

DWDM Erbium Doped Fiber Amplifier

OTN Solutions for Metro, Regional & Long Haul



Description

The multi-channel erbium doped fiber amplifier(EDFA) features stable output power, low noise and power consumption. The kernel components of the product are high-availability pump laser and high-performance gain flattening filters.

Both input and output signals are sampled and monitored with a feedback circuit. AGC (Automatic Gain Control) circuit is designed into the amplifier to ensure high output power stability and reliability.

Features

- Prevent the eyes from highlight
- Support single and dual fiber operation
- Highly integrated with FMT management platform
- Support up to 48ch DWDM wavelengths in the C-band
- Support AGC (Automatic Gain-Control) operation modes
- Front panel blue display, show various main work status parameters
- Online status LEDs and LCD for monitoring and alarm on the EDFA input and output

Application

- C-band 40CH DWDM
- Other optical systems

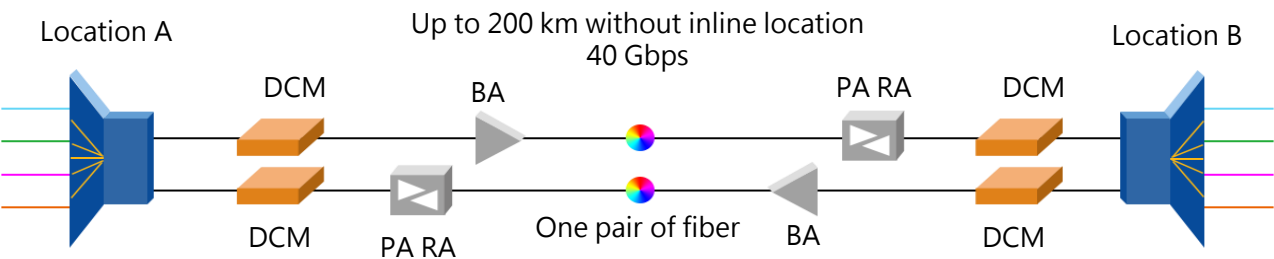
Product Specifications

Parameters	Symb	Min	Typ	Max
Operating Wavelength(nm)(1)	λ_c	1528	--	1564
Saturate Output Power(dBm)	Po	--	--	22
Input Power(dBm)(2)	Pi	-30	--	+5
Gain(dB)	G	15	--	33
Noise Figure(dB)	NF	--	4.5	6
Power/Gain Stability(dB)	ΔP_o	--	± 0.05	± 0.2
Input Isolation(dB)	ISOi	30	--	--
Output Isolation(dB)	ISOo	30	--	--
Flatness(dB)	GF	--	1	1.5
Return Loss(dB)	RL	45	--	--
PDG(dB)	PDG	--	--	0.3
PMD(ps)	PMD	--	--	0.3
Operation Temperature($^{\circ}\text{C}$)	--	-5	--	55
Storage Temperature($^{\circ}\text{C}$)	--	-40	--	80
Consumption(W)	P	--	--	10
Optical Connectors	LC/UPC			

Notes:
1.Operating wavelength range (1528~1564nm) can be customized.
2.The input power can be selected in -30~+12dB.

EDFA for DWDM Network up to 200 km

The DWDM EDFA is a low-noise, gain-flattened C-band optical erbium doped fiber amplifier (EDFA) designed to extend the distance in dense wavelength-division multiplexing (DWDM) optical infrastructure. It provides customers with the capability to extend their 100GHz, up to 40 channels, 2.5Gbps, or 10Gbps optical infrastructure over greater distances.



Dimensions

4-slot 1U managed chassis, supports up to 4x multiplexer/EDFA/OEO/OLP card with accessories:

- Width: 482.6mm(19")
- Height: 44.50mm(1.75")
- Depth: 300mm(11.81")

EDFA plug-in card occupies one slot.



