cable, 3m length, 3 wires AWG16 blue black and yellow/green with overall jacket,	•	
1036904054	Pluggable Terminal Block at equipment end	\$	42.67
1036000690	AC Power Cable, US, 2.5m length, left angled C19 plug at equipment end	\$	140.02
1051002130	Duplex Cable - Multimode 62.5, LC, 300 cm	\$	47.35
1051002131	Duplex Cable - Multimode 62.5, LC, 700 cm	\$	47.35
		т	
1051002606	Outdoor LC SMF Duplex Fibre Cable with pre-fitted Screw-in IP-67 Cable gland, 2m length	\$	600.29
1051002607	Outdoor LC MMF Duplex Fibre Cable with pre-fitted Screw-in IP-67 Cable gland, 2m length	\$	600.29
1036016007	Outdoor RJ-45 Copper Cable with pre-fitted Screw-in IP-67 Cable gland, 2m length	\$	69.03
	LSZH CABLE, -48VDC POWER, 3-POS, MINI-FIT JR-SPADE, 2,60 METERS, blue, black and		
1036904063	yellow/green color	\$	42.19
1036000693	AC Power Cable, Japan, 2.5m length, left angled C19 plug at equipment end	\$	133.35
1040904057-01	XG120Pro 150 Watt AC power supply	\$	574.67
1040904058-01	XG120Pro 120 Watt DC power supply	\$	305.33
	Outdoor AC Power Cable, 2.5m length, Straight IP-67 equipment end. Unterminated at supply		
1036002600	end. Live =Brown, Neutral = Blue, Earth = Green/Yellow.	\$	113.05
	Outdoor AC Power Cable, 2.5m length, Straight IP-67 equipment end. Unterminated at supply		
1036002630	end. Live =Black, Neutral = White, Earth = Green/Yellow	\$	114.51
1036904058	Outdoor CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE/IP-67 Equipment end, 3 METERS, blue, grey and yellow/green color	\$	164.72
1030304036	Outdoor CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE/IP-67 Equipment end, 3 METERS, red,	ې	104.72
1036904057	black and yellow/green color	\$	164.72
	Outdoor CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE/IP-67 Equipment end, 10 METERS, red,	•	
1036904060	black and yellow/green color	\$	256.25
	Outdoor CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE/IP-67 equipment end, 3 METERS, blue,		
1036904059	black and yellow/green color	\$	164.72
1036904036	CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE, 3 METERS, blue, grey and yellow/green color	\$	53.33
1036904037	CABLE, 24VDC EU POWER, 3-POS, SPADE, 3 METERS, blue, grey and yellow/green color	\$	47.52
1036904038	CABLE, 24VDC NA POWER, 3-POS, SPADE, 3 METERS, red, black and yellow/green color	\$	56.88
1040904123	Power Supply Module I-Temp 40W DC 48V	\$	220.00
	Outdoor CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE/IP-67 Equipment end, 10 METERS,		
1036904061	blue, grey and yellow/green color	\$	256.25
	Outdoor CABLE,DC POWER, 3-POS, MINI-FIT JR-SPADE/IP-67 equipment end, 10 METERS, blue,		
1036904062	black and yellow/green color	\$	256.25
1036000703	AC Power Cable, C13, Brazil, 2.5m length, straight equipment end	\$	20.00

1036000700	AC Power Cable, C13, Chile, 2.5m length, straight equipment end	\$ 33.33
1036000684	AC Power Cable, C20, 2.5m length, right angled C19 plug at equipment end	\$ 41.30
1051002495	Duplex Cable - Single Mode, LC, 500 cm	\$ 47.35
1051002501	Duplex Cable - Single Mode, LC to SC angled, 500 cm	\$ 47.35
1036700041	DC Power Cable, 3m length, 3 single wires AWG10 red (-48V)/black (+return)/green-yellow, SUB-D connector at equipment end	\$ 180.36
1036700043	DC Power Cable, 3m length, 3 single wires AWG10 grey (-48V)/blue (+return)/green-yellow, SUB-D connector at equipment end	\$ 186.29
1036700042	DC Power Cable, 10m length, 3 single wires AWG10 red (-48V)/black (+return)/green-yellow, SUB-D connector at equipment end	\$ 364.46
1036700044	DC Power Cable, 10m length, 3 single wires AWG10 grey (-48v)/blue (+return)/green-yellow, SUB-D connector at equipment end	\$ 429.37
1036700046	DC Power Cable, 10m length, 3 single wires AWG10 blue (-48V)/black (+return)/green-yellow, SUB-D connector at equipment end DC Power Cable, 3m length, 3 single wires AWG10 blue (-48V)/black (+return)/green-yellow,	\$ 429.37
1036700045	SUB-D connector at equipment end	\$ 174.08
1013904025	AC/DC power adapter for use with GE112Pro (m).	\$ 146.67
1036000590	Video Adapter Cable, HBNC-Plug Connector to BNC-Jack Connector, 100cm	\$ 157.77
1051002517	Breakout Cable - OM3 fiber, 1 x MPO24 fan out to 20 x LC, 300 cm, LSZH	\$ 628.99
1040904070-01	PSU,-48VDC, 90W for OSA 5430 / 5440, high power -48v power supply (no fan or filter)	\$ 436.80
1013904033	SFP threaded cover 40mm	\$ 30.40
1036016008	Outdoor RJ-45 Copper Cable with pre-fitted Screw-in IP-67 Cable Seals, 10m length	\$ 121.60
1051002609	Outdoor LC SMF Dual Fibre Cable with pre-fitted Screw-in IP-67 Cable Seals, 10m length	\$ 448.00
1051002608	Outdoor LC MMF Dual Fibre Cable with pre-fitted Screw-in IP-67 Cable Seals, 10m length Mounting Kit ETSI Standard Racks for devices with 443 mm width. Comes with 4 screws for	\$ 408.00
1013902004	rack mounting. Sub-set of 1013902002	\$ 15.85
1036000712	AC Power Cable, C19, 2.5m length, straight C19 plug at equipment end, ONLY Allowed for 220V (NOT for 110V)	\$ 116.50
1036800048	Power supply cord for front DC power feeding. AWG8 cables for NA market, color red (-48VDC) / black (+Return), 3 meter length, SUB-D2W2, LSZH	\$ 133.94
1036800051	Power supply cord for DC power feeding. AWG8 cables for NA market, color red (-48VDC) / black (+Return), 10 meter length, SUB-D2W2, LSZH	\$ 341.22
1036800050	Power supply cord for front DC power feeding. AWG8 cables for ETSI market, color grey (-48VDC) / blue (+Return), 10 meter length, SUB-D2W2, LSZH	\$ 344.69
1036800047	Power supply cord for front DC power feeding. AWG8 cables for ETSI market, color grey (-48VDC) / blue (+Return), 3 meter length, SUB-D2W2, LSZH	\$ 133.94
1036800046	Power supply cord for front DC power feeding. AWG8 cables for ETSI market, color blue (-48VDC) / black (+Return), 3 meter length, SUB-D2W2, LSZH	\$ 110.67
1036800049	Power supply cord for front DC power feeding. AWG8 cables for ETSI market, color blue (- 48VDC) / black (+Return), 10 meter length, SUB-D2W2, LSZH	\$ 344.69
1036000706	AC Power Cable, Switzerland, 2.5m length, straight C19 plug at equipment end	\$ 228.36
1036000705	AC Power Cable, UK plug with 10A fuse, 2.5m length, straight C19 plug at equipment end	\$ 116.91
1036000704	AC Power Cable, Europe, 2.5m length, straight C19 plug at equipment end	\$ 147.85
1036000708	AC Power Cable, Australia, 2.5m length, straight C19 plug at equipment end	\$ 130.25
1036000710	AC Power Cable, Japan, 2.5m length, straight C19 plug at equipment end	\$ 122.86
1036000711	AC Power Cable, C20, 2.5m length, straight C19 plug at equipment end	\$ 169.16
1036000707	AC Power Cable, US, 2.5m length, straight C19 plug at equipment end	\$ 116.50
	Power supply cord for DC power feeding. AWG14 cables for ETSI market, color grey (-48VDC) / blue (+Return), includes AWG12 grounding cable green/yellow, 3 meter length, wrapped with	
1036800053	overall jacket, LSZH	\$ 46.48

	DC-Power-Cable with 2x AWG14(2.5qmm) double isolated Solarwire PV1-F blue (-48V) black		
	(+0V) and 1x AWG12 (4qmm) H07Z-K GN/YE, 3 meter length, LSZH. Customer side open, ADVA		
1036800052	side pre-assembled with Spade tongue terminal M3.5.	\$	102.95
	Power supply cord for DC power feeding. AWG14 cables for ETSI market, color grey (-48VDC) / blue (+Return), includes AWG12 grounding cable green/yellow, 10 meter length, wrapped with		
1036800056	overall jacket, LSZH	\$	126.91
	Power supply cord for DC power feeding. AWG12 cables for NA market, color red (-48VDC) /	*	
	black (+Return), includes AWG12 grounding cable green/yellow, 3 meter length, wrapped with		
1036800054	overall jacket	\$	60.40
	Power supply cord for DC power feeding. AWG12 cables for NA market, color red (-48VDC) /		
1036800057	black (+Return), includes AWG12 grounding cable green/yellow, 10 meter length, wrapped with overall jacket	ċ	161.09
1030800037	Power supply cord for DC power feeding. AWG14 cables for ETSI market, color blue (-48VDC) /	\$	161.09
	black (+Return), includes AWG12 grounding cable green/yellow, 10 meter length, wrapped		
1036800055	with overall jacket, LSZH	\$	126.91
1036000688	AC Power Cable, UK plug with 10A fuse, 2.5m length, left angled C19 plug at equipment end	\$	116.50
1036000689	AC Power Cable, Switzerland, 2.5m length, left angled C19 plug at equipment end	\$	116.50
1036000691	AC Power Cable, Australia, 2.5m length, left angled C19 plug at equipment end	\$	114.32
1013700030-01	FIPS security seals for general use	\$	35.01
1013700031-01	FIPS security seals for CFP	\$	23.62
1013700032-01	FIPS security wire seals for each module	\$	296.30
1051002515	Breakout Cable - OM3 fiber, 1 x MPO12 fan out to 8 x LC, 300 cm, LSZH	\$	436.61
1051002516	Breakout Cable - OM3 fiber, 1 x MPO12 fan out to 8 x LC, 1000 cm, LSZH	\$	562.40
1051002518	Breakout Cable - OM3 fiber, 1 x MPO24 fan out to 20 x LC, 1000 cm, LSZH	\$	843.60
1036700006	DC Power Cable, 3m length, 3 wires AWG14 grey/blue/green-yellow with overall jacket, ring	ė.	F2 20
1036700006	terminal at equipment end	\$	53.30
1051002618	Breakout Cable - Single Mode, 1 x MPO24 fan out to 10 x LC duplex (20 x LC), 300 cm, LSZH	\$	904.06
1051002619	Breakout Cable - Single Mode, 1 x MPO24 fan out to 10 x LC duplex (20 x LC), 1000 cm, LSZH	\$	953.49
1051002617	Cable - OM3 fiber, MPO12, 1000 cm, LSZH	\$	362.59
1051002616	Cable - OM3 fiber, MPO12, 300 cm, LSZH	\$	362.59
1051002614	Breakout Cable - Single Mode, 1 x MPO12 fan out to 8 x LC, 300 cm, LSZH	\$	429.20
1051002615	Breakout Cable - Single Mode, 1 x MPO12 fan out to 8 x LC, 1000 cm, LSZH	\$	478.04
1036006013	Ethernet cable CAT6 RJ45, 3m, black	\$	14.13
1036006015	Ethernet cable CAT6 RJ45, 5m, black	\$	21.16
1036006011	Ethernet cable CAT6 RJ45, 1m, black	\$	7.45
	CABLE, DC POWER, 3-POS, MINI-FIT JR-SPADE, 2A INLINE FUSE, 3 METERS, blue, grey and	*	71.10
1036904047	yellow/green color	\$	26.67
1051002519	Duplex Cable - Single Mode, LC, 210 cm	\$	47.35
1051002520	Duplex Cable - Single Mode, LC, 310 cm	\$	47.35
1058480001-01	Tunable attenuator 1.5-35dB UPC SC/SC connectors	\$	329.77
1036000582	Serial Cable 3-WIRE DB9-F/RJ45-M, 150 cm length	\$	6.93
1058009004	Standard SC Duplex Adapter	\$	11.16
1051002521	MPO multifibre Cable - OM3 fiber, MPO24, 310 cm, LSZH	\$	710.40
1036000713	AC Power Cable, Israel 2.5m length, straight equipment end	\$	50.02
1051002544	Breakout Cable - Single Mode 1 x MPO12 fan out to 10 x LC, 110 cm	\$	478.04
1051002543	Y cable for Channel card protection, 310 cm lenght, OM3 fiber, LC connector	\$	273.79
1013904034	OSA GNSS Antenna L-Mounting bracket (delivered without accessories)	\$	59.20

1051002566	Breakout Cable - OM4 fiber, 1 x MPO12 fan out to 8 x LC, 300 cm, LSZH	\$	742.15
1013904468	Enhanced Mounting Bracket for 19" Racks for devices with 445.4 mm width. Comes with 4 screws for rack mounting	\$	37.35
1013301100	Enhanced Mounting Bracket for ETSI Racks for devices with 445.4 mm width. Comes with 4	Ÿ	37.33
1013904469	screws for rack mounting	\$	37.35
1013904470	Enhanced Mounting Bracket for 23" Racks for devices with 445.4 mm width. Comes with 4 screws for rack mounting	\$	40.00
1051002564	Breakout Cable - OM4 fiber, 1 x MPO24 fan out to 20 x LC, 300 cm, LSZH	\$	1,128.06
1051002565	Breakout Cable - OM4 fiber, 1 x MPO24 fan out to 20 x LC, 1000 cm, LSZH	\$	1,341.85
1051002567	Breakout Cable - OM4 fiber, 1 x MPO12 fan out to 8 x LC, 1000 cm, LSZH	\$	879.41
1051002568	Cable - OM3 fiber, MPO16, 100 cm, LSZH	\$	330.11
1051002569	Cable - OM3 fiber, MPO16, 300 cm, LSZH	\$	374.15
1051002570	Cable - OM3 fiber, MPO16, 500 cm, LSZH	\$	418.17
1036002634	AC Power Cable, C5, US, 2.5m length, right angled equipment end	\$	46.67
1036700058	DC Power Cable, 3m length, overall jacket (PVC-cable LivYY UL/CSA), 2 tinned wires AWG16 red (-48V) / black (+return), 2W2 SUB-D 2-pole straight connector at equipment end	d \$	59.39
1030700038	(-48V) / black (+return), 2W2 5OB-D 2-pole straight connector at equipment end	Ş	59.39
	DC power cable according BauPVO B2ca s1 d1 a1 cable double isolated 2x AWG14 (2.5qmm)		
	white (-48V) red (+0V), separate wire 1x AWG12 (4qmm) green/yellow, 10 meter length,		
1036800068	Customer side open, ADVA side pre-assembled with Spade tongue terminal M3.5	\$	131.98
1020004004	DC Power Cable, 3m length, 3 wires AWG16 grey, blue and yellow/green, Pluggable Terminal	ć	22.24
1036904094	Block at equipment end, LSZH AC Power Cable, India, 2.5m length, left angled C19 plug at equipment end, 16A-Connector	\$	33.31
1036000695	(IS1293) for wall-socket	\$	105.60
	DC power cable according BauPVO B2ca s1 d1 a1 3m length, double isolated cable AWG16		
1036700063	(1.5qmm) white (-48V)/red (+return), SUB-D 2W2 connector at equipment end	\$	115.09
	DC power cable according BauPVO B2ca s1 d1 a1 cable double isolated 2x AWG14 (2.5qmm)		
	white (-48V) red (+0V), separate wire 1x AWG12 (4qmm) green/yellow, 3 meter length,		
1036800067	Customer side open, ADVA side pre-assembled with Spade tongue terminal M3.5	\$	115.09
	DC power cable according BauPVO B2ca s1 d1 a1 Power supply cord for DC power feeding.		
1036800071	AWG8 (10qmm) cables for ETSI market, color white (-48VDC) / red (+Return), 10 meter length, SUB-D2W2, LSZH, double insulated single wire.	\$	820.86
1030600071	DC power cable according BauPVO B2ca s1 d1 a1 Power supply cord for DC power feeding.	Ş	020.00
	AWG8 (10qmm) cables for ETSI market, color white (-48VDC) / red (+Return), 3 meter length,		
1036800069	SUB-D2W2, LSZH, double insulated single wire.	\$	330.00
	DC power cable according BauPVO B2ca s1 d1 a1 3m length, double isolated cable AWG14		
1026004005	(2.5qmm) white (-48V)/red (+return), Pluggable Terminal Block at equipment end Widened (-	¢	117.07
1036904095 1036000613-01	20C to +85C) AC Power Cable, C15, UK plug with 10A fuse, 2.5m length, straight equipment end	\$ \$	117.87 60.00
1058009002	Optical Adapter LC to LC	۶ \$	37.54
1036000633-01	AC Power Cable, C15, US, 2.5m length, straight equipment end	۶ \$	113.33
1036007011	Ethernet cable CAT6 RJ45 grey 1m length according BauPVO B2ca s1 d1 a1	\$	32.00
1040904104-01	Pluggable PoE PSU, AC, I-Temp 200 watts	\$	1,153.33
		7	_,
1040904103-01	Optional XO126 Pluggable Surge Protection for outdoor devices, AC, I-Temp, Spare Part Only	\$	300.00
1036002635	AC Power Cable, C5 , C14, 1m length, right angled equipment end	\$	26.67
1036002633	AC Power Cable, C5, UK plug with 5A fuse, 2.5m length, right angled equipment end	\$	46.67
1051002750	MPO Multifibre Cable, conform to B2ca - Single Mode, MPO12, 33cm	\$	933.33
1036700067	DC Power Cable, 3m length, 2 single wires AWG10 white (-48V)/blue (+return), SUB-D connector at equipment end	\$	160.00
	SS. Mester at equipment and	Y	100.00

1051002757	SN to SN duplex connector cable - Single Mode 1 x duplex SN to 1 x duplex SN, 1000 cm, LSZH	\$	160.00
1036904097	DC Power Cable, 3m length, 3 wires AWG16 white (-48V)/blue(+0V return) and yellow/green, Pluggable Terminal Block at equipment end	\$	117.87
1030304037	DC Power Cable, 3m length, 2 x 2 wires AWG16 white (-48V)/blue(+0V return) with overall	Y	117.07
1036700066	jacket	\$	160.00
1051002744	Breakout Cable - Single Mode, 1 x MPO12 fan out to 12 x LC, 300 cm, LSZH	\$	448.51
	Optional XO126 Pluggable Surge Protection for outdoor devices, DC -48V, I-Temp, Spare Part		
1040904113-01	Only	\$	240.00
1036000571	Interface Cable 3m length of IEEE1394 type according BauPVO B2ca s1 d1 a1	\$	74.67
1051002751	MPO Multifibre Cable, conform to B2ca - Single Mode, MPO12, 300cm	\$	1,000.00
1051002756	SN to SN duplex connector cable - Single Mode 1 x duplex SN to 1 x duplex SN, 300 cm, LSZH	\$	133.33
	DC Power Cable, 10m length, 3 single wires AWG10 red (-48V)/black (+return)/green-		
1036800065	yellow,straight SUB-D connector at equipment end	\$	391.90
1051002752	MPO Multifibre Cable, conform to B2ca - Single Mode, MPO12, 1000cm	\$	1,133.33
	DC Power Cable with Molex connector, 0.45m length, 2 x 2 wires AWG16 white (-		
1036700068	48V)/blue(+0V return)	\$	160.00
1036007013	Ethernet cable CAT6 RJ45 grey 3m length according BauPVO B2ca s1 d1 a1	\$	40.00
402000075	DC Power Cable, 3m length, 3 single wires AWG10 white (-48V)/blue (+return)/green-yellow,	<u> </u>	200.24
1036800075	straight SUB-D connector at equipment end LSZH Earthing Kit with 3m cable, 4 mm2, yellow/green according BauPVO B2ca s1 a1 d1, ring	\$	208.34
1036904096	terminal, nuts and washers	\$	55.47
1030301030	Power supply cord for front DC power feeding. AWG8 cables for ETSI market, color white (-	Ÿ	33.17
1036800083	48V)/blue(+0V return), 3 meter length, SUB-D2W2, LSZH	\$	160.00
1051002754	MPO Breakout Cable - OM3 fiber, 1 x MPO12 fan out to 8 x LC, conform to B2ca - 300 cm	\$	1,266.67
1058009006	MPO adapter up-down, reduced flange, black	\$	13.33
1040904114-01	Pluggable PoE PSU DC -48V, I-Temp 200 watts	\$	1,153.33
	SN to LC duplex connector cable - Single Mode 1 x duplex SN to 1 x uniboot duplex LC, 300 cm,		
1051002758	LSZH	\$	80.00
1036002632	AC Power Cable, C5, Europe, 2.5m length, right angled equipment end	\$	46.67
1051002755	MPO Multifiber Cable - OM3 fiber, conform to B2ca - 300cm	\$	973.33
	Jumper for cabling between ALM unit and WDM coupler / AUX port, conform to B2ca - Single		
1051002746	Mode, LC/APC, 150 cm	\$	60.00
1040904101-01	Pluggable PSU, AC, I-Temp 100 Watts	\$	613.33
1051002749	Duplex Cable, conform to B2ca - Multimode OM4, LC, 500cm	\$	80.00
1051003747	Jumper APC/PC adapter for connection of 1610nm "clear channel" to AUX port, conform to	ċ	F2 22
1051002747	B2ca - Single Mode, LC/APC, 310 cm SN to LC duplex connector cable - Single Mode 1 x duplex SN to 1 x uniboot duplex LC, 1000	\$	53.33
1051002759	cm, LSZH	\$	133.33
1051002748	Duplex Cable, conform to B2ca - Multimode OM4, LC, 90cm	, \$	73.33
1036002636	AC Power Cable, C5, Europe, conform to B2ca, 2.5m length, right angled equipment end	\$	100.00
	Power supply cord for front DC power feeding. AWG16 cables for ETSI market, color white (-	•	
1036904098	48V)/blue(+0V return), 3 meter length.	\$	117.87
1040904111-01	Pluggable PSU, DC -48V, I-Temp 100 watts	\$	613.33
	DC Power Cable, 3m length, 3 single wires AWG10 white (-48V)/blue(+0V return)/green-		
1036700073	yellow, SUB-D connector at equipment end	\$	160.00
1005000075	DC Power Cable, 10m length, 3 single wires AWG10 white (-48v)/blue (+return)/green-yellow,		400 15
1036800076	straight SUB-D connector at equipment end	\$	480.15
1013002995	1HU Fiber Management bracket (2 pcs.)	\$	21.33
1051002745	Breakout Cable - Single Mode, 1 x MPO12 fan out to 12 x LC, 1000 cm, LSZH	\$	478.04

