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HPA Data Sheet

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Product Overview

The EYDFA, based on multi-mode pumping and Er/Yb double-clad fiber technology, delivers high output power up to 23dBm. With multiple output port options (4/8/16 ports), it meets diverse user needs. It is designed for maximum configuration flexibility, with pluggable modules that plug directly into the FMT managed chassis, each module occupying two slots.

Offering exceptional output power stability, the EYDFA is ideal for high-quality CATV services with multiple branching points and for use in Passive Optical Networks (PON). In addition, it can facilitate an integrated cost-effective and flexible optical layer solution by incorporating a variety of optical layer boards, such as OEO/EDFA/DCM/MUX/OSW/OLP/R/B, and can be applied to DWDM dual and single fiber networks to meet the diverse needs of scenarios.



Features and Benefits

- 5dB Low Noise Figure Ensures High OSNR, Improving Transmission Quality
- 4/8/16 Output Ports are Optional for Diverse Needs
- Selectable Input and Output Power per Path for Optimized Signal Quality
- Facilitate an Integrated Optical Layer Solution by Incorporating OEO/EDFA/DCM/MUX/OSW/OLP/R/B
- Suitable for PON and CATV Networks
- Support SNMP, Monitor Online, Simple Management Tool
- Fit into Two Slots of the [FMT Managed Chassis](#)

Application

- Analog and Digital CATV Optical Network
- FTTH
- Tri-networks integration
- Free space communications
- R&D

Optical Characteristics

Operating Wavelength	1540-1564nm	Max Output Power	26dBm
Output Per Path	26dBm	Output Port Number	1
Input Power	-10~10dBm	Noise Figure	5dB
Input Isolation	≥30dB	Output Isolation	≥30dB
Consumption	≤35W	Gain Stability	±0.05dB
Fiber Optic Interface	LC/UPC or LC/APC		

Electrical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Power Supply	Vps	170	—	264	VAC
Consumption	P	—	—	50	W

Environmental Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	Tw	-5	—	60	℃
Storage Temperature	Ts	-40	—	80	℃
Humidity (1)	—	10	—	85	%

Customized Information

Housing	Pluggable Module		Standalone		
Output Ports	4 Ports	8 Ports	16 Ports		
WDM	Without				
Output Per Path	13dBm 19dBm	15dBm 20dBm	17dBm 21dBm	18dBm 22dBm	23dBm
Input Power	-8dBm~10dBm		-3dBm~10dBm	0dBm~10dBm	5dBm~15dBm
Connector	LC/UPC	LC/APC			

