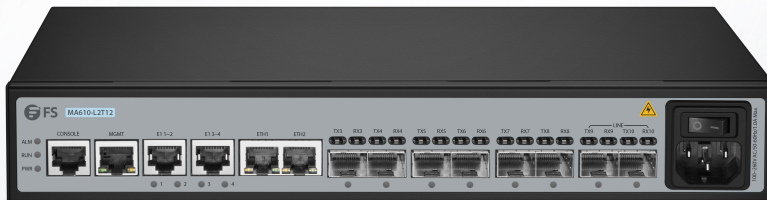


MA610-L2T12, 4x RJ45 and 6x SFP to 2x SFP+, 10G Muxponder

Multi-protocol, Multi-rate
Aggregation, Metro Access



Overview

FS's MA610-L2T12 is a highly integrated 10G muxponder for unified transport of different protocols: 2x E1 (RJ45), 2x FE/GE (RJ45), 2x FE/GE (SFP), 2x STM-1/4/16 (SFP), 2x OTU1/OTU2 (SFP/SFP+). It can aggregate services into a 10G uplink, with another dual 10G uplink trunks for full uplink and fiber protection. This muxponder is small in size and fits in multiple installation modes such as rack-, desk- and wall-mounted. It is a cost-effective 1U platform with low power consumption, ideal for customer located equipment.

This muxponder builds a physical isolation of services and provides highly reliable private line solutions for governments and enterprises, making it ideal for office, campus, and building interconnections.

Highlights

- High Density ½ Width 1U Modular, Small Integrated OTN Muxponder
- Multiple Interfaces Services Such as E1/FE/GE/STM for Access and Transmission
- OTN Hard Pipe to Build Physical Isolation and Provide High Network Security
- Three FEC Types Includes G.709 GFEC, EFEC I.4, etc. for Enhanced Performance
- Support Fiber Mode Conversion and Wavelength Conversion
- Support Tunable DWDM, WDM SFP/SFP+, SR, LR, etc.
- Suitable for Metro Access and Convergence Optical Transport Network

Technical Data

Items	Description
Client Interface	SFP RJ45
Service Types	E1/FE/GE/STM-1/4/16
Line Interface	SFP/SFP+
Line Interface Protocol	OTU1/OTU2
In-band Management	GCC0 on OTU2 or OTU1 GCC1 or GCC2 or GCC1+2 on ODU2 or ODU1 GCC1 or GCC2 or GCC1+2 on ODU0
Out-Band Management	10M/100M/1000M Duplex Ethernet Ports
Client Signal Mapping Mode	FE (GFP-F) <-> VC12<->VC4<-> ODU0 GE (GFP-F) <-> VC4 <-> ODU0 FE (GFP-F) <-> ODU0 GE (GFP-F) <-> ODU0
Line Signal Multiplexing Structure	WDM port OCh <-> OTU2 <-> ODU2 <-> ODU0 OCh <-> OTU1 <-> ODU1 <-> ODU0 Grey port OTU2 <-> ODU2 <-> ODU0 OTU1 <-> ODU1 <-> ODU0
FEC Types	OTU1 G.709 GFEC or EFEC I.4 or EFEC I.7 OTU2 G.709GFEC
Ethernet OAM	Supported
Qos	Supported
Transmission Protection	SNC/N, SNC/I, SNC/S, OCh1+1
LAG	Supported

Technical Data

Items	Description
Ethernet Private Line (EPL) Service	Supported
Ethernet Virtual Private Line (EVPL) Service	Support multiple Ethernet layer 2 service aggregation Support Ethernet service layer 2 forwarding
Flow Control	Support flow control based on IEEE 802.3x
Speed Limit	Support speed limit function based on port or port + VLAN service
Consumption	50W (Typical)
Dimension (HxWxD)	1.73"×11.42"×8.66" (44×290×220mm)
Operating Temperature	-10°C to 55°C (14 to 131°F)
Storage Temperature	-40 to 70°C (-40 to 158°F)
Humidity	5% to 95%
Input Range	AC (100~240VAC)