1051002753	MPO Breakout Cable - Single Mode, 1 x MPO12 fan out to 8 x LC, conform to B2ca - 300 cm	\$	1,266.67
1013902007	XG490 Shelf Front cover	\$	835.12
	Power supply cord for DC power feeding. AWG14 cables for ETSI market, color white (-		
1036800081	48V)/blue(+0V return), includes AWG12 grounding cable green/yellow, 3 meter length, wrapped with overall jacket, LSZH	\$	160.00
1030800081	wrapped with overall jacket, L3211	ڔ	100.00
	DC Power Cable, 3m length, overall jacket (PVC-cable LivYY UL/CSA), 2 tinned wires AWG16		
1036700057	blue (-48V) / black (+return), 2W2 SUB-D 2-pole straight connector at equipment end	\$	59.39
1036006020	Ethernet cable CAT6 RJ45, 10m, black	\$	65.26
403600064	DC Power Cable, 3m length, 3 single wires AWG10 red (-48V)/black (+return)/green-	<u> </u>	402.06
1036800064	yellow,straight SUB-D connector at equipment end	\$	193.96
1051002578	Jumper for internal cabling - Single Mode, LC, 800 cm	\$	30.44
	DC Power Cable, 3m length, overall jacket (PVC-cable LivYY UL/CSA), 2 tinned wires AWG16		
1036700059	grey (-48V) / blue (+return), 2W2 SUB-D 2-pole straight connector at equipment end	\$	59.39
1013902005	Mounting Kit for 23" Racks for 1RU devices. Comes with 4 screws for rack mounting	\$	83.20
1013904038	Mounting Kit for 23" Racks for 2RU devices. Comes with 4 screws for rack mounting	\$	83.20
1036000653-01	AC Power Cable, C15, Australia/China, 2.5m length, straight equipment end	\$	113.33
1040904082-01	XGPRO 250 Watt AC power supply	\$	909.33
1036000603-01	AC Power Cable, C15, Europe, 2.5m length, straight equipment end	\$	106.67
1013904045	Connector straight for high AC/DC voltage PSU 1040904032-01	\$	35.20
1040904032-01	PSU, 100-240 VAC & 100-250 VDC, 90W for OSA 5422 and OSA5412.	\$	400.00
1013904046	Connector 90deg angled for 542x high AC/DC voltage PSU 1040904032-01	\$	35.20
	AC Power Cable, India, 2.5m length, straight C19 plug at equipment end, 16A-Connector		
1036000714	(IS1293) for wall-socket	\$	105.60
1036700047	DC Power Cable, 3m length, double insulated Cable LivYY UL/CSA 3x AWG14 red (-48V)/black (+return)/green-yellow, SUB-D connector at equipment end. Left routed	\$	175.22
1040904091-01	Pluggable PSU with 72watts, DC -48V, I-Temp	\$	300.00
1051002705	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 25 cm	\$	44.38
1051002706	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 30 cm	\$	44.38
1051002707	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 35 cm	\$	44.38
1051002708	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 40 cm	\$	44.38
1051002709	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 45 cm	\$	44.38
1051002710	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 50 cm	\$	44.38
1051002711	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 55 cm	\$	44.38
1051002712	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 60 cm	\$	44.38
1051002713	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 65 cm	\$	44.38
1051002714	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 70 cm	\$	44.38
1051002715	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 75 cm	\$	44.38
1051002716	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 80 cm	\$	44.38
1051002717	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 85 cm	\$	44.38
1051002734	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 240 cm	\$	44.38
1036000663-01	AC Power Cable, C15, India, 2.5m length, straight equipment end	\$	113.33
1036000623-01	AC Power Cable, C15, Switzerland, 2.5m length, straight equipment end	\$	106.67
1036000673-01	AC Power Cable, C15, Japan, 2.5m length, straight equipment end	\$	113.33
1036800070	Power supply cord for DC power feeding. AWG14 cable, color grey (-48VDC) / blue (+Return), grounding cable green/yellow, 5 meter length, wrapped with overall jacket, LSZH	\$	48.00
1051002718	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 90 cm	\$ \$	44.38
1031002/10	Jumper for internal cability, comorni to bzca - single wode, EC, 30 cm	ې	44.30

1051002719	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 95 cm	\$	44.38
1051002720	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 100 cm	\$	44.38
1051002721	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 105 cm	\$	44.38
1051002722	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 110 cm	\$	44.38
1051002723	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 115 cm	\$	44.38
1051002724	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 120 cm	\$	44.38
1051002725	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 130 cm	\$	44.38
1051002726	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 140 cm	\$	44.38
1051002727	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 150 cm	\$	44.38
1051002728	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 160 cm	\$	44.38
1051002729	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 170 cm	\$	44.38
1051002730	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 180 cm	\$	44.38
1051002731	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 190 cm	\$	44.38
1051002732	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 210 cm	\$	44.38
1051002733	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 230 cm	\$	44.38
1051002735	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 280 cm	\$	44.38
1051002736	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 300 cm	\$	44.38
	Power Supply Module AC, 400W, AC 110V/240V and DC 240V, front power feeding, for		
1040800069-01	F8/SH2R, F8/SH2, XG404 and XG418	\$	526.88
1025700050	DC power cable according BauPVO B2ca s1 d1 a1 3m length, 2 single double isolated wires	¢	152.16
1036700060	AWG10 white (-48V)/red (+return), SUB-D connector at equipment end DC power cable according BauPVO B2ca s1 d1 a1 10m length, 2 single double isolated wires	\$	153.16
1036700061	AWG10 white (-48V)/red (+return), SUB-D connector at equipment end	\$	371.71
	DC power cable according BauPVO B2ca s1 d1 a1 3m length, 2 single double isolated wire	·	
	AWG10 (6qmm), color white (-48VDC) / red (+Return) and 1 single isolated wire green/yellow,		
1036800072	3 meter length, SUB-D 5W5 connector at equipment end	\$	194.63
	DC power cable according BauPVO B2ca s1 d1 a1 10m length, 2 single double isolated wire		
1036800073	AWG10 (6qmm), color white (-48VDC) / red (+Return) and 1 single isolated wire green/yellow, 3 meter length, SUB-D 5W5 connector at equipment end	\$	480.15
103000073	5 meter length, 555 5 5 775 connector at equipment ena	Ψ	100.13
1036700064	DC Power Cable, 3m length, 2 x 2 wires AWG16 white (-48V)/red (+return) with overall jacket	\$	160.00
1036000591	USB-A to RJ45-CISCO Pinning serial adapter cable , 180 cm	\$	72.11
1036000592	USB cable 1m, with screw lock USB-C to USB-C	\$	123.41
1051002737	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 310 cm	\$	44.38
1051002738	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 500 cm	\$	83.20
1051002742	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 800 cm	\$	80.00
1051002739	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 1000 cm	\$	83.20
1051002740	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 2500 cm	\$	104.00
1051002741	Jumper for internal cabling, conform to B2ca - Single Mode, LC, 4500 cm	\$	124.80
1036000588	USB Cable 1.5m Micro USB to USB-A	\$	13.33
1040904059-01	XGPro 100 Watt AC power supply	\$	598.65
1040904085-01	XGPRO 240 Watt -48v power supply	\$	498.67
1040904086-01	XGPRO 200 Watt AC power supply	\$	845.33
1036016009	Outdoor RJ-45 Copper Cable with Male RJ-45 to waterproof female RJ-45 connector	\$	119.30
1051002577	Outdoor Cable - Single Mode, LC-OptiTap, 80 cm	\$	366.08
	DC Power Cable, 3m length, 3 wires AWG14 red (-48V) / black (return)/green-yellow with		
1036700050	overall jacket, M3 ring terminals at equipment end	\$	60.42
BC4701E006 04	Rack mounting accessories including 4x M6x20mm screws + 4x M6 cage nuts, for equipment	ċ	160.00
BC47015906-01	rack integration	\$	160.00

1040904090-01	Pluggable PSU 68 watts, AC, I-Temp	\$	113.33
1013904036	OSA GNSS Pipe Mounting Adaptor	\$	76.80
	DC Power Cable, 3m length, 2 single wires AWG10 blue (-48V) / red (+return), SUB-D connector		
1036700053	at equipment end	\$	143.37
1036700054	DC Power Cable, 10m length, 2 single wires AWG10 blue (-48V) / red (+return), SUB-D connector at equipment end	\$	250.61
1040904100-01	Pluggable PSU 48 watts, AC, I-Temp, for Outdoor Devices, Spare Part only	\$	173.33
1040904112-01	Surge Protection Module DC Type 1 for outdoor Devices, Spare Part only	\$	173.33
1040904110-01	Pluggable PSU 48 watts, DC -48V, I-Temp, for Outdoor Devices, Spare Part only	\$	180.00
			180.00
1040904102-01	Surge Protection Module AC Type 1 for outdoor Devices, Spare Part only	\$	
1013904057	XO106 and XO126 Strand Mounting Kit	\$	360.00
1013904056	XO106 and XO126 Pole Mounting Kit	\$	300.00
1013904055	XO106 and XO126 Wall Mounting Kit	\$	173.33
1013900010	FSP 150-XG404 Fan Tray Module-filter replacement	\$	16.00
1036700055	DC Power Cable, LSZH, 3m length, 2 single wires AWG10 blue/black, blue and black solar PV1-F wire, SUB-D 3W3 connector over-molded at equipment end	\$	174.57
1030700033	DC Power Cable, LSZH, 3m length, 2 single wires AWG14 blue/black+ 1 wire 2.5mm2 green-	ې	1/4.5/
	yellow wrapped in black spiral hose, blue and black solar PV1-F wire, Phoenix connector with		
1036700056	strain relief at equipment end	\$	148.65
1058009001	Optical Adapter SC to SC	\$	13.33
	LSZH DC Power Cable, 3m length, 2 wires AWG14 blue black with overall jacket, Pluggable		
1036904092	Terminal Block at equipment end	\$	80.88
1036904093	LSZH Earthing Kit with 3m cable, 4 mm2, yellow/green, ring terminal, nuts and washers	\$	55.47
1051002491	Jumper for internal cabling - Single Mode, LC, 20 cm	\$	47.35
	Power Supply Module DC, 400W, DC 48V, front power feeding, for F8/SH2R, F8/SH2, XG404		
1040800056-01	and XG418	\$	507.45
1036000593	USB cable 2m, with screw lock USB-C to USB-C	\$	165.33
1036000594	USB Cable 1m, USB2-Standard-A to USB2-Standard-B	\$	26.67
1091904563-01	OSA 5405/INPUT 1588-PTP	\$	660.00
1078904679-01	OSA 54xx 16xBITS Output Card	\$	1,650.00
	OSA 5421 with very high Quartz HQ++ (Stratum 2E G.812 Type II), ageing/Day +/-1e-11 with		
1078904673-01	holdover algorithm,+/-5e-11 without it, Temperature stability +/-1e-11, GNSS receiver for GPS L1, GLONASS G1, BeiDou B1, Galileo E1, pluggable PSUs, 1x Exp Slot	\$	6.824.40
1078904073-01	OSA 5421 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, Temperature	Ą	0,824.40
	stability +/-2e-10, GNSS receiver for GPS L1, GLONASS G1, BeiDou B1, Galileo E1, pluggable		
1078904674-01	PSUs, 1x Exp Slot	\$	8,690.88
1036005403-01	High Density Cable 220 cm, LSZH	\$	236.28
	OSA 5411 with one Quartz (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temperature		
	stability +/-50e-10, integrated GNSS receiver for GPS L1, GLONASS G1, BeiDou B1, Galileo E1,		
1078904660-02	pluggable PSUs	\$	4,864.20
1091904912-01	OSA 542X/3X/4X/SYNC 1588-PTP /UPG-KEY-128-1024	\$	2,399.77
1091904913-01	OSA 542X/3X/4X/SYNC 1588-PTP /UPG-KEY-256-1024	\$	1,599.83
	OSA 5411 with Rubidium (Stratum 3E G.812 Type III), ageing/Day +/-5e-12, Temperature		
1078904661-02	stability +/-2e-10, integrated GNSS receiver for GPS L1, GLONASS G1, BeiDou B1, Galileo E1, pluggable PSUs	\$	7,623.00
10,030 1001 02	OSA 5410 with one Quartz (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temperature	Y	7,023.00
	stability +/-50e-10, with integrated AC PSU and GNSS receiver for GPS L1, GLONASS G1, BeiDou		
1078904650-02	B1, Galileo E1	\$	3,557.40
1091904671-01	SYNCJACK OS, OSA 541X, Extended Probes License Key	\$	942.48
1091904673-01	OSA 541X/SYNC 1588-PTP /KEY-8	\$	942.48
1091904675-01	OSA 541X/SYNC 1588-PTP /UPG-KEY-8-32	\$	471.23

1091904677-01	OSA 541X/SYNC 1588-PTP /UPG-KEY-8-64	\$	1,169.52
1091904676-01	OSA 541X/SYNC 1588-PTP /KEY-64	\$	2,112.00
1091904674-01	OSA 541X/SYNC 1588-PTP /KEY-32	\$	1,413.72
1091904679-01	OSA 541X/SYNC 1588-PTP /G8275-1-L2	\$	1,452.00
1091904678-01	OSA 541X/SYNC 1588-PTP /UPG-KEY-32-64	\$	698.28
1091904681-01	OSA 541X/SYNC 1588-PTP /PTP-ENTERPRISE/PTP-IP-MULTI	\$	2,006.40
1091904907-01	OSA 5412/2X/3X/4X/SYNC 1588-PTP /UPG-KEY-256-512	\$	799.92
1091904906-01	OSA 5412/2X/3X/4X/SYNC 1588-PTP /UPG-KEY-128-512	\$	1,599.83
1091904905-01	OSA 5412/2X/3X/4X/SYNC 1588-PTP /UPG-KEY-128-256	\$	799.92
1036005404-01	High Density Cable 30 cm, LSZH	\$	163.68
	OSA 5405-I Kit, including OSA 5405-I Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP GM with Stratum 3E OCXO, windows mounting (1063904610		
BC47020179-01	01) + wall mounitng kit (1047026090-01)	\$	2,824.80
	OSA 5405-O Kit, including OSA 5405 Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP GM with Stratum 3E OCXO (1063904620-01) + Outdoor		
BC47020180-01	mounting kit for wall/pole mounting (1047026091-01)	\$	2,905.32
1091904557-01	OSA 5405/SYNC 1588-PTP /UPG-KEY-8-64	\$	1,584.00
	OSA 5411 with very high quality Quartz-HQ ++(Stratum 2E G.812 Type II),ageing/Day +/-1e-11		
	with holdover algorithm,+/-5e-11 without it,Temperature stability +/-1e-11,integrated GNSS		
1078904664-01	receiver for GPS L1, GLONASS G1, BeiDou B1, Galileo E1, pluggable PSUs.	\$	6,388.80
1091904911-01	OSA 5412/2X/3X/4X/SYNC 1588-PTP /UPG-KEY-512-1024	\$	799.92
	OSA 5410 with one Quartz (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temperature stability +/-50e-10, with integrated -48VDC PSU and GNSS receiver for GPS L1, GLONASS G1,		
1078904651-02	BeiDou B1, Galileo E1	\$	3,557.40
1063904601-02	OSA 5401 SYNCPLUG SFP , including Stratum 3E OCXO	\$	2,032.80
1091904689-03	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R8.5.3	\$	159.72
1047026090-01	OSA 5405-I / OSA 5405-P wall mounting bracket OSA 5405 Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP	\$	66.00
1063904620-01	GM with Stratum 3E OCXO OSA 5405-I Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP	\$	2,781.23
1063904610-01	GM with Stratum 3E OCXO	\$	2,758.80
100000 1010 01	OSA 5405-0 / OSA 5405-MB Outdoor mounting kit for wall/pole mounting. For pole diameter	Ψ	2,700.00
1047026091-01	38~89mm	\$	124.08
1091904694-01	SYNCJACK OS, OSA 541X, PRE-INSTALLED SW, R9.5.1	\$	159.72
1091904556-01	OSA 5405/SYNC 1588-PTP /UPG-KEY-8-32	\$	1,056.00
1091904555-01	OSA 5405/SYNC 1588-PTP /UPG-KEY-8-16	\$	528.00
1091904560-01	OSA 5405/SYNC 1588-PTP /UPG-KEY-32-64	\$	528.00
1091904559-01	OSA 5405/SYNC 1588-PTP /UPG-KEY-16-64	\$	1,056.00
1091904558-01	OSA 5405/SYNC 1588-PTP /UPG-KEY-16-32	\$	528.00
1091904561-01	SYNCJACK OS, OSA 540x, Probes License Key to extend to 2x Clock probe + 2x PTP clock probe	\$	660.00
1091904688-03	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R9.1.3	\$	159.72
1047026081-01	OSA 542x 16 x BNC output panel for BITS, 75 ohm	\$	396.00
1091904562-01	OSA 5401/SYNC 1588-PTP /UPG-KEY-32-64	\$	792.02
1091904695-02	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R9.5.2	\$	159.72
1047026089-01	OSA 542x 16 x BNC output panel for CLK, 50 ohm	, \$	435.58
1047026082-01	OSA 542x 16 x RJ-45/48 output panel for BITS, 120 ohm	, \$	435.58
1047026083-01	OSA 542x 16 x RJ-45/48 output panel for ToD+1PPS, 100/120 ohm	\$	396.00
1047026084-01	OSA 542x 16 x BNC output panel for 1PPS, 50 ohm	\$	435.58
		7	.55.55