Layout and Dimensions



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

Ordering Information

Mux Demux & OADM		
DWDM MUX DEMUX	FMU-D402160M	40 Channels DWDM Mux Demux, 100GHz C21-C60, with Monitor Port, 3.0dB Typical IL, LC/UPC, Dual Fiber, FMU 1U Rack Mount#33485
	FMU-D402160M3	40 Channels DWDM Mux Demux, 100GHz C21-C60, with Monitor and 1310nm Port, 3.5dB Typical IL, LC/UPC, Dual Fiber, FMU 1U Rack Mount#35887
	FMU-D162136EM3	16 Channels DWDM Mux Demux, 100GHz C21-C36, with Monitor, Expansion and 1310nm Port, 4.4dB Typical IL, LC/UPC, Dual Fiber, FMU 1U Rack Mount#72430
	FMU-MD085360EM3	8 Channels DWDM Mux Demux, 100GHz C53-C60, with Monitor, Expansion and 1310nm Port, 3.0dB Typical IL, LC/UPC, Dual Fiber, FMU Plug-in Module#72433
	FMU-FD402160M3	40 Channels DWDM Mux Demux, 100GHz C21-C60, with Monitor and 1310nm Port, 4.5dB Typical IL, LC/UPC, Dual Fiber, FMU 1U Rack Mount#84492
	FHD-D82128EM3	8 Channels DWDM Mux Demux, 100GHz C21-C28, with Monitor, Expansion and 1310nm Port, 2.4dB Typical IL, LC/UPC, Dual Fiber, High Density, FHD Plug-in Module#126899
	FMT-OMD	FMT-OMD, Customized DWDM Dual-fiber Mux/Demux for FMT Managed Chassis#317057
CWDM MUX DEMUX	FMT-OMD-SF	FMT-OMD-SF, Customized DWDM Single-fiber Mux/Demux for FMT Managed Chassis#317055
	FMU-C182761M	18 Channels CWDM Mux Demux, 1270-1610nm, with Monitor Port, 5.0dB Typical IL, LC/UPC, Dual Fiber, FMU 1U Rack Mount#33489
	FMU-MC042733	4 Channels CWDM Mux Demux, 1270-1330nm, 1.0dB Typical IL, LC/UPC, Dual Fiber, FMU Plug-in Module#42972
	FMU-MC09B	9 Channels CWDM Mux Demux, 1290-1610nm, 2.4dB Typical IL, LC/UPC, Single Fiber, Side-B, FMU Plug-in Module#43699
	FMU-MC09A	9 Channels CWDM Mux Demux, 1270-1590nm, 2.4dB Typical IL, LC/UPC, Single Fiber, Side-A, FMU Plug-in Module#43711
	FMU-MC084761EM	8 Channels CWDM Mux Demux, 1470-1610nm, with Monitor and Expansion Port, 2.0dB Typical IL, LC/UPC, Dual Fiber, FMU Plug-in Module#78163
	FMU-C182761M	18 Channels CWDM Mux Demux, 1270-1610nm, with Monitor Port, 2.2dB Typical IL, LC/UPC, Dual Fiber, FMU 1U Rack Mount#123533
LWDM MUX DEMUX	FHD-C84761EM	8 Channels CWDM Mux Demux, 1470-1610nm, with Monitor and Expansion Port, 2.0dB Typical IL, LC/UPC, Dual Fiber, High Density, FHD Plug-in Module#126902
	FHD-C82745EM	8 Channels CWDM Mux Demux, 1270-1450nm (Skip 1390, 1410nm), with Monitor and Expansion Port, 2.0dB Typical IL, LC/UPC, Dual Fiber, High Density, FHD Plug-in Module#126903
	FMU-L042930A	4 Channels LAN-WDM Mux Demux, 1295.56-1309.14nm, 2.7dB Typical IL, LC/UPC, Single Fiber, Side A, FMU Plug-in Module#244657
	FMU-L042728B	4 Channels LAN-WDM Mux Demux, 1273.55-1286.66nm, 2.7dB Typical IL, LC/UPC, Single Fiber, Side B, FMU Plug-in Module#244655
	MUX-DWDM	Customized Dual and Single Fiber DWDM Mux Demux#322911
	Customized Mux Demux MUX-CWDM	Customized Dual and Single Fiber CWDM Mux Demux#70410
	MUX-CCWDM	Customized Dual and Single Fiber Low-loss Compact CWDM Mux Demux#73961
OADM	DOADM-EAW	Customized Dual and Single Fiber DWDM OADM, East and West#70427
	DOADM-EOW	Customized Dual and Single Fiber DWDM OADM, East or West#73795
	COADM-EAW	Customized Dual and Single Fiber CWDM OADM, East and West#70425
	COADM-EOW	Customized Dual and Single Fiber CWDM OADM, East or West#73794
	FMU-1UFMX-N	FMU 2-Slot 1U 19" Rack Chassis Unloaded, Holds up to 2 Units FMU Plug-in Module#30408
Chassis	FHD-1U-CMP400	FHD High Density 1U Rack Mount Modular Enclosure Unloaded, Rear Cable Managers, Holds up to 4 x FHD® Cassettes or Panels, 144 Fibers (LC)#70419

TRANSPONDERS & MUXPONDERS

25G	FMT4DL-OEO25GSFP28	FMT4DL-OEO10GSFP, 4 Channels WDM Transponder (Converter) for FMT Managed Chassis, 8 SFP/SFP+ Slots#30515
10G	FMT4DL-OEO10GSFP	FMT4DL-OEO25GSFP28, 4 Channels 25G WDM Transponder (Converter) for FMT Managed Chassis, 8 SFP28/SFP+ Slots#92056