Ordering Information

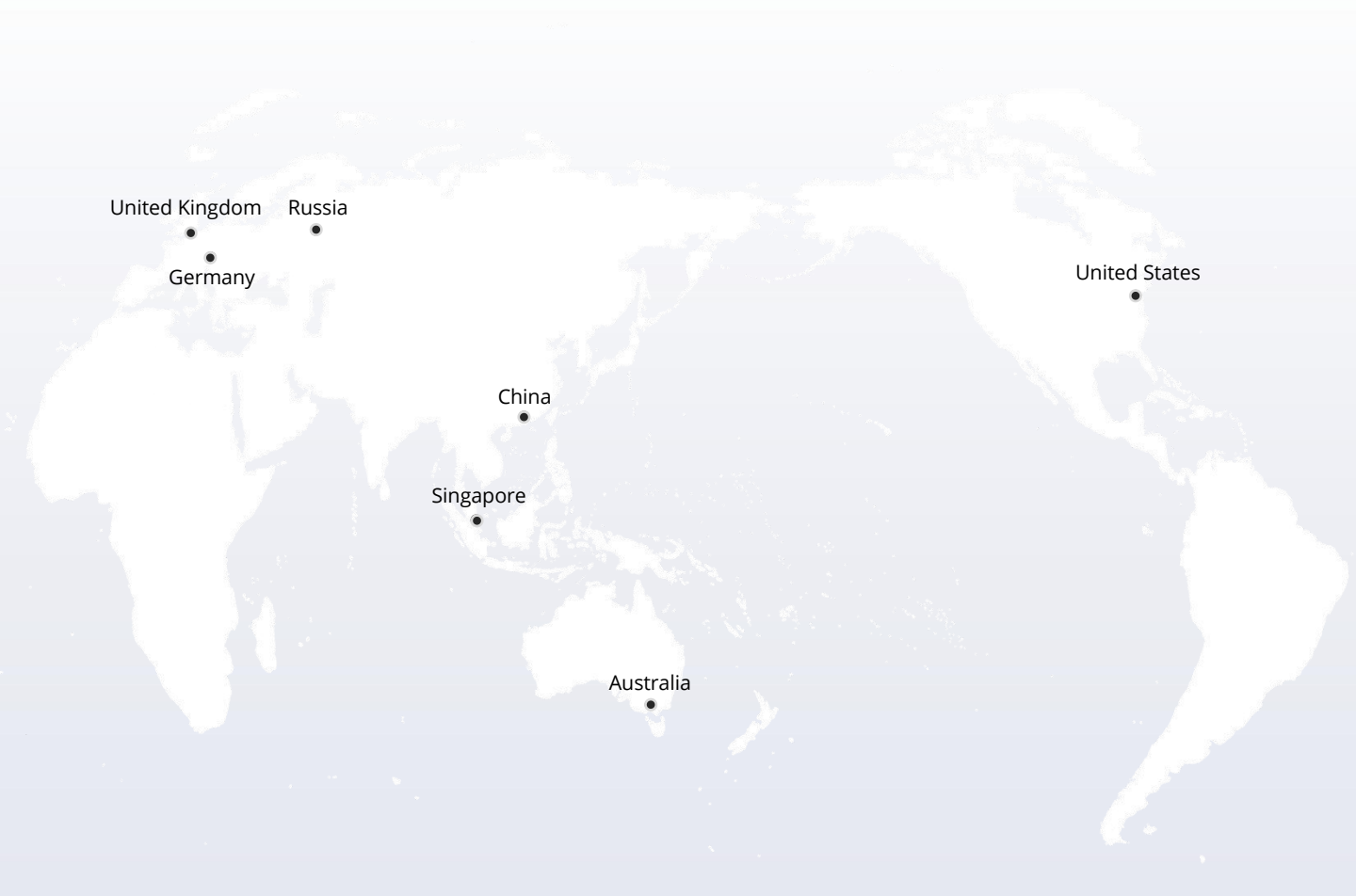
Mux Demux & OADM		
DWDM MUX DEMUX	FMU-D402160M3	40 Channels 100GHz C21-C60, with 1310nm and Monitor Port, 3.5dB Typical IL, LC/UPC, Dual Fiber DWDM Mux Demux, 1U Rack Mount #35887
	M6200-D2160M	40 Channels 100GHz C21-C60 Dual Fiber DWDM Mux and Demux with Monitor Port, Pluggable Module, LC/UPC, Integrated 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		
25G	FMT4DL-OEO25GSFP28	4 Channels 25G WDM Transponder (Converter), 8 SFP28/SFP+ Slots#92056
10G	FMT4DL-OEO10GSFP	4 Channels WDM Transponder (Converter), 8 SFP/SFP+ Slots#30515
Chassis	FMT04-CH1U	1U Managed Chassis Unloaded Platform, Supports up to 4x EDFA/OEO/OLP Card with Accessories #39214
	FMT-CH	Customized 1U/2U/4U Managed Chassis Unloaded, Supports up to 16x Multiplexer/EDFA/OEO/OLP Module with Accessories #70413

OPEN LINE SYSTEM

Amplifiers	FMT26PA-EDFA	26dB Gain DWDM EDFA Pre-Amplifier, 16dBm Output#36524
	FMT20PA-EDFA	20dB Gain DWDM EDFA Pre-Amplifier, 13dBm Output#72284
	FMT17BA-EDFA	17dBm Output DWDM EDFA Booster Amplifier, 17dB Gain #72283
	FMT-LA	In-Line EDFA for DWDM Solution#35924
Dispersion Compensation	FMT40-DCM	40KM DCF-based Passive Dispersion Compensation Module#65781
	FMT80-DCM	80KM DCF-based Passive Dispersion Compensation Module#65779
	FS-TDCM	C-band Tunable Dispersion Compensation Module (TDCM)#72427
	FMT-OLP2	1+1 Optical Line Protection Switch (OLP)#66010
Line Protection	FMT-BDOLP	FMT-BDOLP, Optical Line Protection Switch (OLP)#72700
	FMT-BDSplitter	FMT-BDSplitter, Optical Splitter#73324
Red/Blue Filter	FMT-RB	1x2 Single Fiber DWDM Splitter Red/Blue C Band Filter#65981
	FMT-OPD	4 Channels 1550nm Optical Power Detection OPD (AIU)#78568
	FMT-OPM	Optical Performance Monitoring (OPM)#71586
Fiber Monitoring	FMT-OSW	1x16 Multi-Channel Opto-Mechanical Optical Switches with Adjustable Channels Control#73287
	FMT-OTDR	Optical Time Domain Reflectometer (OTDR)#73281
	FMT-LSU	LSU Light Source Unit, Pluggable Module for FMT Multi-Service Transport Platform#78469
VOA Units	FS-VOA-C	Variable Optical Attenuator, 0~15dB, Pluggable Module, LC/UPC#65271
	AT-M-LCU	Fixed Fiber Optic Attenuators #70009
Chassis	FMT04-CH1U	1U Managed Chassis Unloaded Platform, Supports up to 4x EDFA/OEO/OLP Card with Accessories #39214
	FMT-CH	Customized 1U/2U/4U Managed Chassis Unloaded, Supports up to 16x Multiplexer/EDFA/OEO/OLP Module with Accessories #70413

WDM TRANSCEIVERS

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



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