1047026087-01	OSA 54xx 16x ToD and 1PPS Output Card	\$	653.40
1047026085-01	OSA 542X, 4-port GE fiber expansion module, SFP optics	\$	726.00
1047026086-01	OSA 542x 16x Clock and 1PPS Output Card	\$	653.40
	OSA 5420 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover		
	algorithm +/-2e-10 without it, Temperature stability +/-2e-10, GNSS receiver for GPS L1,		
1078904671-01	GLONASS G1, BeiDou B1, Galileo E1, pluggable PSUs, 2x Exp Slot	\$	5,500.43
	OSA 5420 with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temperature stability		
1078904670-01	+/-50e-10, GNSS receiver for GPS L1, GLONASS G1, BeiDou B1, Galileo E1, pluggable PSUs, 2x Exp Slot	\$	4,501.20
1091904698-01		\$	159.72
	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R10.2.1		159.72
1091904727-01	SYNCJACK OS, OSA 5405, Pre-installed SW, R11.5.1	\$	-
1047026094-01	OSA 5405-P spare DIN Rail Aluminium Mounting Bracket + ETSI/19" mounting bracket	\$	58.08
	OSA 5405-P Kit, GNSS/PRTC/PTP Grand Master. Stratum 3E OCXO, configurable IRIG outputs		
1063904611-01	(Optical / AM / DCLS), relay contacts, with DIN/ETSI/19" mounting bracket included	\$	2,904.00
	OSA 5405-MB Smart Multiband L1+L2 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS,	•	•
1063904621-01	SBAS) /PRTC /PTP GM with Stratum 3E enhanced OCXO	\$	4,567.20
	OSA 5405 NTP profile basic system software license, including: NTP basic key license, up to		
1091904577-01	4000 TPS	\$	792.02
1091904572-01	OSA 5405/SYNC NTP/RESPONDER	\$	1,980.00
1091904573-01	OSA 5401/SYNC NTP/RESPONDER	\$	1,980.00
	OSA 5405 Power profile basic system software license, including: PTP power profiles, 1x Clock		
1091904575-01	Probe, 1x PTP Probe	\$	1,188.00
	OSA 5405 Broadcast/Enterprise profile basic system software license, including: PTP Broadcast		
1091904576-01	profiles, 1x Clock Probe, 1x PTP Probe, default L3 mulitcast	\$	1,188.00
1001004570 04	OSA 5401 Power profile basic system software license, including: PTP power profiles, 1x Clock	<u> </u>	4 400 00
1091904579-01	Probe, 1x PTP Probe	\$	1,188.00
1091904580-01	OSA 5401 Broadcast/Enterprise profile basic system software license, including: PTP Broadcast profiles, 1x Clock Probe, 1x PTP Probe, default L3 mulitcast	\$	1,188.00
1031304360 01	OSA 5401 NTP profile basic system software license, including: NTP basic key license, up to	Ţ	1,100.00
1091904581-01	4000 TPS	\$	792.02
1091904582-01	OSA 5405/TELECOM PROFILE 1588-PTP	\$	660.00
1091904583-01	OSA 5401/TELECOM PROFILE 1588-PTP	\$	660.00
1091904728-01	SYNCJACK OS, OSA 5401, Pre-installed SW, R11.5.1	\$	-
1091904961-02	SYNCJACK OS, OSA 5412 and OSA 5422, Pre-installed SW, R11.1.2	\$	_
103130 1301 02	OSA 5422 Time Code Module, with 1x IRIG-B Input AM/DCLS (BNC), 1x optical out (ST), 1x	Ÿ	
1063904707-02	RS422 (RJ11), 1x alarm/pulse relay, 10x IRIG outputs on high density connector	\$	3,136.32
1091905933-01	OSA 540X/A-GNSS-INTF-DET/KEY	\$	660.00
	OSA 5400 SyncModule MB L1+L5, Multiband band L1+L5 GNSS receiver, NGFF M.2 Type 2280	•	
1063904507-01	Key B	\$	2,831.40
1091904735-01	OSA 5401 SYNCJACK OS, PRE-INSTALLED SW, R12.1.1	\$	-
	OSA 5422 Broadcast card for Audio and Video legacy Sync signals, 4x OUT + 1x IN, SMA		
1063904714-01	connectors	\$	3,136.32
1047026095-01	OSA 5422 10 x Wire-wrap output panel for CC outputs	\$	435.58
	OSA 5412 with very high Quartz HQ++ (Stratum 2E G.812 Type II), ageing/Day +/-1e-11 with		
	holdover algorithm,+/-5e-11 without it, Temperature stability +/-50e-10, GNSS receiver for L1		
1078904667-01	(GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	6,534.00
1062004715 01	10 v 64khite/c CC Line Card for OSA E422 providing 10 v 64khite/c CC Output + 1 v CC avera in a state	ċ	2 460 40
1063904715-01	10 x 64kbits/s CC Line Card for OSA 5422, providing 10 x 64kbits/s CC Output + 1x CC sync input		2,468.40
1091904697-01	OSA 5405 SYNCJACK OS, PRE-INSTALLED SW, R9.5.1	\$	159.72
1063904622-01	OSA 5405-MB Smart Multiband L1+L5 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, IRNSS NavIC, QZSS, SBAS) /PRTC /PTP GM with Stratum 3E enhanced OCXO	\$	4,567.20
10000 .011 01		Ψ.	.,507.20

	SoftSync + ENC License., 12 months subscription client license, including Service + ENC		
BC47020605-01	connection license for Qty 2000+	\$	58.63
	OSA 5410XG system software, including PTP Slave, Probes Count: 1x Clock Probe, 1x PTP Clock		
	Probe, 1x PTP Network Probe, 32x PTP slaves G.8265.1/75.2, 2x copper 1GB ports, 2x SFP/SFP+		
1091904988-01	ports.	\$	489.72
	OSA 5410XG with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, GNSS receiver for L1		
	(GPS, GLONASS, BeiDou, Galileo), 48VDC PSU Input, 2x copper 1GB ports + 2x SFP/SFP+ 1/10GB		
1078904695-01	ports (expandable to 4x ports)	\$	3,300.00
DC47020C02_04	SoftSync + ENC License., 9 months subscription client license, including Service + ENC	<u> </u>	CC C7
BC47020692-01	connection license for Qty 100-499	\$	66.67
	OSA 5410XG with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Multiband GNSS receiver for L1+L5 (GPS, GLONASS, BeiDou, Galileo), 230VAC PSU Input, 2x copper 1GB ports +		
1078904698-01	2x SFP/SFP+ 1/10GB ports (expandable to 4x ports)	\$	4,755.30
1070301030 01	SoftSync + ENC License., 12 months subscription client license, including Service + ENC	Y	1,733.30
BC47020601-01	connection license for Qty 1-99	\$	119.63
	SoftSync + ENC License., 12 months subscription client license, including Service + ENC	•	
BC47020602-01	connection license for Qty 100-499	\$	88.43
	SoftSync + ENC License., 6 months subscription client license, including Service + ENC		
BC47020662-01	connection license for Qty 100-499	\$	43.67
	SoftSync + ENC License., 9 months subscription client license, including Service + ENC		
BC47020691-01	connection license for Qty 1-99	\$	89.83
BC47020561-01	SoftSync 6 months subscription client expansion license, including Service for Qty 1-99	\$	50.58
	SoftSync + ENC License., 6 months subscription client license, including Service + ENC		
BC47020661-01	connection license for Qty 1-99	\$	60.37
1091904990-01	OSA 5410XG - License for 2x additional SFP/SFP+ ports (total 4 ports)	\$	264.00
BC47020562-01	SoftSync 6 months subscription client expansion license, including Service for Qty 100-499	\$	36.52
1091904987-01	SYNCJACK OS, OSA 541X, Pre-installed SW, R12.1.1	\$	-
BC47020532-01	SoftSync 3 months subscription client expansion license, including Service for Qty 100-499	\$	18.27
1091904728-02	SYNCJACK OS, OSA 5401, Pre-installed SW, R11.5.2	\$	-
	SoftSync + ENC License., 12 months subscription client license, including Service + ENC		
BC47020603-01	connection license for Qty 500-999	\$	78.05
	IRIG-B I/O license to enable 4x IRIG-B (3x AM or DCLS + 1x DCLS configurable either Input or		
1091904989-01	Output)	\$	880.00
DC47020C22_04	SoftSync + ENC License., 3 months subscription client license, including Service + ENC	<u> </u>	24.00
BC47020632-01	connection license for Qty 100-499	\$	21.88
BC47020592-01	SoftSync 9 months subscription client expansion license, including Service for Qty 100-499	\$	55.88
1091904955-02	SYNCJACK OS, OSA 542X, Pre-installed SW, R11.1.2	\$	-
	OSA 5410XG with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Multiband GNSS		
	receiver for L1+L5 (GPS, GLONASS, BeiDou, Galileo), 48VDC PSU Input, 2x copper 1GB ports +		
1078904697-01	2x SFP/SFP+ 1/10GB ports (expandable to 4x ports)	\$	4,755.30
	SoftSync + ENC License., 12 months subscription client license, including Service + ENC		
BC47020604-01	connection license for Qty 1000-1999	\$	63.27
1091905936-01	OSA 5412-2X/MS-COMB/KEY	\$	6,600.00
	SoftSync + ENC License., 3 months subscription client license, including Service + ENC		
BC47020631-01	connection license for Qty 1-99	\$	29.47
	OSA 5410XG with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, GNSS receiver for L1		
1079004606 01	(GPS, GLONASS, BeiDou, Galileo), 230VAC PSU Input, 2x copper 1GB ports + 2x SFP/SFP+	ċ	2 200 00
1078904696-01	1/10GB ports (expandable to 4x ports)	\$	3,300.00
BC47020531-01	SoftSync 3 months subscription client expansion license, including Service for Qty 1-99	\$	24.73
BC47020505-01	SoftSync 12 months subscription client license, including Service for Qty 2000+	\$	49.17

1063904601-05	OSA 5401 SYNCPLUG GNSS and PTP Grand Master SFP , including Stratum 3E OCXO OSA 5422 with very high Quartz HQ++ (Stratum 2E G.812 Type II), ageing/Day +/-1e-11 with	\$	2,032.80
1078904677-91	holdover algorithm,+/-5e-11 without it, Temperature stability +/-1e-11, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	6,824.40
1078904675-91	OSA 5422 with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temp. stability +/-50e-10, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	4,501.20
1078904684-91	OSA 5422 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	10,497.97
1078904665-91	OSA 5412 with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temperature stability +/-50e-10, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	3,049.20
BC47020591-01	SoftSync 9 months subscription client expansion license, including Service for Qty 1-99	\$	75.30
1091905935-01	OSA 543X-4X/MS-COMB/KEY	\$	6,600.00
1091904694-04	SYNCJACK OS, OSA 541X, PRE-INSTALLED SW, R9.5.4	\$	159.72
1078904676-91	OSA 5422 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover algorithm +/-2e-10 without it, Temperature stability +/-2e-10, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp Slot	\$	5,500.43
	OSA 5405-I Kit, including OSA 5405-I Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP GM with Stratum 3E enhanced OCXO, windows mounting	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
BC47020179-92	(1063904610-92) + wall mouniting kit (1047026090-01)	\$	2,614.92
	OSA 5400 Telecom profile basic system software license, including: 1x Clock Probe, 1x PTP Probe, layer 2 default profiles, G.8275.1 profile, enterprise profile, 32x IP unicast PTP Slaves		
1091904593-01	G.8265.1 / G.8275.2, Sync-E	\$	554.40
1091904731-01	SYNCJACK OS, OSA 5400, Pre-installed SW, R11.6.1	\$	-
1078904666-91	OSA 5412 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover algorithm +/-2e-10 without it, Temperature stability +/-50e-10, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	4,301.88
1091904955-01	SYNCJACK OS, OSA 542X, Pre-installed SW, R11.1.1	\$	-,301.00
1091904999-01	OSA 5422 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, GNSS receiver for L1	۲	_
1078904678-01	(GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	9,481.57
1091904672-01	OSA 5412/22 expansion license to 8x 1GE/10GE ports	\$	528.00
1091905931-01	OSA 5412-22/A-GNSS-INTF-DET/KEY	\$	660.00
	OSA 5422 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover algorithm +/-2e-10 without it, Temp. stab. +/-2e-10, Multiband GNSS receiver for L1+L2 (GPS,		
1078904682-91	GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp Slot	\$	7,289.03
1047026080-02	OSA 54xx blank patch panel	Ş	217.80
BC47020306-01	Latest release pre-installed SW for OSA5420/21 release 11.x.x and above, applicable on 5420 HW 1078904670-01, 1078904671-01 and 5421 HW 1078904673-01, 1078904674-01	\$	_
1091904961-01	SYNCJACK OS, OSA 5412 and OSA 5422, Pre-installed SW, R11.1.1	\$	_
	OSA 5405 Sync Probing profile software license, including: 1x Clock Probe, 1x PTP Probe, L2 +	•	
1091904584-01	L3 input PTP Slave, G.8275.1 + Enterprise profile, Sync-E	\$	330.00
	OSA 5401 Sync Probing profile software license, including: 1x Clock Probe, 1x PTP Probe, L2 +		
1091904585-01	L3 input PTP Slave, G.8275.1 + Enterprise profile, Sync-E	\$	330.00
1091905927-01	OSA 5412-2X/BROADCAST-PTP/KEY	\$	2,006.40
1078904669-01	OSA 5412 with enhanced Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, enhanced Temperature stability, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	9,837.97
1078904658-01	OSA 5412 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	10,062.37
	OSA 5412 with enhanced Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, enhanced		
1078904659-01	Temperature stability, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	11,993.52
20.000.000.01	OSA 5400 M.2 Timing module, including OCXO (10PPB), single band GNSS receiver, NGFF M.2	Y	11,000.02
1063904505-01	Type 3042 Key B	\$	1,422.97

1002004504-04	OCA FACO Tive Cond (TAAC) with Overto OCVO	<u> </u>	2 570 02
1063904501-01	OSA 5400 TimeCard (TMC), with Quartz OCXO	\$	2,570.03
1063904502-01	OSA 5400 TimeCard (TMC), with HQ+	\$	3,310.57
1063904503-01	OSA 5400 TimeCard (TMC), with HQ++	\$	5,125.57
1063904504-01	OSA 5400 TimeCard (TMC), with Rubidium	\$	10,294.68
	OSA 5405-MB L1+L2 Kit, including 1x OSA 5405-MB Smart Multiband L1+L2 GNSS antenna		
BC47020182-01	(GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP GM with Stratum 3E enhanced OCXO (1063904621-01) + Outdoor mounting kit for wall/pole (1047026091-01)	\$	4,691.28
		۶ \$	159.72
1091904694-05	SYNCJACK OS, OSA 541X, PRE-INSTALLED SW, R9.5.5 OSA 5405-I Kit, including OSA 5405-I Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU,	Ş	159.72
	GALILEO, QZSS, SBAS) /PRTC /PTP GM with Stratum 3E enhanced OCXO, windows mounting		
BC47020179-02	(1063904610-02) + wall mouniting kit (1047026090-01)	\$	2,824.80
	OSA 5405-O Kit, including OSA 5405 Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU,	•	,
	GALILEO, QZSS, SBAS) /PRTC /PTP GM with Stratum 3E enhanced OCXO (1063904620-02) +		
BC47020180-02	Outdoor mounting kit for wall/pole mounting (1047026091-01)	\$	2,905.32
	OSA 5412 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover		
	algorithm +/-2e-10 without it, Temperature stability +/-50e-10, Multiband GNSS receiver for		
1078904656-01	L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	7,245.48
	OSA 5412 with very high Quartz HQ++ (Stratum 2E G.812 Type II), ageing/Day +/-1e-11 with		
1070004657 01	holdover algorithm,+/-5e-11 without it, Temperature stability +/-50e-10, Multiband GNSS	۲	0 527 77
1078904657-01	receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots OSA 5422 with very high Quartz HQ++ (Strat. 2E G.812 Type II), Multiband GNSS receiver for	\$	8,537.77
1078904683-51	L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots. TAA compliant.	\$	10,556.03
1070301003 31	OSA 5422 with enhanced Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, enhanced		10,550.05
	Temperature stability, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x		
1078904685-01	Exp. slots	\$	11,412.72
	OSA 5422 with enhanced Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, enhanced		
	Temperature stability, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x		
1078904686-01	PSU slots, 2x Exp. slots	\$	13,547.17
1091903021-04	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R10.5.4	\$	159.72
1091905924-01	OSA 5412-2X/S1588-PTP/HABC	\$	920.70
	OSA 5412 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, GNSS receiver for L1		
1078904668-91	(GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	7,405.20
	OSA 5422 with very high Quartz HQ++ (Strat. 2E G.812 Type II), ageing/Day +/-1e-11 with		
1070004602 01	holdover algorithm,+/-5e-11 without it, Temp. stab. +/-1e-11, Multiband GNSS receiver for	۲	0.610.30
1078904683-91	L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots OSA 5422 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, GNSS receiver for L1	\$	8,618.28
1078904678-91	(GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	8,690.88
1070304070 31	(G13, G2011/33, BC1504, Gaille 6), 2x130 310t3, 2x Exp. 310t3	Y	0,030.00
1091904586-01	SYNCJACK OS, OSA 5400, Probes License Key to extend to 2x Clock probe + 2x PTP clock probe	\$	462.00
	OSA 5422 with very high Quartz HQ++ (Strat. 2E G.812 Type II), Multiband GNSS receiver for		
1078904683-61	L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots. TAA compliant.	\$	9,278.28
1091904588-01	OSA 5400/INPUT 1588-PTP	\$	462.00
1091904599-01	OSA 5400/IEEE 802.1AS - PTP GM	\$	462.00
1091904591-01	OSA 5400/SYNC NTP/KEY	\$	462.00
	External AC/DC power converter for OSA5400 TMC. Input 90-264VAC - IEC320-C14 AC inlet /		
1063904508-01	Output 12VDCm max 3.3A - Order AC cable separately	\$	138.60
1091905929-01	OSA 5412/5422/SYNC NTP/RESPONDER	\$	1,980.00
1091903021-05	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R10.5.5	\$	159.72
1091904953-05	SYNCJACK OS, OSA 542X, Pre-installed SW, R10.5.5	\$	_
1091904718-01	OSA 5401 SYNCJACK OS, PRE-INSTALLED SW, R10.5.1	\$	132.00
	OSA 5405-I Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP		202.00
1063904610-02	GM with Stratum 3E enhanced OCXO	\$	2,758.80
			•

1063904620-02	OSA 5405 Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP GM with Stratum 3E enhanced OCXO	\$	2,781.23
1078904665-01	OSA 5412 with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temperature stability +/-50e-10, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	3,775.20
1070304003 01	OSA 5412 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover	Y	3,773.20
1078904666-01	algorithm +/-2e-10 without it, Temperature stability +/-50e-10, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	5,212.68
10,030,1000,01	OSA 5422 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover	Ψ	3,212.00
1078904676-01	algorithm +/-2e-10 without it, Temperature stability +/-2e-10, GNSS receiver for L1 (GPS,	ċ	6 524 00
10/89046/6-01	GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots OSA 5422 with very high Quartz HQ++ (Stratum 2E G.812 Type II), ageing/Day +/-1e-11 with	\$	6,534.00
	holdover algorithm,+/-5e-11 without it, Temperature stability +/-1e-11, GNSS receiver for L1		
1078904677-01	(GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	7,869.83
	OSA 5422 with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temp. stability +/-50e-10, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp.		
1078904681-01	slots	\$	6,287.17
	OSA 5422 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover		
1078904682-01	algorithm +/-2e-10 without it, Temp. stab. +/-2e-10, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp Slot	\$	8,531.17
10,030,002,01	OSA 5422 with very high Quartz HQ++ (Strat. 2E G.812 Type II), ageing/Day +/-1e-11 with	Y	0,331.17
	holdover algorithm,+/-5e-11 without it, Temp. stab. +/-1e-11, Multiband GNSS receiver for		
1078904683-01	L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	9,844.57
1078904684-01	OSA 5422 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	11,412.72
	OSA 5422 with High Quality Quartz - HQ+ (G.812 Type I), GNSS receiver for L1 (GPS, GLONASS,	•	,
1078904676-51	BeiDou, Galileo), 2x PSU slots, 2x Exp Slot. TAA compliant.	\$	7,260.02
1078904668-01	OSA 5412 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	8,203.80
1078304008-01	OSA 5400 Power profile basic system software license, including: PTP power profiles, 1x Clock	Ų	0,203.80
1091904594-01	Probe, 1x PTP Probe	\$	831.60
	OSA 5422 with enhanced Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, enhanced		
1078904685-91	Temperature stability, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	10,429.32
1091904590-01	OSA 5400/BROADCAST PROFILE 1588-PTP	\$	739.20
1091904587-01	OSA 5400/SYNC 1588-PTP /UPG-KEY-32-64	\$	554.40
	OSA 5411 with one Quartz (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temperature		
1078904660-92	stability +/-50e-10, integrated GNSS receiver for GPS L1, GLONASS G1, BeiDou B1, Galileo E1,	\$	2,526.48
1078304000-32	pluggable PSUs OSA 5400 Broadcast/Enterprise profile basic system software license, including: PTP Broadcast	Ą	2,320.46
1091904595-01	profiles, 1x Clock Probe, 1x PTP Probe, default L3 mulitcast	\$	831.60
1001001505 01	OSA 5400 NTP profile basic system software license, including: NTP basic key license, up to	<u> </u>	554.40
1091904596-01	4000 TPS	\$	554.40
	OSA 5412 with enhanced Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, enhanced		
1078904669-91	Temperature stability, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	8,886.23
	OSA 5412 with very high Quartz HQ++ (Stratum 2E G.812 Type II), ageing/Day +/-1e-11 with holdover algorithm,+/-5e-11 without it, Temperature stability +/-50e-10, GNSS receiver for L1		
1078904667-91	(GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	5,590.20
1078904687-01	SGPS receiver card for OSA 5422	\$	5,808.00
	OSA 5405-I Smart L1 GNSS antenna (GPS, GLONASS, BEIDOU, GALILEO, QZSS, SBAS) /PRTC /PTP		
1063904610-92	GM with Stratum 3E enhanced OCXO OSA 5422 with enhanced Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, enhanced	\$	2,548.92
	Temperature stability, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x		
1078904686-91	PSU slots, 2x Exp. slots	\$	12,598.08