OPTICAL LINE SYSTEM

Amplifiers	FMT20PA-EDFA	FMT20PA-EDFA, 20dB Gain C-band DWDM EDFA Pre-amplifier for FMT Managed Chassis, 13dBm Output#72284
	FMT26PA-EDFA	FMT26PA-EDFA, 26dB Gain C-band DWDM EDFA Pre-amplifier for FMT Managed Chassis, 16dBm Output#36524
	FMT17BA-EDFA	FMT17BA-EDFA, 17dB Gain C-band DWDM EDFA Booster Amplifier for FMT Managed Chassis, 17dBm Output#72283
	FMT26PA-51EDFA	FMT26PA-51EDFA, 26dB Gain Extended C-Band DWDM EDFA Pre-amplifier for FMT Managed Chassis, 20dBm Output#248135
	FMT17BA-51EDFA	FMT17BA-51EDFA, 17dB Gain Extended C-Band DWDM EDFA Booster Amplifier for FMT Managed Chassis, 20dBm Output#248133
	FMT-EDFA	Customized C-band DWDM EDFA Amplifier for DWDM Solution#322907
	FMT-ARRAY-OA	Customized Multiports DWDM Array EDFA Amplifier#322909
Dispersion Compensation	FS-SOA	Customized 1310nm Semiconductor Optical Amplifier (SOA) for FMT Managed Chassis#69350
	HPA	Customized FTTx PON High Power 1550nm EYDFA for FMT Managed Chassis#65789
	FMT40-DCM	FMT40-DCM, C-Band 40km DCF-based Passive Dispersion Compensation Module for FMT Managed Chassis#65781
	FMT80-DCM	FMT80-DCM, C-Band 80km DCF-based Passive Dispersion Compensation Module for FMT Managed Chassis#65779
	FS-DCM	Customized C-Band DCF-based Dispersion Compensation Module for FMT Managed Chassis#65783
	FS-TDCM	Customized C-band Tunable Dispersion Compensation Module (TDCM) for FMT Managed Chassis#72427
Red/Blue Filter	FSBR-1x2	FSBR-1x2, Customized 1x2 Single Fiber DWDM Splitter Red/Blue C-band Filter#65981
Line Protection	FMT-OLP2	FMT-OLP2, 1+1 Optical Line Protection Switch for FMT Managed Chassis#66010
	FMT-OLP	FMT-OLP, 1:1 Optical Line Protection Switch for FMT Managed Chassis#192620
	FMT-BDSplitter	FMT-BDSplitter, Optical Splitter for FMT Managed Chassis#73324
	FS-OLP	Customized Optical Line Protection Switch (OLP) for FMT Managed Chassis#34720
Fiber Monitoring	FMT-BDOLP	Customized 1+1 BIDI Optical Line Protection Switch (OLP) for FMT Managed Chassis#72700
	FMT-OPD	FMT-4OPD, 4 Channels 1550nm Optical Power Detection OPD (AIU) for FMT Managed Chassis#78568
	FMT-OPM	FMT-OPM, Optical Performance Monitoring (OPM) for FMT Managed Chassis#71586
	FMT-OPD	Customized Optical Power Detection OPD (AIU) for FMT Managed Chassis#70941
	FMTOSW-1x16	Customized 1x16 Multi-Channel MEMS Optical Switches with Adjustable Channels Control for FMT Managed Chassis#73287
	FMT-OTDR	Customized Optical Time Domain Reflectometer (OTDR) for FMT Managed Chassis#73281
	FMT-LSU	Customized LSU Light Source Unit, Pluggable Module for FMT Multi-Service Transport Platform#78469

OPTICAL LINE SYSTEM

VOA Units	FS-VOA-C	Customized Variable Optical Attenuator, LC/UPC for FMT Managed Chassis#65271
	FMT04-CH1U	FMT04-CH1U, 4 Slots 1U Managed Chassis Unloaded Platform, