

DWDM Erbium Doped Fiber Amplifier

OTN Solutions for Metro, Regional & Long Haul



Overview

The FMT array EDFA integrates multiple EDFAs with parallel functions into one module, with each EDFA working independently, providing excellent dynamic performance. FMT array EDFA can be used different types of OADM applications and active/passive ring applications. It can amplify the optical signal more than 120km long distance transmission scenarios. In addition, the amplifiers can be configured and monitored through MonitorOnline, which can help you manage your network more conveniently and efficiently.

FMT Series provides cost-effective and flexible WDM solutions. It has a variety of optical layer boards and provides excellent optical performance, and can be applied to DWDM dual-fiber/DWDM single-fiber/optical cable monitoring systems, to meet the diverse needs of scenarios.

Benefits

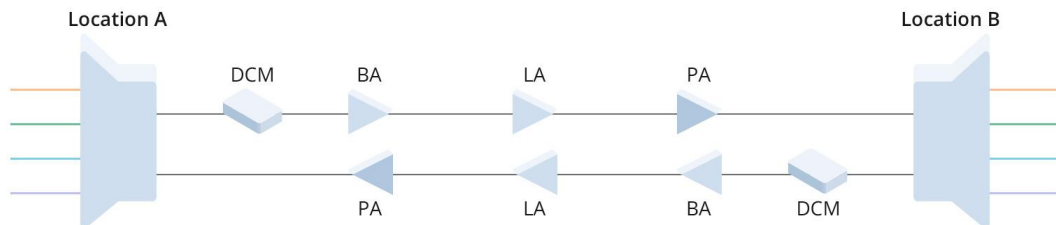
- Output Power: 13-20 dBm Per Port
- Up to 4 Output Ports
- Support Up to 40/48 Wavelengths
- Support AGC Operation Modes

Technical Specification of the Amplifiers

Physical Specification	FMTBA-Array	FMTPA-Array
Amplifier Type	Booster Amplifier	Pre-amplifier
Operation Wavelength	1528nm~1564nm(40CH C-band) 1528nm~1568nm(48CH Extended C-band)	1528nm~1564nm(40CH C-band) 1528nm~1568nm(48CH Extended C-band)
Total Number of Channels Supported	40CH/48CH	40CH/48CH
Channel Spacing	100GHz	100GHz
Custom Optical Gain	10/14/17/18/20/24dB	16/20/24/26/35dB
Gain Flatness	≤1.5dB (1dB typical)	≤1.5dB (1dB typical)
Input Power	-23dBm~12dBm	-30dBm~5dBm
Custom Saturated Output Power	13/17/20dBm	13/17/20dBm
Polarization Mode Dispersion (PMD)	≤0.3ps	≤0.3ps
Polarization Dependent Gain (PDG)	≤0.3dB	≤0.3dB
Noise Figure	≤6dB (4.5dB typical)	≤6dB (4.5dB typical)
Power Consumption	≤10W	≤10W
Optical Connector	LC/UPC LC/APC SC/UPC SC/APC	LC/UPC LC/APC SC/UPC SC/APC
Management	SNMP, Monitor Online, Simple Management Tool	SNMP, Monitor Online, Simple Management Tool
Operation Mode	AGC	AGC
For Use With	FMT managed chassis	FMT managed chassis
Weight	0.42kg	0.42kg
Relative Humidity	5% ~ 95%(Non-condensing)	5% ~ 95%(Non-condensing)
Temperature	Operating: -10 to 60°C (14 to 140°F) Storage: -20 to 75°C (-4 to 171°F)	Operating: -10 to 60°C (14 to 140°F) Storage: -20 to 75°C (-4 to 171°F)

EDFA for DWDM Network up to 120 km

The DWDM EDFA is a low-noise, gain-flattened C-band/extended 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 optical infrastructure over greater distances



Managed Chassis Introduction

4-slot 1 U managed chassis, supports multiple FMT series business modules with accessories.



NMU Module

NMU (Network Management Unit) module provides a strong ability in data processing, supporting the function module rapid configuration and intelligent management.

Blank Plate

Used for FMT series business modules, which are designed as 1-slot or 2-slot type to match the managed chassis:

1-slot module: OEO, DWDM EDFA, OLP, VOA, DWDM Red/Blue Filter, OPD, etc;

2-slot module: DCM, EYDFA, SOA, OTDR, OPM, etc.

Cooling Fan

Intelligent temperature control system and optimized design of ventilation, ensuring high stability and reliability.

Power Supply

Pluggable 1+1 redundant power, providing stable power supply for the equipment. Dual AC/DC power is optional.

Goounding Screw

The groundding screw is used to connect with the ground wire to avoid electric shock.