1091904597-01	OSA 5400/TELECOM PROFILE 1588-PTP	\$	462.00
	OSA 5412 with enhanced Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, enhanced		
1078904659-91	Temperature stability, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	11,056.32
	OSA 5400 Sync Probing profile software license, including: 1x Clock Probe, 1x PTP Probe, L2 +	•	,
1091904598-01	L3 input PTP Slave, G.8275.1 + Enterprise profile, Sync-E	\$	231.00
1091904592-01	OSA 5400/SYNC NTP/RESPONDER	\$	1,386.00
1091904973-06	SYNCJACK OS, OSA 541X, Pre-installed SW, R9.5.6	\$	-
	OSA 5422 with High Quality Quartz - HQ+ (G.812 Type I), GNSS receiver for L1 (GPS, GLONASS,		
1078904676-61	BeiDou, Galileo), 2x PSU slots, 2x Exp Slot. TAA compliant.	\$	6,160.43
1091904589-01	OSA 5400/POWER PROFILE 1588-PTP	\$	739.20
1078904658-91	OSA 5412 with Rubidium (Stratum 2E G.812 Type II), ageing/Day +/-5e-12, Multiband GNSS receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	9,213.60
1091904963-01	SYNCJACK OS, OSA 5412 and OSA 5422, Pre-installed SW, R11.5.1	\$	-
1091905905-01	OSA 5412/542X/SYNC 1588-PTP /KEY-256	\$	1,999.80
1091905903-01	OSA 5412/542X/SYNC 1588-PTP /KEY-128	\$	1,199.88
1091905909-01	OSA 5412/542X/SYNC 1588-PTP /G8275-1-L2	\$	1,499.52
1091905907-01	OSA 5412/542X/SYNC 1588-PTP /KEY-512	\$	2,799.72
1091905911-01	OSA 5412/542X/SYNC 1588-PTP /PTP-ENTERPRISE/PTP-IP-MULTI	\$	2,006.40
1091905915-01	OSA 5412/542X/SYNC NTP/KEY	\$	660.00
1091905913-01	OSA 5412/542X/SYNC 1588-PTP /KEY-1024	\$	3,599.63
1091905917-01	OSA 5412/542X/ePRTC/KEY	\$	6,600.00
1091905901-01	SYNCJACK OS, OSA 5412/542X, Extended Probes License Key	\$	942.48
1091904696-02	OSA 5401 SYNCJACK OS, PRE-INSTALLED SW, R9.5.1A2	\$	132.00
	OSA 5405-I rack mounting kit (for single unit), for installation of OSA 5405-I in 19" or ETSI rack	•	
1013904466	(must use external antenna)	\$	72.60
	OSA 5422 with OCXO (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temp. stability +/-50e-		
1078904675-01	10, GNSS receiver for L1 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots, 2x Exp. slots	\$	5,430.48
BC47020305-01	Latest release pre-installed SW for OSA5412/5421, applicable on 5412/5422 HW	\$	-
1078904680-01	OSA5412/5422/OLED Display + keypad option	\$	660.00
1091904899-01	OSA 5422 system software, including PTP Slave, Probes Count: 1x Clock Probe, 1x PTP Clock Probe, 1x PTP Network Probe.	\$	159.72
1091904698-02	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R10.2.2	\$	159.72
1091904717-01	OSA 5405 SYNCJACK OS, PRE-INSTALLED SW, R10.5.1	\$	159.72
1091904723-01	OSA 5401 SYNCJACK OS, PRE-INSTALLED SW, R11.1.1	\$	-
1091904724-01	OSA 5405 SYNCJACK OS, PRE-INSTALLED SW, R11.1.1	\$	-
1091904893-01	OSA 5412/2X/3X/4X/SYNC 1588-PTP /UPG-KEY-64-128	\$	533.28
1091904894-01	OSA 5412/2X/3X/4X/SYNC 1588-PTP /UPG-KEY-64-256	\$	1,333.20
1091904895-01	OSA 5412/2X/3X/4X/SYNC 1588-PTP /UPG-KEY-64-512	\$	2,133.12
1091904896-01	OSA 5412/2X/3X/4X/SYNC 1588-PTP /UPG-KEY-64-1024	\$	2,933.03
200200 1000 02	OSA 5412 system software, including PTP Slave, Probes Count: 1x Clock Probe, 1x PTP Clock	Ψ	_,,,,,,,,,
1091904918-01	Probe, 1x PTP Network Probe.	\$	159.72
	OSA 541x system software including PTP Slave, Probes Count: 1x Clock Probe, 1x PTP Clock		
1091904921-01	Probe, 1x PTP Network Probe.	\$	159.72
1091904954-01	SYNCJACK OS, OSA 5412 and OSA 5422, Pre-installed SW, R10.6.1	\$	-
1091904956-01	RTU to use one Port of module OSA 5412/5422 with 10GB support with SFP+	\$	660.00
1091904958-01	OSA 5401/IEEE 802.1AS - PTP GM	\$	660.00
1091904959-01	OSA 5405/IEEE 802.1AS - PTP GM	\$	660.00
1063904708-01	OSA 542x Low Phase Noise output, providing 4x 10MHz low phase noise output, SMA, 50 ohms	\$	5,517.60

	OSA 542x Ultra Low Phase Noise output, providing 4x 10MHz low phase noise output, SMA, 50		
1063904709-01	ohms	\$	11,035.20
1091904565-01	OSA 5401/POWER PROFILE 1588-PTP	\$	1,056.00
1091904566-01	OSA 5405/POWER PROFILE 1588-PTP	\$	1,056.00
1091904567-01	OSA 5412/542x/POWER PROFILE 1588-PTP	\$	1,452.00
1091904564-01	OSA 5401/INPUT 1588-PTP	\$	660.00
1091904568-01	OSA 5401/BROADCAST PROFILE 1588-PTP	\$	1,056.00
	OSA 542x Time Code Module, with 1x IRIG-B Input AM/DCLS (BNC), 1x optical out (ST), 1x		
1063904707-01	RS422 (RJ11), 1x alarm/pulse relay, 10x IRIG outputs on high density connector	\$	3,136.32
1047036003 01	Time Code Outputs panel for TCM module, including 6x BNC for 5V DCLS / AM outputs, 2x BNC for 5V / 10V DCLS outputs 3x entirel ST outputs	Ļ	402.60
1047026092-01	for 5V / 10V DCLS outputs, 2x optical ST outputs.	\$	493.68
1091904569-01	OSA 5405/BROADCAST PROFILE 1588-PTP	\$	1,056.00
1091903022-01	OSA 5401 SYNCJACK OS, PRE-INSTALLED SW, R10.1.1	\$	132.00
1091903023-01	OSA 5405 SYNCJACK OS, PRE-INSTALLED SW, R10.1.1	\$	159.72
1091904570-01	OSA 5405/SYNC NTP/KEY OSA 5410 with one Quartz (Stratum 3E G.812 Type III), ageing/Day +/-5e-10, Temperature	\$	660.00
	stability +/-50e-10, with integrated -48VDC PSU and GNSS receiver for GPS L1, GLONASS G1,		
1078904651-92	BeiDou B1, Galileo E1	\$	1,742.40
1091904730-01	SYNCJACK OS, OSA 5405, Pre-installed SW, R11.7.1	\$	-
1091904734-01	OSA 5405 SYNCJACK OS, PRE-INSTALLED SW, R12.1.1	\$	-
1091903021-02	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R10.5.2	\$	159.72
BC47020501-01	SoftSync 12 months subscription client license, including Service for Qty 1-99	\$	100.05
BC47020502-01	SoftSync 12 months subscription client license, including Service for Qty 100-499	\$	74.13
BC47020503-01	SoftSync 12 months subscription client license, including Service for Qty 500-999	\$	65.38
BC47020504-01	SoftSync 12 months subscription client license, including Service for Qty 1000-1999	\$	52.92
1091903021-03	SYNCJACK OS, OSA 542X, PRE-INSTALLED SW, R10.5.3	\$	159.72
	OSA 5405 Telecom profile basic system software license, including: 1x Clock Probe, 1x PTP		
	Probe, layer 2 default profiles, G.8275.1 profile, enterprise profile, 8x IP unicast PTP Slaves		
1091904574-01	G.8265.1 / G.8275.2, Sync-E	\$	792.02
1091904571-01	OSA 5401/SYNC NTP/KEY	\$	660.00
	OSA 5412 with High Quality Quartz - HQ+ (G.812 Type I), ageing/Day +/-1e-10 with holdover algorithm +/-2e-10 without it, Temperature stability +/-50e-10, Multiband GNSS receiver for		
1078904656-91	L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	6,090.48
	Latest release pre-installed SW for OSA5405, applicable on 5405 Indoor HW BC47020179-01	,	2,222.12
BC47020301-01	(1063904610-01) and 5405 Outdoor BC47020180-01 (1063904620-01)	\$	159.72
	Latest release pre-installed SW + Base license for OSA541x, applicable on 5410 HW		
DC47030303 04	1078904650-02, 1078904651-02, 1078904651-92, 1078904652-02 and 5411 HW 1078904660-	<u>,</u>	450.72
BC47020302-01	02, 1078904660-92, 1078904664-01, 1078904661-02	\$	159.72
BC47020300-01	Latest release pre-installed SW for OSA5401, applicable on 5401 HW 1063904601-02 OSA 5412 with very high Quartz HQ++ (Stratum 2E G.812 Type II), ageing/Day +/-1e-11 with	\$	132.00
	holdover algorithm,+/-5e-11 without it, Temperature stability +/-50e-10, Multiband GNSS		
1078904657-91	receiver for L1+L2 (GPS, GLONASS, BeiDou, Galileo), 2x PSU slots	\$	7,384.08
1091904897-01	OSA 5412/542X/SYNC 1588-PTP /KEY-64	\$	666.60
	OSA 5401 Telecom profile basic system software license, including: 1x Clock Probe, 1x PTP		
	Probe, layer 2 default profiles, G.8275.1 profile, enterprise profile, 32x IP unicast PTP Slaves		
1091904578-01	G.8265.1 / G.8275.2, Sync-E	\$	792.02
BC47020193-01	OSA 5420, GNSS/PRTC/PTP: Equipped with Quartz HQ+ and dual pluggable DC PSUs, Pre- installed Software 10.2.1, 2x PWR CBL, NMCL, SYSCL	\$	6,343.68
1047024010-01	OSA 3350 Telecom Module, for ENC management and Telecom frequency outputs	۶ \$	2,566.20
104/024010-01	OSA 3330 Telecont Module, for Live management and Telecont frequency outputs	Ş	2,300.20

	OSA 2250 Ontical Casium Bundle aBBC+ Casium Tube 10 years, Must order 2 BSU's nower		
	OSA 3350, Optical Cesium Bundle, ePRC+, Cesium Tube 10 years. Must order 2 PSU's, power cables and rack mounting hardware kit if required MGMT SW download from customer		
BC47020155-01	portal.	\$	221,788.30
	OSA 3030B EUDICS format Cesium clock/ 5-10 MHz low noise output/ European Long life	•	,
	cesium tube/ PSU input 20-60VDC / 3x Relay alarms contacts / RS232 local mgnt port/ Status		
1047017212-02	alarm LED, Stability 5xE-11xTau-1/2 / Accuracy 1 x E-12	\$	126,336.00
	OSA 3030B EUDICS format Cesium clock/ 5-10 MHz low noise output / European Long life		
	cesium tube/ PSU input 20-60VDC / 3x Relay alarms contacts / RS232 local mgnt port/ Status		
1047020033-02	alarm LED, Stability 2.7xE-11xTau-1/2 / Accuracy 1 x E-12	\$	126,336.00
4047020054.04	OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, Dual DC power incl. / G.811 long life Cesium		111 102 00
1047020054-01	module (1x10-12), equipped as follows:	\$	114,492.00
	OSA 3235B Cesium Clock / 19" 3U subrack, 110-240VAC + 24-60VDC power input / Cesium module (1x10-12) with Allan deviation: 2.7x10-11 T-1/2 / 4x Telecom BNC outputs, equipped		
1047020063-01	as follows:	\$	126,336.00
10 17 02 00 00 01	OSA 3230B Cesium Clock - G.811 / ETSI 4U subrack, Dual DC power incl. / G.811 long life	Υ	120,330.00
1047020059-01	Cesium module (1x10-12) / 4x Telecom BNC outputs, equipped as follows:	\$	114,492.00
	OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, Dual DC power incl. / G.811 long life Cesium		
1047020051-01	module (1x10-12) / 4x Telecom BNC outputs, equipped as follows:	\$	114,492.00
	OSA 3300 HP, Optical Cesium Bundle High Performance, including Cesium Tube HP 10 years.		
	Must order 2 PSU's, power cables and Battery option separately. MGMT SW download from		
BC47020151-01	customer portal.	\$	344,034.70
1047024002-01	Power Supply Unit -48VDC, 90W	\$	1,362.06
1047020201-01	OSA 33xx Battery filler plate	\$	407.96
1047024001-01	PSU Power Supply Unit AC , 90W	\$	1,559.46
1047020200-01	OSA 3300 Battery	\$	4,935.00
1047024003-01	Power Supply Unit 24VDC , 90W	\$	1,362.06
	OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, Dual DC power incl. / G.811 long life Cesium		
1047020167-01	module (1x10-12), OEM version equipped as follows:	\$	93,733.75
	OSA 3230B ePRC Cesium Clock - G.811.1 / 19" 3U subrack, Dual DC power incl. / long life		
1047020051-11	Cesium module (1x10-12) / 4x Telecom BNC outputs, equipped as follows:	\$	126,015.23
4047020052 44	OSA 3230B ePRC Cesium Clock - G.811.1 / 19" 3U subrack, Dual DC power incl. / long life		126 045 22
1047020052-11	Cesium module (1x10-12) / 4x Telecom DB9 outputs, equipped as follows:	\$	126,015.23
	OSA 3230B ePRC Cesium Clock - G.811.1 / 19" 3U subrack, 110-240VAC + 24-60VDC power		
1047020056-11	input / long life Cesium module (1x10-12) / 4x Telecom DB9 outputs, equipped as follows:	\$	126,791.67
	,	•	,
	OSA 3230B ePRC Cesium Clock - G.811.1 / 19" 3U subrack, 110-240VAC + 24-60VDC power		
1047020055-11	input / long life Cesium module (1x10-12) / 4x Telecom BNC outputs, equipped as follows:	\$	126,791.67
	OSA 3230B ePRC Cesium Clock - G.811.1 / 19" 3U subrack, 110-240VAC + 24-60VDC power		
	input / long life Cesium module (1x10-12) / 4x Telecom mixed BNC/DB9 outputs, equipped as		
1047020057-11	follows:	\$	126,791.67
4047030053 44	OSA 3230B ePRC Cesium Clock - G.811.1 / 19" 3U subrack, Dual DC power incl. / long life	<u>,</u>	126 045 22
1047020053-11	Cesium module (1x10-12) / 4x Telecom mixed BNC/DB9 outputs, equipped as follows: OSA 3230B ePRC Cesium Clock - G.811.1 / 19" 3U subrack, Dual DC power incl. / long life	\$	126,015.23
1047020054-11	Cesium module (1x10-12), equipped as follows:	\$	123,343.75
1047020054 11	OSA 3230B ePRC Cesium Clock - G.811.1 / 19" 3U subrack, 110-240VAC + 24-60VDC power	Y	123,343.73
1047020058-11	input / long life Cesium module (1x10-12) , equipped as follows:	\$	123,343.75
	OSA 3230B ePRC Cesium Clock - G.811.1 / ETSI 4U subrack, Dual DC power incl. / long life	•	,
1047020059-11	Cesium module (1x10-12) / 4x Telecom BNC outputs, equipped as follows:	\$	125,378.61
	OSA 3230B ePRC Cesium Clock - G.811.1 / ETSI 4U subrack, Dual DC power incl. / long life		
1047020060-11	Cesium module (1x10-12) / 4x Telecom DB9 outputs, equipped as follows:	\$	125,378.61
	OSA 3230B ePRC Cesium Clock - G.811.1 / ETSI 4U subrack, Dual DC power incl. / long life		
1047020061-11	Cesium module (1x10-12) / 4x Telecom mixed BNC/DB9 outputs, equipped as follows:	\$	125,378.61

BC47020211-01	ePRTC license	\$	134,778.61
557,020210 01	OSA 3230B ePRC Cesium clock G.811.1 - ETSI 4U subrack, long life 8 years cesium module (1x10-12), dual 48VDC power supply, equipped with 4x telecom BNC outputs, including OSA543x/4x		100,710.20
BC47020210-01	(1x10-12), dual 48VDC power supply, equipped with 4x telecom BNC outputs, including OSA543x/4x ePRTC license	\$	135,415.23
-	OSA 3230B ePRC Cesium clock G.811.1 - ANSI 19" 3U subrack, long life 8 years cesium module	r	
1091904974-01	OSA 3300 system software license	\$	296.10
1047020202-01	OSA 3350 Battery filler plate	\$	1,974.00
1047020219-01	19" to 21" mounting extension kit for OSA33XX / 3U height	\$	329.00
1047020159-01	OSA 3350 Software Release 4.5.1 preinstalled, has to be ordered once per purchase order	\$	-
1047020069-01	OSA 3235B Cesium Clock / 19" 3U subrack, 110-240VAC + 24-60VDC power input / Internal battery / Cesium module (1x10-12) with Allan deviation: 2.7x10-11 T-1/2 / 4x Telecom BNC/DB9 mixed outputs, equipped as follows:	\$	126,336.00
1047020070-01	OSA 3235B Cesium Clock / 19" 3U subrack, 110-240VAC + 24-60VDC power input / Internal battery / Cesium module (1x10-12) with Allan deviation: 2.7x10-11 T-1/2, equipped as follows:	\$	126,336.00
1047020068-01	OSA 3235B Cesium Clock / 19" 3U subrack, 110-240VAC + 24-60VDC power input / Internal battery / Cesium module (1x10-12) with Allan deviation: 2.7x10-11 T-1/2 / 4x Telecom DB9 outputs, equipped as follows:	\$	126,336.00
1047020067-01	OSA 3235B Cesium Clock / 19" 3U subrack, 110-240VAC + 24-60VDC power input / Internal battery / Cesium module (1x10-12) with Allan deviation: 2.7x10-11 T-1/2 / 4x Telecom BNC outputs, equipped as follows:	\$	126,336.00
1047020065-01	OSA 3235B Cesium Clock / 19" 3U subrack, 110-240VAC + 24-60VDC power input / Cesium module (1x10-12) with Allan deviation: 2.7x10-11 T-1/2 / 4x Telecom BNC/DB9 mixed outputs, as follows:	\$	126,336.00
1047020066-01	OSA 3235B Cesium Clock / 19" 3U subrack, 110-240VAC + 24-60VDC power input / Cesium module (1x10-12) with Allan deviation: 2.7x10-11 T-1/2, equipped as follows:	\$	126,336.00
1047020064-01	OSA 3235B Cesium Clock / 19" 3U subrack, 110-240VAC + 24-60VDC power input / Cesium module (1x10-12) with Allan deviation: 2.7x10-11 T-1/2 / 4x Telecom DB9 outputs, equipped as follows:	\$	126,336.00
1047020062-01	OSA 3230B Cesium Clock - G.811 / ETSI 4U subrack, Dual DC power incl. / G.811 long life Cesium module (1x10-12), equipped as follows:	\$	114,492.00
1047020061-01 1047020060-01	Cesium module (1x10-12) / 4x Telecom mixed BNC/DB9 outputs, equipped as follows: OSA 3230B Cesium Clock - G.811 / ETSI 4U subrack, Dual DC power incl. / G.811 long life Cesium module (1x10-12) / 4x Telecom DB9 outputs, equipped as follows:	\$ \$	114,492.00 114,492.00
1047020057-01	follows: OSA 3230B Cesium Clock - G.811 / ETSI 4U subrack, Dual DC power incl. / G.811 long life	\$	114,492.00
1047020055-01	G.811 long life Cesium module (1x10-12) / 4x Telecom BNC outputs, equipped as follows: OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, 110-240VAC + 24-60VDC power input / G.811 long life Cesium module (1x10-12) / 4x Telecom mixed BNC/DB9 outputs, equipped as	\$	114,492.00
	OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, 110-240VAC + 24-60VDC power input /		
1047020058-01	OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, 110-240VAC + 24-60VDC power input / G.811 long life Cesium module (1x10-12) , equipped as follows:	\$	114,492.00
1047020056-01	OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, 110-240VAC + 24-60VDC power input / G.811 long life Cesium module (1x10-12) / 4x Telecom DB9 outputs, equipped as follows:	\$	114,492.00
1047020053-01	OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, Dual DC power incl. / G.811 long life Cesium module $(1x10-12)$ / $4x$ Telecom mixed BNC/DB9 outputs, equipped as follows:	\$	114,492.00
1047020052-01	OSA 3230B Cesium Clock - G.811 / 19" 3U subrack, Dual DC power incl. / G.811 long life Cesium module (1x10-12) / 4x Telecom DB9 outputs, equipped as follows:		114,492.00
1047020062-11	OSA 3230B ePRC Cesium Clock - G.811.1 / ETSI 4U subrack, Dual DC power incl. / long life Cesium module (1x10-12), equipped as follows:	\$	122,708.78