Ordering Information

Mux Demux & OADM		
	FMU-D402160M3	40 Channels 100GHz C21-C60, with 1310nm and Monitor Port, 3.5dB Typical IL, LC/UPC, Dual Fiber DWDM Mux Demux, 1U Rack Mount #35887
DWDM MUX DEMUX	M6200-D2160M	40 Channels 100GHz C21-C60 Dual Fiber DWDM Mux and Demux with Monitor Port, Pluggable Module, LC/UPC, Integrated with M6200 Series Managed Chassis #120424
	FMU-D162136EM3	16 Channels 100GHz C21-C36, with Monitor, Expansion and 1310nm Port, LC/UPC, Dual Fiber DWDM Mux Demux, 1U Rack Mount #72430
	FMU-MD085360EM3	CWDM/DWDM Hybrid Solution, 8 Channels 100GHz C53-C60, with Monitor, Expansion and 1310nm Port, LC/UPC, Dual Fiber DWDM Mux Demux, FMU Plug-in Module #72433
CWDM MUX DEMUX	FMU-C182761M	18 Channels 1270-1610nm, with Monitor Port, LC/UPC, Dual Fiber CWDM Mux Demux, 1U Rack Mount #33489
	FMU-MC084761EM	8 Channels 1470-1610nm, with Monitor and Expansion Port, LC/UPC, Dual Fiber, Low Insertion Loss CWDM Mux Demux, FMU Plug-in Module #78163
LWDM MUX DEMUX	ABS-L042930A	4 Channels 1295.56-1309.14nm, Single Fiber LAN-WDM Mux Demux, Side-A, ABS Pigtailed Module, LC/UPC #97782
	ABS-C062737A	6 Channels 1271-1371nm, Single Fiber CWDM Mux Demux, Side-A, ABS Pigtailed Module, LC/UPC #97784
OADM	DOADM-DF	Customized Dual Fiber & Single Fiber DWDM OADM #70427
	COADM-DF	Customized Dual Fiber & Single Fiber CWDM OADM #70425
Chassis	FMU-1UFMX-N	FMU 2-Slot 1U 19" Rack Chassis Unloaded, holds up to 2 Units FMU Plug-in Module #30408
	FUD-1UFMX-N	FUD 4-Slot 1U 19" Rack Chassis Unloaded, holds up to 4 Units FUD Plug-in Module #106578
TRANSPONDERS & MUXPONDERS		
8x 200G	M6800-TSP16	16x 100G QSFP28 to 8x 200G CFP2 OTN Managed Transport Platform#111053
100G/200G	M6500-TMXP5	2x 100G QSFP28/4x 40G QSFP+ to 1x 200G CFP2 Transponder/Muxponder#111049
	M6200-OEO100G	3 Channels 40G & 100G WDM Transponder, QSFP28 to QSFP28, QSFP+ to QSFP+ #129994
10G	M6200-OEO10G	5 Channels WDM Transponder (Converter), 10 SFP/SFP+ Slots#107365
	M6500-CH2U	2U Managed Chassis Unloaded Platform, Supports 2x 200G Transponder/Muxponder #96454
Chassis	M6500-CH5U	5U Managed Chassis Unloaded Platform, Supports 6x 200G Transponder/Muxponder #111050
	M6200-CH2U	2U Managed Chassis Unloaded Platform, Supports 7x Mux/DEMUX/EDFA/OEO/OLP/DCM Cards #107371
	M6200-CH5U	5U Managed Chassis Unloaded Platform, Supports 15x MUX/DEMUX/EDFA/OEO/OLP/DCM Cards #111052

