

# 200G Transponder, 1U Rack Mount

Up to 1.6T Capacity, 16x QSFP28 to 8x CFP2, 1U 19" Rack Mount



#### Description

The 1.6T transponder is an OTN transmission platform customized for Data Center Interconnect (DCI) applications. It's up to eight single wavelength 200G channels, with 8x 200G CFP2 coherent optics uplinks on the line side, and 16x 100G OSFP28 on the client side.

Its large transmission capacity, adaptation to installation conditions in DC equipment rooms, and simple management mode provide an optimal user experience on DCI carrier networks.

## Highlight

- High transport capacity of 1.6T in 1U chassis
- Support 16x 100G QSFP28 client interfaces
- Support 8x 8QAM/16QAM modulation coherent CFP2 line interfaces
- Support WEB, SNMP v2 management
- Support GCC0/1/2 in-band management
- Individually controlled dual AC power supply and fan unit
- Coherent detection removes the need for dispersion compensation

#### **Application**

- 1.6T connectivity for DCI and colocation providers
- 1.6T connectivity for cloud and internet exchange



# Technical Specifications

#### Line Interface

Parameter	Description
Line Interface Type	8x 200G CFP2
Line Interface Protocol	Coherent CFP2
Coherent Modulation Technology	8QAM/16QAM
Transmit Rate	200Gbit/s
OSNR Sensitivity	18dB/ 8QAM 20dB/ 16QAM
Wavelength Range of Input Signal	1528~1568nm
Channel Spacing	50GHz
Dispersion Tolerance	20,000ps/nm 8QAM 16,000ps/nm 16QAM
FEC Support	Non-diff 15% SD-FEC 8QAM Non-diff 15% SD-FEC 16QAM

## Client Interface

Parameter	Description
Client Interface Type	16x 100G QSFP28
Client Interface Protocol	100G
FEC Support	G.709 Regular FEC, RS-FEC

# Management

Parameter	Description
Management Interface	2x RJ45 network interface 1x Mini USB serial port
Out-band Management	Web, SNMP v2
In-band Management	GCC 0/1/2



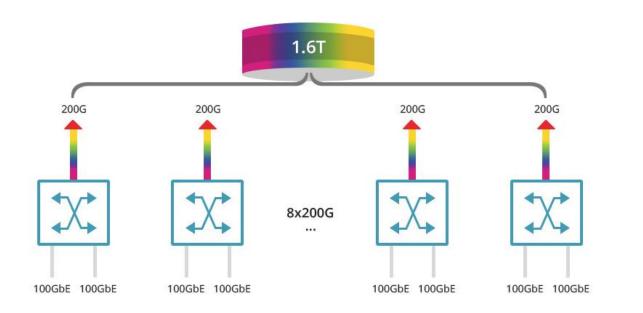
## Physical Specification

Parameter	Description
Power Supply	Dual power, 100V-240VAC
Power Consumption	Max.360W
Operating Temperature	0 to 45° C
Storage Temperature	-40 to 70° C
Dimension(H*W*D	1.73"x14.5"x1 <b>3.39</b> " (44x442x3 <b>4</b> 0mm)

Note: The device comes with dual AC power supply in default, DC power can be customized, please contact sales@fs.com for more details.

#### **Function Diagram**

The 200G OTN transponder provides a high transport capacity of 200G over a single wavelength, it aggregates 2x 100G services into a single 200G uplink. One 200G OTN transponder can provide high transport capacity up to 1.6T capacity in a 1U chassis.

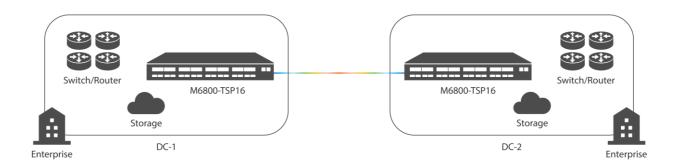




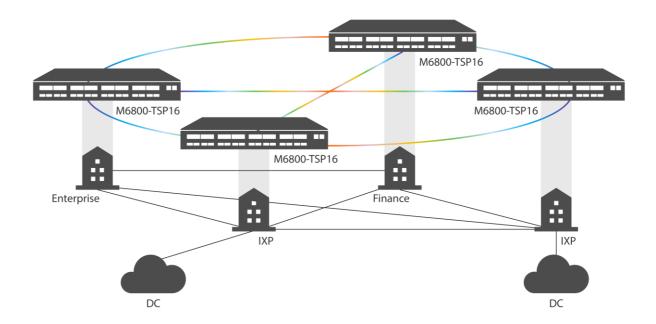
#### **Applications**

M6800 TSP16 is an optical-electrical integrated OTN transmission device designed for Data Center Interconnect (DCI), which is widely applicable to DCI scenarios for industries and enterprises with high digitalization, including IXPs, finance, large enterprises and etc. It also enables easy scaling of existing network capacity without replacing exiting OTN/DWDM infrastructure.

#### ① Small-sized Networks---Point-to-point Network

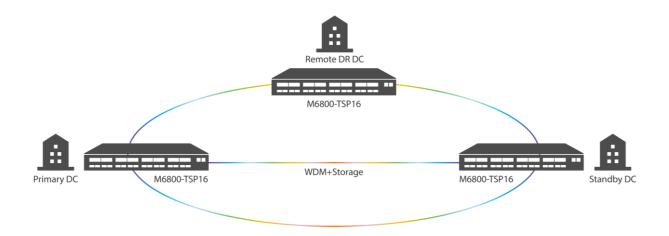


#### 2 Medium-and Large-sized Networks---Mesh Network





## ③ Disaster Recovery---Ring Network



#### Accessories



Power Cord x2



Console Cable x1



Ethernet Cable x1



CD x1



Mounting Bracket x2



Cable Manager x1



ESD Wrist Strap x1



Grounding Cable x1



M6 Screw Set x4



M4 Screw x8



# 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
TRANSPONDE	RS & 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
10G	M6200-OEO10G	5 Channels WDM Transponder (Converter), 10 SFP/SFP+ Slots#107365
Chassis	<u>M6500-CH2U</u>	2U Managed Chassis Unloaded Platform, Supports 2x 200G Transponder/Muxponder #96454
	<u>M6500-CH5U</u>	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 Amplifer, 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 TRANSCE	EIVERS	
100G/200G CFP2	M-CFP2-DCO	C14 1566.31nm 100G/200G Tunable CFP2-DCO Coherent Transceiver, up to 1000km #120128
25G SFP28	DWDM-SFP25G-10	25G DWDM SFP28 100GHz 1563.86nm 10km DOM LC SMF Optical Transceiver Module #87000
	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



10G SFP+	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
	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
1G SFP	DWDM-SFP1G-EZX	1000BASE-DWDM SFP 100GHz 1563.86nm 100km DOM LC SMF Transceiver Module #54150
	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

 $<sup>{}^{\</sup>star}\text{Standard products are listed above. Customized specifications are available upon request.}$ 









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