1047020127-01	OSA 3300 Software Release 3.2.1 preinstalled, has to be ordered once per purchase order	\$	-
1047020217 01	Guide Rail kit for 4-post racks 570 to 800mm post distance - To be used for installing OSA33XX	۲.	493.50
1047020217-01 1091904975-01	in a rack OSA 3350 system software license	\$ \$	495.30 296.10
1091904973-01	OSA SSSU System software ilcense	Ş	290.10
	OSA 3350 ePRTC+ Cesium clock G.811.1 - ANSI 19" 3U subrack, long life 10 years cesium		
BC47020212-01	module, dual 48VDC power supply with power cords, including OSA543x/4x ePRTC license	\$	234,802.29
1047020178-01	OSA 3300 Software Release 4.6.1 preinstalled, has to be ordered once per shelf	\$	-
1047020179-01	OSA 3350 Software Release 4.6.1 preinstalled, has to be ordered once per shelf	\$	-
DC47030404 04	Slim Line EMP arrestor (GDT technology 350uJ) 1047020133-01 with mounting bracket,		225 72
BC47020104-01	including TNC-M/TNC-M adapter 1047014321-01 Power Over Ethernet injector, 48-57VDC input on terminal block, 2x 10/100/1000 BaseT RJ45,	\$	225.72
1047020214-01	max 30W output power (as per IEEE 802.3af / IEEE 802.3at)	\$	167.63
	GNSS Roof Antenna Kit for OSA 54xx including: GLONASS + GPS + GALILEO + BEIDOU 40dB cost	•	
	effective antenna, 10m of antenna cable, Slim line EMP Protection Kit with, 2m TNC-f to SMA-		
BC47020097-02	m interconnecting cable	\$	460.68
1047027423-01	Interconnecting cable 2m long, with TNC-f / SMA-m angled connectors (LSZH)	\$	56.77
1047024187-01	Lightning arrestor and fine protector (hybrid technology), with TNC-f connector (without cable)	\$	356.40
1047027425-01	SMA-m to BNC-f adapter cable with light weight BNC connector. RG316 (ZH), 15cm	\$	58.08
1047027424-01	TNC-Male connector 50 ohms, crimp, for cable LMR/HPC-400 or equivalent	\$	26.40
	Power Over Ethernet injector 33.6W as per IEEE 802.3af / IEEE 802.3at. 90-264VAC input (IEC		
1047020210-01	320 C14), 56VDC up to 600mA on 10/100/1000 BaseT RJ45	\$	129.37
1047020133-01	Slim Line EMP arrestor type GDT, with TNC-f connector (without cables)	\$	174.23
1047020135-01	20cm RP-MMCX Male to BNC Male Adaptor cable for 540x output	\$	36.97
1047020134-01	GNSS L1 (GPS+GLONASS+GALILEO+BeiDou) cone antenna 40dB, including: antenna TNC-f with pipe mounting adaptor (without cable)	\$	363.00
1047020211-01	10/100/1000 Mbps Indoor lightning arrestor for RJ45, 8kA / 16kV	\$	129.37
1047016718-01	19" mounting kit (to build ETSI 4Usubrack into 19" cabinet)	\$	170.48
1047013396-01	Mounting brackets 19" to 23", 3U high	\$	172.92
1047014157-01	Adapter straight BNC-m / TNC-f	\$	51.48
		•	
1047005318-01	120 ohms/75 ohms Balun with Krone Connector for 120 ohms end, BNC Conn. for 75 ohms end	\$	51.48
1047014107 01	Lightning Protection Kit for GNSS including Lightning Protector, capsule, 10 m of LMR/HPC-400	۲.	FFF 72
1047014187-01	interconnecting cable 10m High Performance Coaxial antenna cable - LMR/HPC-400, TNC-m connectors, zero-	\$	555.72
1047014324-01	halogen	\$	100.32
1047014321-01	Adapter TNC-m/TNC-m straight	\$	51.48
	20m High Performance Coaxial antenna cable - LMR/HPC-400, TNC-m connectors, zero-		
1047014325-01	halogen	\$	142.57
1047014335-01	GNSS Line Amplifier TNC (with adapter) Includes 1x TNC-m/TNC-m adapter	\$	1,009.80
1047014327-01	120m High Performance Coaxial antenna cable - LMR/HPC-400, TNC-m connectors, zero- halogen	ċ	545.17
1047014768-01	19" 6U to ETSI adapter (pair)	\$ \$	203.28
1047014875-01	Cable RS-232, 2 meters, LapLink type	۶ \$	203.28
10 17 01 10 / 3 01	Interconnecting cable - 25 conn., 3m long, for OSA 5548C Expansion shelf (2 cables per	ب	21.12
1047015112-01	expansion shelf required for redundancy)	\$	415.80
1047015367-01	Adapter TNC-f/TNC-f straight	\$	51.48
1047015494-01	Interconnecting cable - RG58 2m with 2x BNC-m connector	\$	71.28
1047012328-01	Adapter BNC-f/TNC-m	\$	51.48

1047012326-01	GNSS Line Amplifier (without adapters) TNC female connectors on both ends	\$	958.32
1047015901-01	150m High Performance Coaxial antenna cable - LMR/HPC-400, TNC-m connectors, zero- halogen	\$	696.97
1047016266-01	Adapter N-m/TNC-f straight	\$	51.48
1047016746-01	Technical doc OSA3230B on CD-ROM // DWG 990.500.084	\$	239.78
1047010740 01	Gigabit Ethernet Electrical SFP Transceiver. , Up to 1.25 GB/s bi-directional data links, 10/100/1000Base-T operation, Compact RJ-45 connector, Applications: 1.25 Gigabit Ethernet	Y	233.70
1047016713-01	over Cat-5 cable 23" mounting extension kit for 5548C 3U including pair of 3U bracket and accessories //	\$	157.08
1047017097-01	A013397 // CLEI: D0MYABRJRA GNSS cable kit LMR/HPC-400 120m Composed by: 1x 1047014327 120m of LMR/HPC-400	\$	244.20
BC47014188-01	cable, 1x 1047014335 20dB GNSS Line Amplifier, with 1x TNC/TNC adapter 60m High Performance Coaxial antenna cable - LMR/HPC-400, TNC-m connectors, zero-	\$	1,554.97
1047014326-01	halogen	\$	289.08
1047020002-01	Cables and connectors Accessories kit for OSA 54XX CLK/1PPS/GPS/BITS I/F	\$	246.83
1047017421-01	Interconnecting cable 2m long, with TNC-f / SMA-m connectors	\$	56.77
1047020097-01	GNSS antenna splitter 1:2, TNC-F in, 2x GNSS TNC-F out	\$	798.60
1047010083-01	Antenna Mast Mounting Support	\$	72.60
1047012876-01	Antenna Mast Mounting Clamp	\$	10.57
1047023806-01	GNSS (GPS+GLONASS) Antenna 26dB magnetic support / 2.6-6VDC / 5m of cable / SMA-m connector	\$	283.80
BC47020098-01	GNSS Roof Antenna Kit for OSA 54xx including: 1047020134 40dB GPS + GLONASS + GALILEO cone antenna, with mounting kit, EMP Protection Kit with 10m connection cable, 2m TNC-f to SMA-m interconnecting cable	\$	788.03
5017020030 01	Lightning arrestor and fine protector (hybrid technology - 6uJ) 1047024187-01 with mounting	Ψ	700.03
BC47020103-01	bracket, including 10m of LMR/HPC-400 cable 1047014324-01	\$	456.72
BC47020102-01	GNSS (GPS+GLONASS+GALILEO+BEIDOU) 40dB Antenna, including mounting kit (without cable)	\$	456.72
1047020098-01	GNSS antenna splitter 1:4, TNC-F in, 4x GNSS TNC-F out	\$	1,234.20
	GNSS (GPS + Glonass + Galileo + Beidou / L1 + L2 + L5) 2-ports Smart splitter 1:2, TNC-F		
1047020213-01	connectors	\$	972.83
1047023807-01	30m High Performance Coaxial antenna cable - LMR/HPC-400, TNC-m connectors, zero- halogen	\$	174.23
	90m High Performance Coaxial antenna cable - LMR/HPC-400, TNC-m connectors, zero-		
1047023808-01	halogen	\$	414.48
BC47015905-01	GNSS cable kit - LMR/HPC-400 150m Composed by: $1x 1047015901 150m$ of LMR/HPC-400 cable, $1x 1047014335 20dB$ GNSS Line Amplifier with $1x TNC/TNC$ adapter	\$	1,706.77
1047020140-02	GNSS (GPS+GLONASS+Galileo+Beidou) 40dB cost effective antenna kit, including: 40dB antenna, 10m cable with TNC-m connector, L-mounting bracket (do not include mounting screws or clamps)	\$	174.23
1047020171-02	GNSS (GPS+GLONASS+Galileo+Beidou) 40dB cost effective antenna, with TNC-f connector.	\$	80.52
1047010083-02	Antenna Mast Mounting Support	\$	72.60
1047020101-01	Shipping Box for OSA 33xx family cesium products, used for RMA shipments	\$	900.23
D047000000 04	Multiband L1/L2/L5 37dB GNSS antenna kit, including: Multiband high precision GNSS antenna 37dB (1047020173-01), pipe mounting adaptor (1013904036), 25cm POM mast (1047010083-		4 500 00
BC47020220-01	02), 2x clamps (1047012876-01) GNSS (GPS + Glonass + Galileo + Beidou / L1 + L2 + L5) 4-ports Smart splitter 1:4, TNC-F	\$	1,500.83
1047020218-01	connectors	\$	1,408.43
1036005408	Octopus CC fanout cable, 90 cm, for 10x CC outputs (RJ-45)	\$	327.37
1047020177-01	GNSS MB Antenna L1/L2/L5 (GPS+GLONASS+Galileo+Beidou) 38dB - for Access and Edge Sync, with TNC-f connector.	\$	649.00

	Multiband L1/L2/L5 38dB GNSS Access and Edge Sync antenna kit, including: Multiband GNSS		
	antenna 38dB (1047020177-01), pipe mounting adaptor (1013904036), 25cm POM mast		
BC47020224-01	(1047010083-02), 2x clamps (1047012876-01)	\$	806.08
	Multiband L1/L2/L5 38dB GNSS Access and Edge Sync antenna kit, including: Multiband GNSS antenna 38dB (1047020177-01), L-mounting bracket (do not include mounting screws or		
BC47020225-01	clamps)	\$	697.83
1036005405	High Density Cable 100 cm, LSZH	\$	188.77
1047020212-02	10/100/1000 Mbps Outdoor lightning arrestor for RJ45, 8kA / 16kV, IP67	\$	170.28
	1U Universal Management Interface (UMI), allows remote monitoring of OSA 3230B 3x		
1047025914-01	electrical alarms with SNMP traps over TCP/IP.	\$	2,904.00
1047026017-01	Alarm management cable for OSA3030 / OSA323x, 2m long	\$	72.60
1047020099-01	GNSS antenna splitter 1:8, TNC-F in, 8x GNSS TNC-F out	\$	1,960.20
DC47020222 04	Anti-jamming L1 GNSS antenna kit, including: Anti-jamming antenna (1047027431-01) with L-	<u>,</u>	060.57
BC47020223-01	mounting bracket GNSS AJ (Anti-Jamming) L1 antenna (GPS+GLONASS+GALILEO+BeiDou), 40dB, including: AJ	\$	868.57
1047027431-01	antenna with TNC-f connector (without cable)	\$	819.72
-0.77-7-7-7	Anti-jamming L1 GNSS antenna kit, including: Anti-jamming antenna (1047027431-01), pipe	Ψ	0102
	mounting adaptor (1013904036), 25cm POM mast (1047010083-02), 2x clamps (1047012876-		
BC47020222-01	01)	\$	976.80
1047014968-02	Interconnecting cable - LMR240 - LSZH - 2m with 2x TNC-m connectors	\$	109.57
1047020300-01	90cm / 3 feet Composite Clock cable, for 10 outputs CC.	\$	260.03
BC47020125-01	250m LMR/HPC-400 cable kit, antenna & EMP for OSA54xx	\$	2,982.10
1047020001-01	E1/T1 CAT6 Crossover Cable LSZH, 3m long - 2x RJ48C connector	\$	51.48
1047027427-02	Multiband GNSS 40dB Line Amplifier, TNC female connectors on both ends.	\$	797.50
1047020186-01	Adapter straight N-f / TNC-m	\$	51.48
1047020303-01	300cm / 10 feet Composite Clock cable, for 10 outputs CC.	\$	312.83
	2m LMR240 high performances low reflection 50 ohms interconnecting cable, SMA-M (angled)		
1047027422-01	to BNC-M	\$	114.83
1047027423-02	Interconnecting cable 2m long, LMR240, with TNC-f / SMA-m angled connectors (LSZH)	\$	77.88
1047027429-01	Multiband GNSS 20dB Line Amplifier, TNC male / TNC female connectors	\$	1,024.32
	Slim Line EMP arrestor (GDT technology 350uJ) 1047020133-01 with mounting bracket,		
BC47020105-01	including 10m of LMR/HPC-400 cable 1047014324-01	\$	274.57
BC47020106-01	GNSS (GPS+GLONASS+Galileo+Beidou) 40dB cost effective antenna kit, including: 40dB antenna, L-mounting bracket (do not include mounting screws or clamps)	Ś	129.37
BC47020100-01	GNSS (GPS+GLONASS+GALILEO+BEIDOU) 40dB cost effective antenna kit, including: 40dB	Ą	129.57
BC47020107-01	antenna (1047020171-02) with pipe mounting kit (without cable)	\$	237.60
	Multiband L1/L2/L5 37dB GNSS antenna kit, including : Multiband high precision GNSS antenna		
BC47020221-01	37dB (1047020173-01), L-mounting bracket (do not include mounting screws or clamps)	\$	1,392.60
1047017421-02	Interconnecting cable 2m long, LMR240, with TNC-f / SMA-m connectors (LSZH)	\$	77.88
1047020470 02	GNSS L1 (GPS+GLONASS+GALILEO+BeiDou) cone antenna 26dB, including: antenna TNC-f with	<u>,</u>	204.02
1047020170-02	pipe mounting adaptor (without cable).	\$	304.92
1036005407	IRIG Fanout cable, 50 cm, for 10x IRIG outputs (BNC)	\$	327.37
1036005406	Time Code High Density Cable, 100 cm	\$	327.37
1047020173-01	Multiband high precision GNSS antenna (GPS L1/L2/L5 + GLONASS L1/L2 + Galileo E1/E5 + Beidou B1/B2) 37dB, TNC-f connector	\$	1,343.77
1047020173 01	RJ48 TOD+BITS splitter/combiner cable, used to split signals TOD+PPS into two separate RJ45	Y	1,545.77
1047027430-01	connectors, TOD+PPS and BITS IN+OUT	\$	22.45
1047020187-01	Adapter TNC-m/TNC-f 90-degree angled	\$	51.48
BC47020186-01	Multiband GNSS 18dB Line Amplifier, with TNC-M / TNC-M adaptor	\$	704.88
BC47020187-01	Multiband GNSS 40dB Line Amplifier, with TNC-M / TNC-M adaptor	\$	848.98
-	,	•	2.2.20

1047021001-01	SyncView Plus Class 1 connection fee	\$	3,376.57
1047021005-01	SyncView Plus Class 5 connection fee	\$	1,818.97
1047021003-01	SyncView Plus Class 3 connection fee	\$	2,455.20
1047021002-01	SyncView Plus Class 2 connection fee	\$	3,116.52
1047021004-01	SyncView Plus Class 4 connection fee	\$	1,325.28
1047021006-01	SyncView Plus Class 6 connection fee	\$	455.40
1047021016-01	SyncView Plus License file delivered via Customer-portal (only electronically)	\$	-
1091904941-01	RTU to duplicate licenses on second OSA 54CR CSM.	\$	3,599.63
1091904951-01	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.2.1	\$	-
	4x 1GB/10GB LC card (Line card) for OSA 543x / 544x, providing 4-ports 1GE/10GE fiber for	•	
1063904706-01	SFP/SFP+ optics	\$	2,032.80
1091904940-01	RTU to use one Port of module OSA 54CR with 10GB support with SFP+	\$	660.00
1078904693-01	OSA 5430 1U 19" shelf, including grounding kit and blank plates.	\$	1,306.80
	AUX card (Auxiliary card) for OSA 543x / 544x, providing 1x BITS in/out, 2x Clk in/out, 1x PPS		
1063904704-01	in/out, 1x ToD+PPS out, 1x DCN RJ-45 (management)	\$	871.20
1063904705-01	16x BITS LC card (Line card) for OSA 543x / 544x, providing 16xBITS Output	\$	2,178.00
	OSA 543x / 544x system software, including PTP Slave, Probes Count: 1x Clock Probe, 1x PTP		
1091904920-01	Clock Probe, 1x PTP Network Probe.	\$	198.00
1091904952-02	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.5.2	\$	-
1091904952-03	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.5.3	\$	-
1091904962-02	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R11.1.2	\$	-
1091904952-06	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.5.6	\$	-
1091905930-01	OSA 543X/4X/SYNC NTP/RESPONDER	\$	1,980.00
4062004704 02	CSM card with Quartz HQ++, Ageing/Day +/-5e-11 , Temperature stability +/-1e-11, with 1x	<u> </u>	6 242 60
1063904701-02	GNSS input, 4x NTP/PTP Ethernet I/F , 1x RS-232 on RJ48 connector.	\$	6,243.60
1091905932-01	OSA 543X/4X/A-GNSS-INTF-DET/KEY	\$	990.00
1063904700-02	CSM card with Rubidium, Ageing/Day +/-5e-12, with 1x GNSS input, 4x NTP/PTP Ethernet I/F, 1x RS-232 on RJ48 connector.	\$	7,986.00
1003304700 02	CSM card with Quartz HQ+, Ageing/Day +/-1e-10 with holdover algorithm +/-3e-10 without it,	Y	7,500.00
	Temperature stability +/-2e-10, with 1x GNSS input, 4x NTP/PTP Ethernet I/F , 1x RS-232 on		
1063904702-02	RJ48 connector.	\$	4,646.40
1091904919-01	OSA 543X/4X/SYNC 1588-PTP /UPG-KEY-1024-1536	\$	799.92
1091905934-01	OSA 543X/4X/SYNC 1588-PTP /KEY-1536	\$	4,399.57
	CSM card with Quartz, Ageing/Day +/-5e-10, Temperature stability +/-50e-10, with 1x GNSS		
1063904703-02	input, 4x NTP/PTP Ethernet I/F , 1x RS-232 on RJ48 connector.	\$	3,775.20
1070004604 02	OSA 5440 3U 19" shelf, including 19" mounting kit, grounding kit, Mylar top cover (to be used	ċ	4.005.00
1078904694-02	with fan tray) and blank plates. 16x BITS LC card (Line card) for OSA 543x / 544x, providing 16xBITS Output with enhanced	\$	4,065.60
1063904705-02	protection	\$	2,395.80
1091904952-05	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.5.5	\$	-
100100 1001 00	Feature key license to use high accuracy G.8275.1/G.8273.2 PTP BC type C/D feature on	*	
1091905926-01	543x/544x	\$	920.70
1091905928-01	OSA 543X-4X/BROADCAST-PTP/KEY	\$	2,006.40
1047020180-04	OSA 5335 Software Release 2.5.4 preinstalled, has to be ordered once per purchase order	\$	-
1047020181-04	CD/DVD with OSA 5335 firmware and user documentation for Rel. 2.5.4	\$	116.17
4002004742.04	CSM card with enhanced Rubidium, Ageing/Day +/-5e-12 with enhanced Temperature stability,	<u> </u>	0.502.22
1063904713-01	with 1x GNSS input, 4x NTP/PTP Ethernet I/F , 1x RS-232 on RJ48 connector.	\$	9,583.20
1091904952-04	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.5.4	\$	-
1063904711-02	10 x 64kbits/s CC card (Line card) for OSA 543x / 544x, providing 10 x 64kbits/s CC-JCC Output + 1x CC sync input/output	\$	2,468.40
130330 17 11 02	· 1/ 00 3/10 mpay output	7	2, 100.40