Ordering Information

Chassis		
1U	FMT04-CH1U	FMT04-CH1U, 1U Managed Chassis Unloaded Platform, Supports up to 4x EDFA/OEO/OLP Card #39214
1U/2U/4U	FMT-CH	Customized 1U/2U/4U Managed Chassis Unloaded, Supports up to 16x Multiplexer/EDFA/OEO/OLP Module with Accessories #70413
Transponder		
10G	FMT4DL-OEO10GSFP	FMT4DL-OEO10GSFP, 4 Channels WDM Transponder (Converter), 8 SFP/SFP+ Slots #30515
25G	FMT4DL-OEO25GSFP28	FMT4DL-OEO25GSFP28, 4 Channels 25G WDM Transponder (Converter), 8 SFP28/SFP+ Slots #92056
Optical Amplifiers		
Pre-amplifier	FMT20PA-EDFA	FMT20PA-EDFA, 20dB Gain DWDM EDFA Pre-Amplifier, 13dBm Output #72284
	FMT26PA-EDFA	FMT26PA-EDFA, 26dB Gain DWDM EDFA Pre-Amplifier, 16dBm Output #36524
	FMT26PA-51EDFA	FMT26PA-51EDFA, 26dB Gain Extended C-Band DWDM EDFA Pre-amplifier, 20dBm Output #248135
	EDFA-PA	Customized Pre-Amplifier EDFA for DWDM Solution #35925
Booster Amplifier	FMT17BA-EDFA	FMT17BA-EDFA, 17dBm Output DWDM EDFA Booster Amplifier, 17dB Gain #72283
	FMT17BA-51EDFA	FMT17BA-51EDFA, 17dB Gain Extended C-Band DWDM EDFA Booster Amplifier, 20dBm Output #248133
	EDFA-BA	Customized Booster EDFA for DWDM Solution #35926
In-line Amplifier	EDFA-LA	Customized In-Line EDFA for DWDM Solution #35924
High Power Amplifier	HPA	Customized FTTx PON High Power 1550nm EYDFA #65789
SOA	FS-SOA	Customized 1310nm Semiconductor Optical Amplifier (SOA) #69350
Array EDFA	FMTPA-Array	Customized Multiports DWDM Array EDFA Pre-amplifier #248139
	FMTBA-Array	Customized Multiports DWDM Array EDFA Booster Amplifier #248137
DCMs		
40KM	FMT40-DCM	FMT40-DCM, 40KM DCF-based Passive Dispersion Compensation Module #65781
80KM	FMT80-DCM	FMT80-DCM, 80KM DCF-based Passive Dispersion Compensation Module #65779
10-140KM	FS-DCM	Customized DCF-based Dispersion Compensation Module #65783
-20~+20KM -40~+40KM	FS-TDCM	Customized C-band Tunable Dispersion Compensation Module (TDCM) #72427
Line Protection		
OLP	FS-OLP	Customized Optical Line Protection Switch (OLP) #34720
	FMT-BDOLP	Customized BIDI Optical Line Protection Switch (OLP) #72700
BIDI Splitter	FMT-BDSplitter	FMT-BDSplitter, Optical Splitter #73324

Ordering Information

Fiber Monitoring		
OPD	FMT-4OPD	FMT-4OPD, 4 Channels 1550nm Optical Power Detection OPD (AIU) #78568
	FMT-OPD	Customized Optical Power Detection OPD (AIU) #70941
LSU	FMT-LSU	Customized LSU Light Source Unit, Pluggable Module for FMT Multi-Service Transport Platform #78469
OSW	FMTOSW-1x16	Customized 1x16 Multi-Channel Opto-Mechanical Optical Switches with Adjustable Channels Control #73287
OPM	FMT-OPM	FMT-OPM, Optical Performance Monitoring (OPM) #71586
OTDR	FMT-OTDR	Customized Optical Time Domain Reflectometer (OTDR) #73281
Accessories		
Power Supply	FMT124U-PS	Customized Power Supply Module Tailored for FMT 1U/2U/4U Managed Chassis #66922
Cooling Fan	FMT1U-FAN	Cooling Fan Card Tailored for FMT 1U Managed Chassis #66916
	FMT-FAN	Customized Cooling Fan Module Tailored for FMT 1U/2U/4U Managed Chassis #70414
Red/Blue Filter	FSBR-1x2	Customized 1x2 Single Fiber DWDM Splitter Red/Blue C Band Filter #65981
VOA Units	FS-VOA-C	Customized Variable Optical Attenuator, 0~15dB, LC/UPC #65271
NMU	FMT-MING-S	FMT-MNG-S, Network Management Unit for FMT 1U, 2U and 4U Managed Chassis , 2x 100Base-X SFP Ports, 2x 10/100Base-T RJ45 Ports #66915