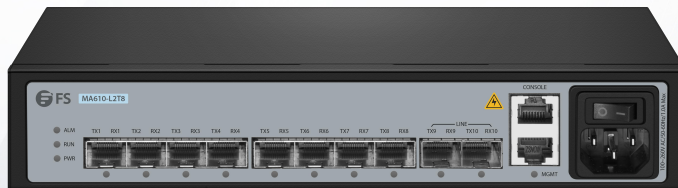


# MA610-L2T8, 8x SFP to 2x SFP+, 10G Muxponder

Multi-protocol, Multi-rate  
Aggregation, Metro Access



## Overview

FS's MA610-L2T8 is a highly integrated 10G muxponder for unified transport of different protocols: 6x FE/GE, 2x FE/GE/STM-1/4/16, 2x OTU1/OTU2. 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 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
<b>Client Interface</b>	SFP
<b>Service Types</b>	FE/GE/STM-1/4/16
<b>Line Interface</b>	SFP/SFP+
<b>Line Interface Protocol</b>	OTU1/OTU2
<b>In-band Management</b>	GCC0 on OTU1
	GCC0 on OTU2
	GCC1 or GCC2 or GCC1+2 on ODU2 or ODU1
	GCC1 or GCC2 or GCC1+2 on ODU0
<b>Out-Band Management</b>	10M/100M/1000M Duplex Ethernet Ports
<b>Client Signal Mapping Mode</b>	FE (GFP-F) <-> ODU0
	GE (GFP-F) <-> ODU0
<b>Line Signal Multiplexing Structure</b>	WDM port
	OCh <-> OTU2 <-> ODU2 <-> ODU0
	OCH <-> OTU1 <-> ODU1 <-> ODU0
	Grey port
	OTU2 <-> ODU2 <-> ODU0
	OTU1 <-> ODU1 <-> ODU0
<b>FEC Types</b>	OTU1 G.709GFEC
	OTU2 G.709 GFEC or EFEC I.4 or EFEC I.7
<b>Ethernet OAM</b>	Supported
<b>Qos</b>	Supported
<b>Transmission Protection</b>	SNC/N, SNC/I, SNC/S, OCh1+1
<b>LAG</b>	Supported

## Technical Data

Items	Description
<b>Ethernet Private Line (EPL) Service</b>	Supported
<b>Ethernet Virtual Private Line (EVPL) Service</b>	Support multiple Ethernet layer 2 service aggregation
	Support Ethernet service layer 2 forwarding
<b>Flow Control</b>	Support flow control based on IEEE 802.3x
<b>Speed Limit</b>	Support speed limit function based on port or port + VLAN service
<b>Consumption</b>	50W (Typical)
<b>Dimension (HxWxD)</b>	1.73"×9.53"×8.66" (44×242×220mm)
<b>Operating Temperature</b>	-10°C to 55°C (14 to 131°F)
<b>Storage Temperature</b>	-40 to 70°C (-40 to 158°F)
<b>Humidity</b>	5% to 95%
<b>Input Range</b>	AC (100~240VAC)

## Ordering Information

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

## OPEN LINE SYSTEM

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

## WDM TRANSCEIVERS

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

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