1091905908-01	OSA 543X/4X/SYNC 1588-PTP /KEY-512	\$	2,799.72
1091905912-01	OSA 543X/4X/SYNC 1588-PTP /PTP-ENTERPRISE/PTP-IP-MULTI	\$	2,006.40
1091905916-01	OSA 543X/4X/SYNC NTP/KEY	\$	660.00
1063904710-01	Multi-band GNSS receiver card for OSA 543x / 544x	\$	2,904.00
1047026093-01	1U 19"/23" output patch panel, for up to 40x CC outputs protected or unprotected.	\$	545.17
	10 x 64kbits/s CC card (Line card) for OSA 543x / 544x, providing 10 x 64kbits/s CC Output + 1x		
1063904711-01	CC sync input/output	\$	2,468.40
1091904951-03	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.2.3	\$	-
	Set of mounting kits for 3RU and 1RU shelves, including ETSI and 23" mounting, standard and		
1013904458	extended mounting	\$	166.32
1091905904-01	OSA 543X/4X/SYNC 1588-PTP /KEY-128	\$	1,199.88
1091905906-01	OSA 543X/4X/SYNC 1588-PTP /KEY-256	\$	1,999.80
1091905902-01	SYNCJACK OS, OSA 543X / 544x, Extended Probes License Key.	\$	942.48
1091905910-01	OSA 543X/4X/SYNC 1588-PTP /G8275-1-L2	\$	1,499.52
1091905914-01	OSA 543X/4X/SYNC 1588-PTP /KEY-1024	\$	3,599.63
1091905918-01	OSA 543X/4X/ePRTC/KEY	\$	6,600.00
1013904464	1RU 19" Panel for air filter and cable management tray	\$	217.80
1013904465	Mylar top cover plate	\$	22.45
1042900001-01	OSA 5440 Fan Tray Module	\$	327.37
1091904951-04	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.2.4	\$	-
1091904951-05	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R10.2.5	\$	-
1091904962-01	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R11.1.1	\$	-
	External AC/DC power converter for OSA543x / 544x. Input 85-264VAC - IEC320-C14 AC inlet /		
	Output 48VDCm max 3.3A - 1.5m cable with 543x / 544x power supply connector and		
1013904467	grounding - Order AC cable separately	\$	421.08
1091905922-01	OSA 543x/4x POWER PROFILE 1588-PTP	\$	1,452.00
1091904964-01	SYNCJACK OS, OSA 543X and OSA 544X, Pre-installed SW, R11.5.1	\$	-
1091904898-01	OSA 543X/4X/SYNC 1588-PTP /KEY-64	\$	666.60
	Latest release pre-installed SW for OSA543x and OSA5440, applicable on 5430 HW		
BC47020304-01	1078904693-01 and 5440 HW 1078904694-02	\$	-
3000-167	SFP, 1000BASE-LX, 1310NM, 10KM SMF, I-temp	\$	144.76
3000-079	SFP, 100FX, 1310, SM, IR, iTemp	\$	108.57
3000-166	SFP, 1000BASE-SX, 850nm, 500m MMF, I-temp	\$	208.10
3000-053	SFP, OC-12, 1310, SM, IR, DDM, I-temp	\$	108.57
3000-055	SFP, OC-3, 1310, SM, IR, I-temp	\$	108.57
3000-221	SFP+, 10GBASE-LR, 1310nm, 10km, SMF, I-Temp	\$	309.43
3000-220	SFP+, 10GBASE-SR, 850nm, 200m, MMF, I-temp	\$	821.52
0061705844-03	pluggable client I/F for 850nm, intra office reach	\$	90.53
0061705805-02	pluggable client I/F for 1310nm, short reach	\$	88.17
1061003028	GBE 1490 Bi-directional pluggable tranceiver C-Temp 80KM	\$	406.86
1061003029	GBE 1570 Bi-directional pluggable tranceiver C-Temp 80KM	\$	428.19
1061701833-02	4G/8G Pluggable I/F for 1310nm, short reach	\$	356.42
1061701837-02	4G/8G Pluggable I/F for 850nm, intra office reach	\$	440.32
	SFP+, 614Mbps to 11.3Gbps, CWDM 1471NM, 40KM, SM, DLC, DD, Industrial Temperature -	·	
1061480691-01	40C to +85C	\$	1,066.67
	SFP+, 614Mbps TO 11.3Gbps, CWDM 1611NM, 40KM, SM, DLC, DD, Industrial Temperature -		
1061480698-01	40C to +85C	\$	1,066.67
1061490604 01	SFP+, 614Mbps to 11.3Gbps, CWDM 1531NM, 40KM, SM, DLC, DD, Industrial Temperature -	ċ	1.066.67
1061480694-01	40C to +85C	\$	1,066.67

	SFP+, 614Mbps to 11.3Gbps, CWDM 1591NM, 40KM, SM, DLC, DD, Industrial Temperature -		
1061480697-01	40C to +85C	\$	1,066.67
1061480696-01	SFP+, 614Mbps TO 11.3Gbps, CWDM 1571NM, 40KM, SM, DLC, DD, Industrial Temperature - 40C to +85C	\$	1,066.67
	SFP+, 614Mbps to 11.3Gbps, CWDM 1551NM, 40KM, SM, DLC, DD, Industrial Temperature -		
1061480695-01	40C to +85C	\$	1,066.67
1061480692-01	SFP+, 614Mbps to 11.3Gbps, CWDM 1491NM, 40KM, SM, DLC, DD, Industrial Temperature - 40C to +85C	\$	1,066.67
1001480092-01	SFP+, 614Mbps to 11.3Gbps, CWDM 1511NM, 40KM, SM, DLC, DD, Industrial Temperature -	۲	1,000.07
1061480693-01	40C to +85C	\$	1,066.67
1061702393-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery	\$	1,449.37
1061702394-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery	\$	1,449.37
1061702395-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery	\$	1,374.21
1061702397-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery	\$	1,449.37
1061702396-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery	\$	1,449.37
1061702391-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery	\$	1,449.37
1061702392-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery	\$	1,449.37
1061702398-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery	\$	1,449.37
1061701884-01	11G Pluggable CWDM I/F, short reach, SFP+ form factor with clock recovery	\$	449.56
1061701883-01	11G Pluggable CWDM I/F, short reach, SFP+ form factor with clock recovery	\$	449.56
1061701885-01	11G Pluggable CWDM I/F, short reach, SFP+ form factor with clock recovery	\$	449.56
1061701886-01	11G Pluggable CWDM I/F, short reach, SFP+ form factor with clock recovery	\$	449.56
1061705854-02	pluggable client I/F for 850nm, intra office reach, industrial temperature range	\$	71.92
1061700656-01	Client CFP for 100GbE and OTU4, SR10 type	\$	4,818.88
1061705851-02	pluggable client I/F for 1310nm, long reach, industrial temperature range	\$	173.22
61702470	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702471	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702472	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702481	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
1061701593-01	11G Pluggable CWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	3,781.22
1061701596-01	11G Pluggable CWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	3,781.22
	224G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to		
1061700632-01	196.1 THz on a 12.5GHz grid, improved performance and suitable for colorless add/drop	\$	40,469.73
61704491	up to 2.7G Pluggable CWDM I/F, very long reach	\$	324.23
61704492	up to 2.7G Pluggable CWDM I/F, very long reach	\$	324.23
61704493	up to 2.7G Pluggable CWDM I/F, very long reach	\$	324.23
61704494	up to 2.7G Pluggable CWDM I/F, very long reach	\$	324.23
61704495	up to 2.7G Pluggable CWDM I/F, very long reach	\$	324.23
61704496	up to 2.7G Pluggable CWDM I/F, very long reach	\$	324.23
61704497	up to 2.7G Pluggable CWDM I/F, very long reach	\$	324.23
61704498	up to 2.7G Pluggable CWDM I/F, very long reach	\$	324.23
61702401	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702402	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702403	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61705807	pluggable client I/F for 1310nm, long reach, up to 2.7G	\$	460.00
61705824	pluggable client I/F for 1310nm, short reach	\$	56.36
61705890	pluggable client I/F for GbE copper interface	\$	166.65

61702404	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702405	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702406	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702407	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702408	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702409	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702410	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702411	up to 4G Pluggable DWDM I/F, very long reach	, \$	1,073.49
61702412	up to 4G Pluggable DWDM I/F, very long reach	, \$	1,073.49
61702413	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702414	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702415	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702416	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702417	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702417	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702418		\$	1,073.49
61702420	up to 4G Pluggable DWDM I/F, very long reach		
	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702421	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702422	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702423	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702424	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702425	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702426	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702427	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702428	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702429	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702430	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702431	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702432	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702465	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702466	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702467	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702468	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
61702469	up to 4G Pluggable DWDM I/F, very long reach	\$	1,073.49
0061701811-03	11G Pluggable I/F for 1310nm, short reach	\$	220.08
1061704483	up to 2.7G Pluggable CWDM I/F, very long reach	\$	336.80
1061704484	up to 2.7G Pluggable CWDM I/F, very long reach	\$	336.80
1061704485	up to 2.7G Pluggable CWDM I/F, very long reach	\$	336.80
1061704486	up to 2.7G Pluggable CWDM I/F, very long reach	\$	336.80
1061704487	up to 2.7G Pluggable CWDM I/F, very long reach	\$	336.80
1061704488	up to 2.7G Pluggable CWDM I/F, very long reach	\$	336.80
1061704489	up to 2.7G Pluggable CWDM I/F, very long reach	\$	336.80
1061704490	up to 2.7G Pluggable CWDM I/F, very long reach	\$	336.80
1061706083	pluggable client I/F for 1528.77nm, extended reach, 125Mbit/s only	\$	1,270.61
1061706192	pluggable client I/F for 1490nm, very long reach, 125Mbit/s only	\$	324.69
1061706193	pluggable client I/F for 1510nm, very long reach, 125Mbit/s only	\$	159.89
61003002	SFP - 100Mbps (1310nm) Optic, Singlemode LC (10km)	\$	88.59

64000004	CED 400M (4550) O 11 C1 1 10 (001)	400.04
61003004	SFP - 100Mbps (1550nm) Optic, Singlemode LC (80km)	\$ 408.04
61003006	SFP - Multimode (850nm) LC Gigabit Ethernet LED (220m)	\$ 77.68
61003008	SFP - GigE (1310nm) Optic, Singlemode LC (10km)	\$ 73.10
61003009	SFP - GigE (1310nm) Optic, Singlemode LC (40km)	\$ 187.09
61003010	SFP - GigE (1550nm) Optic, Singlemode LC (80km)	\$ 590.99
61003011	SFP - GigE (1550nm + APD) Optic, Singlemode LC (120km)	\$ 949.83
61003014	SFP - GigE (1000BaseBX10) Optic, BiDi 1310nm Singlemode (10km)	\$ 68.57
61003015	SFP - GigE (1000BaseBX10) Optic, BiDi 1490nm Singlemode (10km)	\$ 89.90
61003018	SFP - GigE (1000BaseBX40) Optic, BiDi 1310nm Singlemode (40km)	\$ 185.90
61003019	SFP - GigE (1000BaseBX40) Optic, BiDi 1490nm Singlemode (40km)	\$ 185.90
61701812	11G Pluggable I/F for 1550nm, long reach	\$ 966.86
61705993	pluggable client I/F for 1510nm, ultra long reach, 125Mbit/s only	\$ 372.99
1061701491	11G Pluggable CWDM I/F, very long reach	\$ 1,713.26
1061701492	11G Pluggable CWDM I/F, very long reach	\$ 1,713.26
1061701493	11G Pluggable CWDM I/F, very long reach	\$ 1,713.26
1061701494	11G Pluggable CWDM I/F, very long reach	\$ 1,376.29
1061701495	11G Pluggable CWDM I/F, very long reach	\$ 1,376.29
1061701496	11G Pluggable CWDM I/F, very long reach	\$ 1,713.26
1061701497	11G Pluggable CWDM I/F, very long reach	\$ 2,352.25
1061701498	11G Pluggable CWDM I/F, very long reach	\$ 2,352.25
1061701691	11G Pluggable CWDM I/F, long reach	\$ 1,487.73
1061701692	11G Pluggable CWDM I/F, long reach	\$ 1,487.73
1061701693	11G Pluggable CWDM I/F, long reach	\$ 1,487.73
1061701694	11G Pluggable CWDM I/F, long reach	\$ 999.10
1061701695	11G Pluggable CWDM I/F, long reach	\$ 999.10
1061701696		1,487.73
1061701697	11G Pluggable CWDM I/F, long reach	\$
	11G Pluggable CWDM I/F, long reach	\$ 1,487.73
1061701698	11G Pluggable CWDM I/F, long reach	\$ 1,487.73
1061702192-02	11G Pluggable CWDM I/F, long reach, SFP+ form factor	\$ 1,411.77
1061702191-02	11G Pluggable CWDM I/F, long reach, SFP+ form factor	\$ 1,411.77
1061702193-02	11G Pluggable CWDM I/F, long reach, SFP+ form factor	\$ 1,411.77
1061705855-01	SFP, GPON ONU, Single-Fiber SC/APC-Connector, -40C to +85C	\$ 480.00
1061701889-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1270nm / Rx:1330nm, long reach	\$ 518.10
1061701890-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1330nm / Rx:1270nm, long reach	\$ 518.10
1061701887-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1270nm / Rx:1330nm, short reach	\$ 275.81
1061701888-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1330nm / Rx:1270nm, short reach	\$ 275.81
1061702194-02	11G Pluggable CWDM I/F, long reach, SFP+ form factor	\$ 923.16
1061702196-02	11G Pluggable CWDM I/F, long reach, SFP+ form factor	\$ 998.32
1061702195-02	11G Pluggable CWDM I/F, long reach, SFP+ form factor	\$ 923.16
1061702197-02	11G Pluggable CWDM I/F, long reach, SFP+ form factor	\$ 1,411.77
1061702198-02	11G Pluggable CWDM I/F, long reach, SFP+ form factor	\$ 1,411.77
	112G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to	
1061700618-02	196.1 THz on a 12.5GHz grid	\$ 30,490.57
1061700619-02	112G Pluggable, coherent, C-Band tunable DWDM network IF	\$ 29,682.69
1061705876-01	Bi-Directional SFP for Single Fiber Working, Tx:1310nm / Rx:1490nm, short reach	\$ 269.14
1061705874-01	Bi-Directional SFP for Single Fiber Working, Tx:1310nm / Rx:1490nm, long reach	\$ 450.97
1061705875-01	Bi-Directional SFP for Single Fiber Working, Tx:1490nm / Rx:1310nm, long reach	\$ 450.97

1061705877-01	Bi-Directional SFP for Single Fiber Working, Tx:1490nm / Rx:1310nm, short reach	\$ 358.90
1061701891-01	Bi-Directional XFP for Single Fiber Working, Tx:1270nm / Rx:1330nm, short reach	\$ 281.90
1061701892-01	Bi-Directional XFP for Single Fiber Working, Tx:1330nm / Rx:1270nm, short reach	\$ 281.90
1061701851-02	10G Pluggable I/F for 1310nm, short reach, SFP+ form factor	\$ 127.96
1061701855-02	10G Pluggable I/F for 850nm, intra office reach, SFP+ form factor	\$ 113.87
1061701121-01	16G Pluggable I/F for 1310nm, short reach, SFP+ form factor with clock recovery	\$ 1,399.26
1061701125-01	16G Pluggable I/F for 850nm, intra office reach, SFP+ form factor with clock recovery	\$ 733.24
1061701850-03	10G Pluggable I/F for 1310nm, short reach, SFP+ form factor	\$ 127.96
1061701854-03	11G Pluggable I/F for 850nm, intra office reach, SFP+ form factor	\$ 125.18
0061703825-02	4G pluggable client I/F for 850nm, intra office reach	\$ 108.93
1061702000-02	11G Pluggable, very long reach C-Band tunable DWDM network IF, SFP+ form factor	\$ 3,047.85
1061702591-02	11G Pluggable CWDM I/F, very long reach, SFP+ form factor	\$ 2,414.08
1061702593-02	11G Pluggable CWDM I/F, very long reach, SFP+ form factor	\$ 2,414.08
1061702595-02	11G Pluggable CWDM I/F, very long reach, SFP+ form factor	\$ 2,414.08
1061702592-02	11G Pluggable CWDM I/F, very long reach, SFP+ form factor	\$ 2,414.08
1061702594-02	11G Pluggable CWDM I/F, very long reach, SFP+ form factor	\$ 2,414.08
1061702596-02	11G Pluggable CWDM I/F, very long reach, SFP+ form factor	\$ 2,414.08
1061702598-02	11G Pluggable CWDM I/F, very long reach, SFP+ form factor	\$ 2,414.08
1061702597-02	11G Pluggable CWDM I/F, very long reach, SFP+ form factor	\$ 2,414.08
1061700654-01	Client CFP for 100GbE and OTU4, ER4 type	\$ 18,899.45
1061702097-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1490nm / Rx:1550nm, very long reach	\$ 3,405.33
1061702098-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1550nm / Rx:1490nm, very long reach	\$ 3,405.33
	11G Pluggable, long reach, OSNR optimized C-Band tunable DWDM network IF, SFP+ form	
1061702100-01	factor	\$ 3,166.25
1061702091-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$ 998.32
1061702093-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$ 998.32
1061800801-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$ 15,108.51
1061800790-01	QSFP14-SR4, LC, 100m, 4x10G, 850nm, grey, 8G FC, 16G FC	\$ 923.70
1061800803-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$ 15,108.51
1061800804-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$ 15,108.51
1061800805-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$ 15,108.51
	11G Pluggable, long reach, OSNR optimized C-Band tunable DWDM network IF, XFP form	
1061701200-02	factor	\$ 3,042.27
1061003030	GBE 1510 Bi-directional pluggable transceiver C-Temp 120KM	\$ 1,110.86
1061003031	GBE 1590 Bi-directional pluggable transceiver C-Temp 120KM	\$ 1,152.00
1061701401-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701402-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701403-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701404-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701405-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701406-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701407-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701408-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701409-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701410-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701411-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29
1061701412-05	11G Pluggable DWDM I/F, very long reach	\$ 1,376.29

1061701413-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701414-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701415-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701416-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701417-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701418-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701419-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701420-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701421-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701422-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701423-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701424-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701425-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701426-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701427-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701427 05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701429-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701430-05		\$	1,376.29
	11G Pluggable DWDM I/F, very long reach 11G Pluggable DWDM I/F, very long reach		1,376.29
1061701431-05		\$ ¢	•
1061701432-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701465-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701466-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701467-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701468-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701469-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701470-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701471-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701472-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061701481-05	11G Pluggable DWDM I/F, very long reach	\$	1,376.29
1061800770-01	QSFP10-LR4, LC, 10km, 4x10G, CWDM, grey, 40GBE and OTU3, OTU3e2	\$	1,483.20
1051002601-01	QSFP28 Active Optical Cable (AOC), 4x28G, 100 cm, 850nm, grey, 100GBE (requires 802.3bj FEC) and OTU4 (requires GFEC)	\$	820.11
1061800780-01	QSFP10-4LR, MPO, 10km, 4x10G, grey, 10GBE and OTU2	\$	1,226.17
1061800744-01	QSFP28-SR4, MPO, 4x28G, 100m, 850nm, grey, 100GBE (requires 802.3bj FEC)	\$	556.38
1001800744-01	Q3FF28-3N4, MFO, 4X28G, 100III, 830IIIII, grey, 100GBL (requires 802.3b) FLC)	ې	330.36
1061800720-01	QSFP28-LR4, LC, 4x28G, 10km, LAN-WDM around 1310nm, grey, 100GBE (no FEC) and OTN	\$	2,885.87
	QSFP28 Active Optical Cable (AOC), 4x28G, 300 cm, 850nm, grey, 100GBE (requires 802.3bj		
1051002603-01	FEC) and OTU4 (requires GFEC)	\$	820.11
	QSFP28 Active Optical Cable (AOC), 4x28G, 500 cm, 850nm, grey, 100GBE (requires 802.3bj		
1051002605-01	FEC) and OTU4 (requires GFEC)	\$	820.11
1061800740-01	QSFP28-LR4, LC, 4x28G, 10km, LAN-WDM around 1310nm, grey, 100GBE (no FEC)	\$	2,850.95
1061800756-01	QSFP28-CWDM4, LC, 4x28G, 2km, CWDM around 1310nm, grey, 100GBE (no FEC)	\$	1,050.34
1061800774-01	QSFP10-SR4, MPO, 100m, 4x10G, 850nm, grey, 40GBE and OTU3, OTU3e2	\$	306.04
1061702019-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702059-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702011-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702043-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702021-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16

1061702017-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702015-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702023-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702025-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702039-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702027-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702029-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702033-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702035-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702031-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702037-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702045-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702047-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702049-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor		923.16
		\$	
1061702051-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702053-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702057-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702055-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702061-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702073-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702063-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702067-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702065-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702069-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702071-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702077-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702075-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702079-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702089-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	998.32
0061702491-03	up to 4G Pluggable CWDM I/F, very long reach	\$	336.80
1061702001-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702081-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702007-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702009-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702005-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702041-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702013-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061702003-01	11G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	923.16
1061707498-01	Bi-Directional SFP for Single Fiber Working 1615nm, H channel	\$	1,676.30
1061701893-02	Bi-Directional XFP for Single Fiber Working, Tx:1270nm / Rx:1330nm, long reach	\$	712.08
1061701895-02	Bi-Directional XFP for Single Fiber Working, Tx:1270nm / Rx:1330nm, short reach	\$	336.80
1061701894-02	Bi-Directional XFP for Single Fiber Working, Tx:1330nm / Rx:1270nm, long reach	\$	712.08
1061701896-02	Bi-Directional XFP for Single Fiber Working, Tx:1330nm / Rx:1270nm, short reach	\$	336.80
0061704505-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,073.49
0061704501-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,073.49
1061700655-02	Client CFP for 100GbE and OTU4, LR4 type	\$	5,388.38
1061702301-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	4,908.84
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1061702304-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702309-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702305-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702302-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702306-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702307-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702311-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702303-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702312-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702308-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702313-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702310-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702314-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702316-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702320-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702321-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702326-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702328-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702315-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702327-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702317-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702318-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702319-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702330-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702322-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702324-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702323-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702333-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702340-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702331-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702325-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702338-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702334-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702337-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702336-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702335-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702329-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702332-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
1061702339-01	11G Pluggable DWDM I/F, very long reach, SFP+ form factor with clock recovery	\$ 4,908.84
0061704504-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704514-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704517-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704518-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704502-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
	11G Pluggable, long reach, OSNR optimized C-Band tunable DWDM network IF, XFP form	
1061701200-01	factor	\$ 3,042.27
0061704506-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49