OPEN LINE SYSTEM

Amplifiers	M6200-25PA	25dB Gain DWDM EDFA Pre-Amplifier, 16dBm Output#107367
	M6200-20BA	20dBm Output DWDM EDFA Booster Amplifier, 16dB Gain#107366
Dispersion Compensation	M6200-DCM40	40KM DCF-based Passive Dispersion Compensation Module#107370
	M6200-DCM80	80KM DCF-based Passive Dispersion Compensation Module#119071
Line Protection	M6200-OLP2	1+1 Optical Line Protection Switch (OLP)#107368
Red/Blue Filter	M6200-RB	1x2 Single Fiber DWDM Red/Blue Filter#107369
VOA Units	M6200-SFPVOA	SFP Variable Optical Attenuator Module#107373
	AT-M-LCU	Fixed Fiber Optic Attenuators #70009
Chassis	M6200-CH2U	2U Managed Chassis Unloaded Platform, Supports 7x Mux/DEMUX/EDFA/OEO/OLP/DCM Cards #107371
	M6200-CH5U	5U Managed Chassis Unloaded Platform, Supports 15x MUX/DEMUX/EDFA/OEO/OLP/DCM Cards #111052

WDM TRANSCEIVERS

100G/200G CFP2	M-CFP2-DCO	C14 1566.31nm 100G/200G Tunable CFP2-DCO Coherent Transceiver, up to 1000km #120128
	DWDM-SFP25G-10	25G DWDM SFP28 100GHz 1563.86nm 10km DOM LC SMF Optical Transceiver Module #87000
25G SFP28	CWDM-SFP25G-40S	25G 1270nm CWDM SFP28 40km DOM LC SMF Optical Transceiver Module #100112
	CWDM-SFP25G-10SP	25G 1270nm CWDM SFP28 10km DOM LC SMF Optical Transceiver Module #76003
	LWDM-SFP25G-40	25G LWDM SFP28 1286.66nm 40km DOM LC SMF Optical Transceiver Module #93786
16G/8G FC	DWDM-SFP16G-40	Customized 16G DWDM SFP+ C20-C61 100GHz 40km DDM LC SMF Transceiver Module#73084
	DWDM-SFP16GH-40	Customized 16G DWDM SFP+ 50GHz 40km DDM LC SMF Transceiver Module #73085
	CWDM-SFP16G-40	Customized 16G Fiber Channel CWDM SFP+ 1470-1610nm 40km DDM LC SMF Transceiver Module #80765

	DWDM-SFP10G-80	10G DWDM SFP+ 1559.79nm 80km DOM LC SMF Transceiver Module, Commercial Temperature#31237, Industrial Temperature#113562
	DWDM-SFP10G-40	10G DWDM SFP+ 1560.61nm 40km DOM LC SMF Transceiver Module, Commercial Temperature#38731, Industrial Temperature#113511
10G SFP+	DWDM-SFP10G-C	10G DWDM C-band Tunable SFP+ 50GHz 80km DOM LC SMF Transceiver Module #69267
	CWDM-SFP10G-80L	10G CWDM SFP+ 1470nm 80km DOM LC SMF Transceiver Module #19367
	CWDM-SFP10G-40S	10G CWDM SFP+ 1270nm 40km DOM LC SMF Transceiver Module, Commercial Temperature#22168, Industrial Temperature#112392
	DWDM-SFP1G-EZX	1000BASE-DWDM SFP 100GHz 1563.86nm 100km DOM LC SMF Transceiver Module #54150
1G SFP	DWDM-SFP1G-ZX	1000BASE-DWDM SFP 1563.86nm 80km DOM LC SMF Transceiver Module #47697
	CWDM-SFP1G-EZX	1000BASE-CWDM SFP 1270nm 120km DOM LC SMF Transceiver Module #102776
	CWDM-SFP1G-ZX	1000BASE-CWDM SFP 1270nm 80km DOM LC SMF Transceiver Module #33234

*Standard products are listed above. Customized specifications are available upon request.



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