0061704581-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704515-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704516-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704569-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704568-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704503-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704512-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704508-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704513-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704522-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
1061701400-01	11G Pluggable, very long reach C-Band tunable DWDM network IF	\$ 3,059.60
0061702492-03	up to 4G Pluggable CWDM I/F, very long reach	\$ 336.80
0061702493-03	up to 4G Pluggable CWDM I/F, very long reach	\$ 336.80
0061702494-03	up to 4G Pluggable CWDM I/F, very long reach	\$ 336.80
0061702495-03	up to 4G Pluggable CWDM I/F, very long reach	\$ 336.80
0061702496-03	up to 4G Pluggable CWDM I/F, very long reach	\$ 336.80
0061702497-03	up to 4G Pluggable CWDM I/F, very long reach	\$ 336.80
0061702498-03	up to 4G Pluggable CWDM I/F, very long reach	\$ 336.80
0061704510-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704519-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704520-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704521-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704523-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704524-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704526-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704527-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704528-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704529-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704530-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704531-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704532-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704565-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704566-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704567-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704570-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704571-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704572-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061703805-02	4G pluggable client I/F for 1310nm, short reach	\$ 221.92
1061707598-01	Bi-Directional SFP for Single Fiber Working 1605nm, L channel	\$ 1,676.30
0061704507-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704525-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704511-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
0061704509-03	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ 1,073.49
1061705911-01	Bi-Directional SFP for Single Fiber Working 1471nm, H channel 20km	\$ 1,322.78
1061705912-01	Bi-Directional SFP for Single Fiber Working 1491nm, L channel 20km	\$ 1,322.78
1061705910-01	Bi-Directional SFP for Single Fiber Working 1471nm, L channel 20km	\$ 1,322.78
1061705913-01	Bi-Directional SFP for Single Fiber Working 1491nm, H channel 20km	\$ 1,322.78

1061705916-01	Bi-Directional SFP for Single Fiber Working 1531nm, L channel 20km	\$	1,322.78
1061705914-01	Bi-Directional SFP for Single Fiber Working 1511nm, L channel 20km	\$	1,322.78
1061705917-01	Bi-Directional SFP for Single Fiber Working 1531nm, H channel 20km	\$	1,322.78
1061705918-01	Bi-Directional SFP for Single Fiber Working 1551nm, L channel 20km	\$	1,322.78
1061705919-01	Bi-Directional SFP for Single Fiber Working 1551nm, H channel 20km	\$	1,322.78
1061705920-01	Bi-Directional SFP for Single Fiber Working 1571nm, L channel 20km	\$	1,322.78
1061705922-01	Bi-Directional SFP for Single Fiber Working 1591nm, L channel 20km	, \$	1,322.78
1061705921-01	Bi-Directional SFP for Single Fiber Working 1571nm, H channel 20km	\$	1,322.78
1061705923-01	Bi-Directional SFP for Single Fiber Working 1591nm, H channel 20km	\$	1,322.78
1061705915-01	Bi-Directional SFP for Single Fiber Working 1511nm, H channel 20km	\$	1,322.78
1061705850-02	pluggable client I/F for 1310nm, short reach, industrial temperature range		56.36
		\$	
1061701943-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701947-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701951-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701949-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701957-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701955-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701945-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701953-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701969-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701961-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701965-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701959-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701971-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701973-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701975-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701967-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	, \$	4,456.34
1061701963-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701977-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701983-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	5,284.69
1061701989-01			
	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	5,284.69
1061701985-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	5,284.69
1061701979-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701981-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701927-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701931-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701933-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701935-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701937-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701939-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701941-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701991-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	5,284.69
1061701987-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	5,284.69
1061701995-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	5,284.69
1061701993-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	5,284.69
1061701901-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701903-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
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1061701907-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701905-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701909-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701911-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701915-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701917-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701913-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701921-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701919-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701923-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701925-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701929-01	8G/16G Pluggable 50GHz DWDM I/F, long reach, SFP+ form factor	\$	4,456.34
1061701853-01	8G Pluggable I/F for 1310nm, short reach, SFP+ form factor	\$	657.22
0061701825-02	10G Pluggable I/F for 850nm, intra office reach	\$	311.68
1061702291-01	4G/8G Pluggable CWDM I/F, long reach	\$	2,654.27
1061702292-01	4G/8G Pluggable CWDM I/F, long reach	\$	2,654.27
1061702293-01	4G/8G Pluggable CWDM I/F, long reach	\$	2,654.27
1061702294-01	4G/8G Pluggable CWDM I/F, long reach	\$	2,654.27
1061702295-01	4G/8G Pluggable CWDM I/F, long reach	\$	2,654.27
1061702296-01	4G/8G Pluggable CWDM I/F, long reach	\$	2,654.27
1061702297-01	4G/8G Pluggable CWDM I/F, long reach	\$	2,654.27
1061702298-01	4G/8G Pluggable CWDM I/F, long reach	\$	2,654.27
1061800838-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800839-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800834-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800791-01	QSFP10-4LR, LC, 10km, 4x10G, grey, 8G FC, 16G FC	\$	1,532.72
1061800821-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800820-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800822-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800826-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800823-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800827-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800825-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800824-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800830-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800829-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800835-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800837-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800836-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800833-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800840-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800832-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
	QSFP28-ER4F, LC, 4x28G, 40km with FEC, 25km without FEC, LAN-WDM around 1310nm, grey,		-,
1061800730-01	100GBE and OTN	\$	11,902.40
1051002626 01	OCED20 Digital Active Coble langth 2m may AMC22 at AMC22 with B CDD with EDDOM	Ċ	1 272 64
1051002636-01	QSFP28 Digital Active Cable length 3m, max AWG30 or AWG32, with R CDR, with EPROM	\$	1,273.64

1051002635-01	QSFP28 Digital Active Cable length 1m, max AWG30 or AWG32, with R CDR, with EPROM	\$	1,029.85
1061800802-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800808-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800807-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800806-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800828-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800810-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	۶ \$	15,108.51
1061800813-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800812-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	۶ \$	15,108.51
1061800809-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	۶ \$	15,108.51
		۶ \$,
1061800811-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,		15,108.51
1061800815-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800814-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800817-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800816-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800819-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800818-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061800831-01	QSFP28, LC, PAM4, 2x56G, colored 100GBE, FEC,	\$	15,108.51
1061701131-01	16G Pluggable I/F for 1310nm, short reach, SFP+ form factor	\$	1,029.20
1061705852-02	pluggable client I/F for 1550nm, very long reach, industrial temperature range	\$	526.38
	QSFP28-SR4, MPO, 4x28G, 100m, 850nm, grey, 100GBE (requires 802.3bj FEC) and OTN		
1061800724-01	(requires GFEC)	\$	651.09
1061700631-01	CFP2 DWDM C-Band tunable coherent with up to 224Gbit/s, supporting QPSK 100G, 8QAM 200G and 16QAM 200G mode	\$	36,410.30
1001700031-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1270nm / Rx:1330nm, short reach, with clock	Ą	30,410.30
1061701871-01	recovery	\$	548.69
	Bi-Directional SFP+ for Single Fiber Working, Tx:1330nm / Rx:1270nm, short reach, with clock		
1061701872-01	recovery	\$	548.69
	Bi-Directional SFP+ for Single Fiber Working, Tx:1270nm / Rx:1330nm, long reach, with clock		
1061701873-01	recovery	\$	699.05
1061701863-01	8G/10G Pluggable I/F for 1310nm, short reach, SFP+ form factor with clock recovery	\$	148.00
1061705883-01	Bi-Directional SFP for Single Fiber Working 1611nm, H channel 20km	\$	1,272.38
1061705882-01	Bi-Directional SFP for Single Fiber Working 1611nm, L channel 20km	\$	1,272.38
1061705885-01	Bi-Directional SFP for Single Fiber Working 1611nm, H channel 40km	\$	1,409.52
1061705884-01	Bi-Directional SFP for Single Fiber Working 1611nm, L channel 40km	\$	1,409.52
1061482114-01	SFP 1000Base-LX, SM, 1310 nm. 10km, with Digital Diagnostics	\$	191.09
1061481005-01	SFP+, 8 to 10.52 Gbps bit Rate. MM, 850 nm, 300m with Digital Diagnostics.	\$	512.51
1061482189-01	SFP supporting 1000Base-T for Layer 2 and higher devices	\$	392.23
	SFP Dual Rate 1/2.1 Gbps SX, or 1000Base-SX GigE, MM, 850 nm, 550m, with Digital		
1061482128-01	Diagnostics	\$	188.27
1061480213-01	QSFP+ 40GBase-SR4 MM 100m	\$	2,050.04
1061480210-01	QSFP28 100G Ethernet 100GBase-SR4 MM, 100m	\$	668.46
1061480300-01	SFP+, 8.5 to 11.3 Gbps bit Rate, DWDM 50GHz Tunable, C-Band, Ch13C - Ch60H, 80km, SM.	\$	14,601.35
1051102152.01	SFP 1000Base-BX, SM Single Fiber LC, TX: 1310 nm, RX: 1490 nm. 40km, with Digital		F00.00
1061482169-01	Diagnostics SER 1000Page BY SM Single Fiber IC TV: 1310 pm BV: 1400 pm 30km with Digital	\$	533.03
1061482161-01	SFP 1000Base-BX, SM Single Fiber LC, TX: 1310 nm, RX: 1490 nm. 20km, with Digital Diagnostics	\$	324.23

	SFP 1000Base-BX, SM Single Fiber LC, TX: 1490 nm, RX: 1310 nm. 20km, with Digital		
1061482163-01	Diagnostics	\$	533.45
	SFP 100Base-BX and OC3, SM Single Fiber LC, TX: 1310 nm, RX: 1550 nm. 20km, with Digital		
1061482146-01	Diagnostics	\$	282.40
	SFP 100Base-BX and OC3, SM Single Fiber LC, TX: 1550 nm, RX: 1310 nm. 20km, with Digital		
1061482148-01	Diagnostics	\$	282.40
1061701874-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1330nm / Rx:1270nm, long reach, with clock	ć	699.05
	recovery	\$	
1061481007-01	SFP+, 8 to 11.3 Gbps bit Rate. SM, 1310 nm, 10km.	\$	1,035.49
1061480214-01	QSFP+ 40GBase-LR SM 10km	\$	10,417.58
1061701135-01	16G Pluggable I/F for 850nm, intra office reach, SFP+ form factor	\$	530.27
1061480301-01	Tunable SFP+, multi-rate 622M to 11.3 Gbps bit Rate, DWDM 50GHz, C-Band, Ch13C - Ch60H, 80km, SM. Extended temperature -5C to +85C	\$	18,785.12
1001400301 01	SFP 1000Base-BX, SM Single Fiber LC, TX: 1490 nm, RX: 1310 nm. 40km, with Digital	Ţ	10,703.12
1061482171-01	Diagnostics	\$	533.03
	CFP 100G SM DWDM Metro 4 wavelength tunable @ 100GHZ. For OD-TXP100G transparent		
1061480105-01	transponders only	\$	146,390.15
1061480211-01	QSFP28 100G Ethernet 100GBase-LR4 SM 10km	\$	2,814.53
1061480161-01	CFP 100GBase-LR4 multirate 100GE/OTU4, SM, 10KM	\$	89,909.24
1061482100-01	SFP Multi-rate SR1, 100-2700Mpbs, SM, 1310 nm, 2km with Digital Diagnostics	\$	593.37
1061482118-01	SFP 1000BASE-LX SM, 1310 nm. 0-20KM, Industrial Temperature -40C to +85C	\$	261.49
1061482110-01	SFP 1000Base-SX, Extended MM, 1310 nm, 1km	\$	1,244.67
	SFP 1000Base-BX, SM Single Fiber LC, TX: 1490 nm, RX: 1570 nm. 80km, with Digital		
1061482173-01	Diagnostics	\$	1,663.05
	SFP 1000Base-BX, SM Single Fiber LC, TX: 1570 nm, RX: 1490 nm. 80km, with Digital		
1061482175-01	Diagnostics	\$	1,663.05
1061480162-01	CFP 100GBase-SR10 multirate 100GE/OTU4, MM, 100m	\$	12,509.47
	Pluggable 1000Base-T transeiver, copper interface - with support for NTP/PTP on 543x/544x,		.=
1061705896-01	SyncE Master/Slave on 543x/544x CSM, SyncE Master on 543x/544x line cards	\$	473.60
1061702200-01	11G Pluggable, very long reach (80Km) C-Band tunable DWDM network IF	\$	3,795.81
1061701865-02	8G/10G Pluggable I/F for 850nm, intra office reach, SFP+ form factor with clock recovery	\$	166.02
1061800752-01	QSFP28-PSM4, MPO, 4x28G, 500m, 4 fibers at 1310nm, grey, 100GBE (no FEC)	\$	1,560.04
1061702000 01	11G Pluggable, very long reach with extended output power, C-Band tunable DWDM network	Ļ	4 204 51
1061702099-01	IF, SFP+ form factor	۶ خ	4,284.51
1061701111-01	25G Pluggable I/F for 1310nm, short reach	\$	661.33
1061701115-01	25G Pluggable I/F for 850nm, intra office reach,	\$	603.43
1061800765-01	QSFP28-SR4, MPO, 4x28G, 100m, 850nm, TWD	\$	1,005.71
1061701859-01	10G Pluggable I/F for 1310nm, short reach, SFP+ form factor, I-temp	\$	216.38
1061701858-01	10G Pluggable I/F for 850nm, intra office reach, SFP+ form factor, I-temp	\$	495.24
1061800757-01	QSFP28-CWDM4, LC, 4x28G, 10km, CWDM around 1310nm, grey, 100GBE (no FEC)	\$	1,111.09
1061702000-03	11G Pluggable, very long reach C-Band tunable DWDM network IF, SFP+ form factor	\$	3,056.04
1051002704-01	QSFP56-DD Active Optical Cable (AOC), 1000 cm, 850nm, grey, 400GBE	\$	9,025.62
	448G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to		
1061700636-01	196.1 THz on a 12.5GHz grid suitable for colorless add/drop	\$	35,858.29
1061700627 01	448G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to	ć	22 152 00
1061700637-01	196.1 THz on a 12.5GHz grid 10G Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range Band 5 from	\$	33,152.00
1061701814-01	19520 to 19600GHz, I-temp solution	\$	2,202.82
	10G Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range Band 4 from	г	-,
1061701815-01	19440 to 19520GHz, I-temp solution	\$	2,202.82

	10G Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range Band 3 from		
1061701816-01	19360 to 19440GHz, I-temp solution	\$	2,202.82
	10G Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range Band 0 from		
1061701819-01	19130 to 19200GHz, I-temp solution	\$	2,202.82
1061701878-01	11G Pluggable, very long reach C-Band tunable DWDM network IF, SFP+ form factor, Temperature Widened (TIN: -40C to +85C)	\$	3,160.38
1061701856-01	10G Pluggable I/F for 850nm, 300m, SFP+ form factor, Dual Rate, I-temp	\$	121.90
1061701864-01	10G Pluggable I/F for 1310nm, 10km, SFP+ form factor, Dual Rate, I-temp	\$	152.38
0061704572-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704515-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704512-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	, \$	1,196.10
0061704513-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704517-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704568-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704581-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704521-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704519-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704520-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704522-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061707601-01	Bi-Directional SFP for Single Fiber Working 1495nm, H channel	\$	2,091.89
1061707602-01	Bi-Directional SFP for Single Fiber Working 1485nm, H channel	\$	2,091.89
1061800931-01	QSFP56-DD, MPO, 8x56G, 100m, 850nm, grey, 400GBE	\$	3,528.48
1061701595-01	11G Pluggable CWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	3,781.22
0061704530-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061704500-01	pluggable client I/F for 1310nm, short reach, I-temp	\$	160.00
1061702791-01			365.71
	up to 2.7G Pluggable CWDM I/F, very long reach, I-temp	\$	
0061704511-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10 365.71
1061702794-01	up to 2.7G Pluggable CWDM I/F, very long reach, I-temp	\$	
1061701859-02	10G Pluggable I/F for 1310nm, short reach, SFP+ form factor, I-temp	\$	137.14
0061704528-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061701858-02	10G Pluggable I/F for 850nm, intra office reach, SFP+ form factor, I-temp	\$	76.19
1061702698-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery, I-temp	\$	1,600.00
1061702797-01	up to 2.7G Pluggable CWDM I/F, very long reach, I-temp	\$	365.71
1061702694-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery, I-temp	\$	1,600.00
1061701899-01	10G Pluggable I/F for electrical, SFP+ form factor	\$	480.00
0061704532-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704524-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061700637-02	448G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to 196.1 THz on a 12.5GHz grid	\$	33,152.00
1061702695-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery, I-temp	\$	1,600.00
1061702692-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery, I-temp	\$	1,600.00
1061701998-01	11G Pluggable I/F for 1310nm, short reach, SFP+ form factor with clock recovery, I-temp	\$	198.10
1061702795-01	up to 2.7G Pluggable CWDM I/F, very long reach, I-temp	\$	365.71
1061702693-01			
1061702697-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery, I-temp	\$ ¢	1,600.00
1061702691-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery, I-temp 11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery, I-temp	\$ \$	1,600.00 1,600.00
1001/02031-01	112G Pluggable, coherent, C-Band tunable DWDM network IF, lower output power, suitable	ٻ	1,000.00
1061700634-01	for passive colorless add/drop	\$	27,218.84

0061704525-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061800750-01	QSFP28-LR, LC, 106G (53GBaud PAM4), 10km, grey, 100GBE	\$	1,904.76
1061800751-01	QSFP28-DR, LC, 106G (53GBaud PAM4), 500 meters, grey, 100GBE	\$	1,353.14
1061702796-01	up to 2.7G Pluggable CWDM I/F, very long reach, I-temp	\$	365.71
0061704501-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704527-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061702798-01	up to 2.7G Pluggable CWDM I/F, very long reach, I-temp	\$	365.71
0061704531-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061701997-01	10G Pluggable I/F for 850nm, intra office reach, SFP+ form factor with clock recovery, I-temp	\$	190.48
1061702696-01	11G Pluggable CWDM I/F, long reach, SFP+ form factor with clock recovery, I-temp	\$	1,600.00
1001/02030 01	448G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to	Ψ	1,000.00
1061700636-02	196.1 THz on a 12.5GHz grid suitable for colorless add/drop	\$	35,858.29
1061702793-01	up to 2.7G Pluggable CWDM I/F, very long reach, I-temp	\$	365.71
1061702792-01	up to 2.7G Pluggable CWDM I/F, very long reach, I-temp	\$	365.71
0061704571-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061480097-01	CFP2 100G SM ER4 multirate 100G Ethernet	\$	16,900.57
1061701104-01	28G pluggable I/F for for 32/16G FibreChannel 850nm, short reach 100m, SFP28 form factor	\$	1,462.86
1061800768-01	QSFP28-FR, LC, 106G (53GBaud PAM4), 2km, grey, 100GBE	\$	1,415.54
1001000700 01	Q311 20 111, 10, 1000 (33 33 33 33 31 111, grey, 100 35 1	Y	1,413.34
1061701101-01	56G pluggable I/F for for 64/32G FibreChannel 1310nm, 10km, long reach, SFP56 form factor	\$	5,363.81
1061701103-01	28G pluggable I/F for for 32/16G FibreChannel 1310nm, long reach 10km , SFP28 form factor	\$	1,950.48
1061705929-01	GbE Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range (19200 to 19130), I-temp solution	\$	1,208.19
1001/03323 01	19199), remposition	Y	1,200.13
1061701102-01	56G pluggable I/F for for 64/32G FibreChannel 850nm, short reach, 100m, SFP56 form factor	\$	2,925.71
1061480212-01	QSFP28 100G Ethernet 100GBase-ZR4 SM LC 80km	\$	20,694.86
	112G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to		
1061700617-02	196.1 THz on a 12.5GHz grid, improved performance and suitable for colorless add/drop	\$	30,490.57
1061701848-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1270nm / Rx:1330nm, short reach 20km	\$	316.95
1061701849-01	Bi-Directional SFP+ for Single Fiber Working, Tx:1330nm / Rx:1270nm, short reach 20km	\$	316.95
1061704499-01	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	966.15
1061705893-01	Bi-Directional SFP for Single Fiber Working, Tx:1550nm / Rx:1490nm, 120km,TIN	\$	289.52
0061704502-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704506-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704510-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704516-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704569-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704523-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704526-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704570-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704508-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704507-04	- 1	т	_,_55.25
	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1.196 10
0061704567-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$ \$	1,196.10 1 196.10
0061704567-04 0061704529-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704567-04 0061704529-04 0061704504-04			,

1061701116-01	25G Pluggable BIDI 1270 Short reach	\$	1,158.10
1061706191-01	pluggable client I/F for 1470nm, extended ultra long reach, 125Mbit/s only	\$	764.34
	QSFP28-SR4, MPO, 4x28G, 100m, 850nm, grey, 100GBE (requires 802.3bj FEC) and OTN	·	
1061800724-02	(requires GFEC)	\$	651.09
4054700524 02	CFP2 DWDM C-Band tunable coherent with up to 224Gbit/s, supporting QPSK 100G, 8QAM		26.440.20
1061700631-02	200G and 16QAM 200G mode	\$	36,410.30
1061705892-01	Bi-Directional SFP for Single Fiber Working, Tx:1490nm / Rx:1550nm, 120km,TIN	\$	289.52
0061704505-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704518-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704566-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704509-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061701119-01	25G Pluggable BIDI 1310 Long reach	\$	1,158.10
1061707599-01	Bi-Directional SFP for Single Fiber Working 1615nm, H channel	\$	2,011.43
1061701118-01	25G Pluggable BIDI 1270 Long reach	\$	1,158.10
1061707600-01	Bi-Directional SFP for Single Fiber Working 1605nm, H channel	\$	2,011.43
1061701117-01	25G Pluggable BIDI 1330 Short reach	\$	1,158.10
1061701126-01	25G Pluggable 1310 Long reach	\$	1,158.10
1061701880-01	XFP based OTDR, 1625nm, one monitoring port, APD version with LC connector	\$	5,363.81
1061800920-01	QSFP-DD-FR4, LC, 4x106G, 2km, CWDM around 1310nm, grey, 400GBE (FEC from host)	\$	6,710.06
1051002703-01	QSFP56-DD Active Optical Cable (AOC), 300 cm, 850nm, grey, 400GBE	\$	8,089.60
1061800930-01	QSFP-DD-LR4, LC, 4x106G, 10km, CWDM around 1310nm, grey, 400GBE (FEC from host)	\$	6,989.64
1061800924-01	QSFP-DD-DR4, MPO, 4x106G, 500m, 1310nm, grey, 400GBE (FEC from host) or 4x 100GE	\$	6,476.99
4064000752-02	QSFP28-PSM4, MPO, 4x28G, 500m, 4 fibers at 1310nm, grey, 100GBE, OTU4 (PCN 4830 -	,	4 500 30
1061800753-02	QuadFlex Support)	\$	1,598.29
1061705889-01	Bi-Directional SFP for Single Fiber Working, Tx:1310nm / Rx:1490nm, short reach,TIN	\$	78.82
1061705888-01	Bi-Directional SFP for Single Fiber Working, Tx:1490nm / Rx:1310nm, short reach, TIN QSFP 100GE and 40GE SR Bidirectional with 2 wavelengths with LC connector 75m on OM3,	\$	91.47
1061800766-01	100m on OM4 fiber	\$	2,773.26
1061480096-01	CFP2 100G LR4 SM LC 10km Ethernet, I-temp	\$	5,228.38
0061704503-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
0061704514-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061800770-11	QSFP10-LR4, LC, 10km, 4x10G, CWDM, grey, 40GBE and OTU3, OTU3e2	;	1,559.12
1061800780-11	QSFP10-4LR, MPO, 10km, 4x10G, grey, 10GBE and OTU2	\$	1,296.23
		·	,
1061800720-11	QSFP28-LR4, LC, 4x28G, 10km, LAN-WDM around 1310nm, grey, 100GBE (no FEC) and OTN	\$	3,047.66
0061704565-04	up to 2.7G Pluggable DWDM I/F, ultra long reach	\$	1,196.10
1061701875-01	Bi-Directional XFP for Single Fiber Working, Tx:1490nm / Rx:1550nm, very long reach	\$	3,406.00
1061701876-01	Bi-Directional XFP for Single Fiber Working, Tx:1550nm / Rx:1490nm, very long reach	\$	3,406.00
1061705886-01	SFP - GigE BiDi 1490nm Singlemode (40km)	\$	239.24
1061705887-01	SFP - GigE BiDi 1310nm Singlemode (40km)	\$	239.24
	GbE Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range (19600 to		
1061705924-01	19530), I-temp solution	\$	1,208.19
1061705925-01	GbE Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range (19520 to	\$	1 200 10
1001/03925-01	19450), I-temp solution GbE Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range (19440 to	Ş	1,208.19
1061705926-01	19370), I-temp solution	\$	1,208.19
	GbE Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range (19360 to	•	•
1061705927-01	19290), I-temp solution	\$	1,208.19
	GbE Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range (19280 to		
1061705928-01	19210), I-temp solution	\$	1,208.19

	224G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to		
1061700632-02	196.1 THz on a 12.5GHz grid, improved performance and suitable for colorless add/drop	\$	40,469.73
1061701591-01	11G Pluggable CWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	3,781.22
1061701592-01	11G Pluggable CWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	3,781.22
1061701594-01	11G Pluggable CWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	3,781.22
1061701597-01	11G Pluggable CWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	3,781.22
1061701598-01	11G Pluggable CWDM I/F, very long reach, SFP+ form factor with clock recovery	\$	3,781.22
	10G Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range Band 1 from		
1061701818-01	19200 to 19280GHz, I-temp solution	\$	2,202.82
1061702407-01	10G Pluggable for third-party equipment (TP), 80km reach, C-Band DWDM tunable, 100GHz spacing with 48 channels, I-temp solution	\$	3,169.52
1001/0240/ 01	10G Pluggable, 40km reach, C-Band DWDM network IF with limited tuning range Band 2 from	Y	3,103.32
1061701817-01	19280 to 19360GHz, I-temp solution	\$	2,202.82
	224G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to		
1061700632-07	196.1 THz on a 12.5GHz grid, improved performance and suitable for colorless add/drop	\$	40,509.52
1061800600-01	QSFP28 112G,100ZR+ coherent, C-Band tunable DWDM network IF, 0 till 70°C	\$	8,350.48
1061800601-01	QSFP28 112G, 100ZR+, coherent, C-Band tunable DWDM network IF, -40 till 85°C	\$	9,112.38
1061800035 01	448G Pluggable, coherent, 400G OpenZR+ support, increase TX power 0dBm, C-band tunable,	Ļ	22 466 67
1061800935-01	network IF center frequency from 191.2375 to 196.1 THz on a 6.25GHz grid. 448G Pluggable, dual laser variant for single fiber working, coherent, C-Band tunable DWDM	\$	23,466.67
1061700642-01	network IF center frequency from 191.23 to 196.1 THz on a 12.5GHz grid	\$	40,990.48
	CFP2 DWDM C-Band tunable coherent with up to 224Gbit/s, supporting QPSK 100G, 8QAM	•	-,
1061700631-03	200G and 16QAM 200G mode	\$	36,410.30
1061700633 03	224G Pluggable, coherent, C-Band tunable DWDM network IF center frequency from 191.23 to	۲	40 500 53
1061700632-03	196.1 THz on a 12.5GHz grid, improved performance and suitable for colorless add/drop	\$	40,509.52
93000112	ADVA FSP Field Service (on-site support) daily rate		#REF!
7036865001	Packing Option single Item - individual packing		#REF!
7041192001	Ethernet Initial Application		#REF!
7027077001	Ethernet Staging Option Baseline Configuration		#REF!
7022459001	Staging Option Assembled		#REF!
	Connector Customization Golden Image: design, develop and test of a custom .iso image based		
7064071001	on Customer's environment, inclusive of installation instructions. Priced per week.		#REF!
	Support VNF on-boarding and testing. In addition to on-boarding VNF into Orchestrator and		
	Connector, characterize VNF performance on target hardware platform(s), validate VNF/device		_
7057539001	interworking and perform basic functional tests. Priced per week.		#REF!
7057541001	Staging: service offering to ship hardware, sourced from ADVA to Customer sites preloaded and tested with verified .iso image. Priced per server.		#REF!
7037341001	Solution Implementation support of the production MANO instance(s), including configuration		#INEI;
	and verification of end-to-end Ensemble solution. Service can be performed onsite or remote.		
7057544001	Priced per week.		#REF!
7075022001	Staging Option Assembled & Configured for OSA Sync Products OSA 5430 / 5440		#REF!
7072518001	Staging Option Assembled for OSA Sync Products OSA 5430 / 5440		#REF!
	GNSS Assurance Integration Service. Remote integration of 3rd Party devices into ENC GNSS		
7070500004	Assurance. Additional up to 50 devices for which GNSS ASSURANCE INTEGRATION has been		"DE='
7078608001	purchased CNSS Assurance Integration Service, Servict Development and remate integration of 2rd Party		#REF!
7078607001	GNSS Assurance Integration Service. Script Development and remote integration of 3rd Party devices into ENC GNSS Assurance. Up to 50 Devices of same type		#REF!
7075311001	Staging Option Assembled & Configured for Ethernet Products (Packet Edge Cloud)		#REF!
, 0, 3311001	Staging Spars is sectioned a configured for Enterfict Froducts (I defect Edge Glodd)		AINEI ;

93000130	Standard Module Test if no Fault Description available / No Fault Found Fee	\$	626.94
7036308001	OPERATIONAL READINESS FEE	\$	12,212.24
	Resident Engineer provides dedicated engineering support at a single customer site. Responsible for providing solution expertise to customer engineering, Ops, IT & security teams.		
7057549001	Details must be agreed in a SOW. (6 month minimum). Priced per month.	\$	43,537.41
7067087001	Disposal of Cesium tube	\$	1,306.12
7076928001	REMOTE LICENSE SUPPORT	\$	1,741.50
7078671001	Ensemble Simulator hosted software service subscription - 12 month period	\$	54,421.77
	Installing & Operating OSA 54xx Family- Sync Director Product Training. (4.5 day course) Per	•	• ·, ·==···
7047188001	Student fee.	\$	3,415.49
	Installing & Operating OSA 54xx Family- Sync Director Product Training. Per Trainer per day fee.		
7047189001	Travel expenses included.	\$	4,693.33
7047190001	Installing & Operating OSA 54xx Family- Sync Director Product Training. (4.5 day course). Per course fee.	\$	20,480.00
7047190001	OSA 5548C SSU-5548C TSG Product Training. (2 day course) Per Student fee.	۶ \$	1,562.29
7047208001	Sync / PTP principles Training (1 day course). Per course fee.	\$	4,887.29
7047208001	OSA 5548C SSU-5548C TSG Product Training. (2 day course). Per Trainer per day fee. Travel	ڔ	4,007.23
7047204001	expenses included.	\$	4,693.33
7047207001	Sync / PTP principles Training (1 day course). Per Trainer per day fee. Travel expenses included.	\$	4,693.33
7047205001	OSA 5548C SSU-5548C TSG Product Training (2 day course). Per course fee.	\$	9,384.51
7047206001	Sync / PTP principles Training. Per Student fee.	\$	782.22
93000360	ACE - ADVA Certified Expert - certification of 1 person- All regions	\$	676.63
7051117001	An Access Link Monitoring Device Training (1 day). Per course fee.	\$	4,693.33
	Shipping international. Training kit shipping and equipment rental fees. Trainer travel costs are		
7041312001	excluded.	\$	5,688.89
7041313001	On-Site travel fees for ADVA Trainer travelling between continents. Includes 5 days cost of accommodation of a Trainer, car rental, allowances and flight cost.	\$	4,977.78
7041313001	ADVA FSP 3000R7 Installation and Commissioning Product Training (2 day course). Per Student	Ţ	4,511.10
7050509001	fee for an open class calculation.	\$	1,564.44
	ADVA 300 Agile Connect (4.5 days). FSP 3000R7 w/ROADMs include HD-Slides (update to		
	existing course). Focus should be 9ROADM-RS and MROADM and MAPs; Bpie: ADVA Licensing.		
7050496001	Focus should be on NED.	\$	21,120.00
7050498001	ADVA FSP 3000R7 Maintenance and Troubleshooting Product Training (2 day course). Per course fee.	\$	9,386.67
7030430001	ADVA FSP 3000R7 Installation and Commissioning Product Training (2 day course). Per course	Ţ	3,300.07
7050499001	fee.	\$	9,386.67
	ADVA FSP 3000R7 Maintenance and Troubleshooting Product Training. (2 day course) Per		
7050508001	Student fee for an open class calculation.	\$	1,564.44
	ADVA 300 Agile Connect (4.5 days). FSP 3000R7 w/ROADMs include HD-Slides (update to		
7050506001	existing course). Focus should be 9ROADM-RS and MROADM and MAPs; Bpie: ADVA Licensing. Focus should be on NED.	\$	3,520.00
7042603001	ADVA Ensemble Controller Training (2 day course). Per Course fee.	\$	9,386.67
7042605001	ADVA Elisemble controller Training (2 day course). Per Course fee.	\$	14,080.00
		\$	14,080.00
7042604001	ADVA Ensemble Controller/ Optical Director Training (3 day course). Per Course fee. ADVA Ensemble Controller/ Optical Director Training. (3 day course) Per Student fee for an	ڔ	14,000.00
7036042001	open class calculation.	\$	2,346.67
7036046001	ADVA FSP 150EG-X Training. (3 day course) Per Student fee for an open class calculation.	\$	2,346.67
	An Access Link Monitoring Device Training. (1 day course) Per Student fee for an open class		•
7051118001	calculation.	\$	782.22

	On-Site travel fees for ADVA Trainer travelling within Europe or United States. Includes 5 days		
7036044001	cost of accomodation of a Trainer, car rental, allowances and flight cost.	\$	3,361.62
	ADVA Ensemble Controller Training. (2 day course) Per Student fee for an open class		
7036041001	calculation.	\$	1,564.44
7036043001	Shipping within EMEA region or route US-CANADA. Training kit shipping and equipment rental fees. Trainer travel costs are excluded.	\$	2,417.78
	Installing & Operating FSP 3000 Cloud Connect. (3 day course) A training course on ADVA FSP		
	3000 Cloud Connect using CLI. OpenFabric, QuadFlex and CryptoMux will be covered in detail.		
7059365001	Per Student fee for an open class calculation.	\$	2,346.67
	Installing & Operating FSP 3000 Cloud Connect. (3 day course) A training course on ADVA FSP 3000 Cloud Connect using CLI. OpenFabric, QuadFlex and CryptoMux will be covered in detail.		
7059366001	Per course fee.	\$	14,080.00
7061617001	ADVA Customized duration training. Price per trainer day. For Custom class taking place at ADVA location trainer travel costs are already included.	\$	4,693.33
7051119001	e-Learning Smart Hands Single Course License. Per enrolment fee.	\$	70.03
	Ensemble Virtualization Monitoring & Troubleshooting: classroom session with in depth		
	understanding of monitoring and troubleshooting with the Ensemble software. Price is per		
7064075001	course (1 day).	\$	5,925.93
7064076001	Ensemble API Integration training: API considerations when integrating ADVA Ensemble with back-office systems. Price is per course (2 day).	\$	10,235.69
7004070001	OSA Optical Cesium Clock Product Training (6hrs course classrom, 4hrs remote). Per student	Y	10,233.03
7081313001	fee.	\$	586.13
7080803001	FSP 150-XG300 Training (3 day course). Per course fee.	\$	14,080.00
7080802001	FSP 150-XG300 Training (3 day course). Per student fee.	\$	2,346.67
7076192001	Operating HD Hardware in FSP 3000 Agile Connect (DCI) (4 day course). Per course fee.	\$	18,773.33
	Shipping within APAC region. Training kit shipping and equipment rental fees. Trainer travel		
7072411001	costs are excluded.	\$	4,551.11
7075037001	ADVA FSP3000 and Ensemble Controller Product Training. (4 day course) Per student fee.	\$	3,128.89
7076191001	Operating HD Hardware in FSP 3000 Agile Connect (DCI) (4 day course). Per Student fee.	\$	3,128.89
7076193001	Operating HD Hardware in FSP 3000 Agile Connect (Carrier) (4 day course). Per Student fee.	\$	3,128.89
7076194001	Operating HD Hardware in FSP 3000 Agile Connect (Carrier) (4 day course). Per course fee.	\$	18,773.33
7075178001	Advanced OSA 5401-5405 Product Training. (2 day course) Per Trainer day fee.	\$	4,693.33
7075179001	Advanced OSA 5401-5405 Product Training. (2 day course) Per course fee.	\$	9,386.67
7075180001	Advanced OSA 5401-5405 Product Training. (2 day course) Per student fee.	\$	1,564.44
7075181001	Advanced OSA 5430-5440 Product Training. (2 day course) Per Trainer day fee.	\$	4,693.33
7075182001	Advanced OSA 5430-5440 Product Training. (2 day course) Per course fee.	\$	9,386.67
7075183001	Advanced OSA 5430-5440 Product Training. (2 day course) Per student fee.	\$	1,564.44
7075184001	Advanced OSA 541X-542X Product Training. (2 day course) Per Trainer day fee.	\$	4,693.33
7075185001	Advanced OSA 541X-542X Product Training. (2 day course) Per course fee.	\$	9,386.67
7075186001	Advanced OSA 541X-542X Product Training. (2 day course) Per student fee.	\$	1,564.44
7075040004	ENC and ENC SyncDirector for Management and Monitoring of OSA54xx Series Product	,	4 602 22
7075918001	Training. (1 day course) Per course fee. ENC and ENC SyncDirector for Management and Monitoring of OSA54xx Series Product	\$	4,693.33
7075919001	Training (1 day course) Per student fee.	\$	782.22
7081874001	ACE refresher training for FSP 3000 R7 product line (3 day course). Per course fee.	, \$	11,733.32
	Shipping within US region. Training kit shipping and equipment rental fees. Trainer travel costs		•
7072911001	are excluded.	\$	1,848.89
7077225004	The class is designed for anyone using Ensemble Packet Director for Management and	,	2 246 67
7077326001	Monitoring of Ethernet Services	\$	2,346.67

	ADVA FSP3000 TeraFlex Installation & Operating Product Training. (2 day course) Per course		
7074989001	fee.	\$	9,386.67
	The class is designed for anyone using Ensemble Packet Director for Management and		
7077327001	Monitoring of Ethernet Services	\$	391.11
7077189001	e-Learning WDM Fundamentals Single Course License. Per enrolment fee.	\$	70.03
7078590001	e-Learning Ensemble Simulator Single Course License. Per enrolment fee.	\$	70.03
7078879001	ENC Fiber Director Training (1 day course). Per student fee.	\$	782.22
7070818001	Travel onsite - US and Europe rate, otherwise custom quoted. Priced per week.	\$	1,885.52
7070819001	Introduction to NFV and Ensemble Training.	\$	18,747.47
7078589001	e-Learning Ensemble Simulator Single Course License. Per enrolment fee.	\$	70.03
7078591001	e-Learning Ensemble Simulator Single Course License. Per enrolment fee.	\$	70.03
7078878001	ENC Fiber Director Training (1 day course). Per course fee.	\$	4,693.33
	ADVA FSP 150XG400 Operation and Maintenance Product Training. (3 day course) Per Student		
7074337001	fee for an open class calculation.	\$	2,346.67
7075036001	ADVA FSP3000 and Ensemble Controller Product Training. (4 day course) Per course fee.	\$	18,773.33
	ADVA FSP3000 TeraFlex Installation & Operating Product Training. (2 day course) Per Student		
7074988001	fee for an open class calculation.	\$	1,564.44
7070365001	ADVA FSP 150CC Open Introductory Training (3 day course). Per Course fee.	\$	14,080.00
7070366001	ADVA FSP 150CC Open Introductory Training (3 day course). Per Student fee.	\$	2,346.67
7070443001	Operating FSP3000 Agile Connect with High Density Shelf (DCI) (4 day course). Per Student fee.	\$	3,128.89
7072104001	ACE - ADVA Certified Expert - certification of 1 person- All regions	\$	782.22
	OSA Optical Cesium Clock Product Training (6hrs course classrom, 4hrs remote). Per course		
7081312001	fee.	\$	3,516.78
7070444001	Operating FSP3000 Agile Connect with High Density Shelf (DCI) (4 day course). Per course fee.	\$	18,773.33
7072410001	ADVA FSP 150 Advanced Course. Price per day.	\$	4,693.33
	ADVA FSP 150XG400 Operation and Maintenance Product Training. (3 day course) Per course		
7074338001	fee.	\$	14,080.00
	Develop and document minimum viable product requirements of the intended deployment		
	architecture including the network design and configuration guidelines, security requirements,		
7057534001	etc. in advance of implementation. (Senior engineer). Priced per hour.	\$	296.30
7022458001	Planning Service - Hourly rate	\$	355.56
7022290001	ADVA Project/Program Manager hourly rate	\$	355.56
	Technical Support in Customer's lab to validate final deployment configuration prior to		
7064072001	production roll out. Can be provided with onsite and/or remote support. Priced per hour.	\$	269.36
	Project Manager to develop a project plan (Gantt chart), establish regular cross-functional		
	meetings, provide regular status reports and manage the project action register throughout		
7057537001	the project lifecycle. Priced per week.	\$	6,464.65
	Develop and document minimum viable product requirements of the intended deployment		
	$architecture\ including\ the\ network\ design\ and\ configuration\ guidelines,\ security\ requirements,$		
7075661001	etc. in advance of implementation. (Senior engineer). Priced per week.	\$	10,774.41
	Project Management: Appointment of a senior Project Manager to guide and manage activities		
7075309001	throughout the ADVA deployment project lifecycle. Required for complex integrated solution deployments	\$	183.16
	Build and test Network Service Templates (NSTs) for initial launch services based on Customer	Y	103.10
7075310001	service offering(s). Priced per day.	\$	2,154.88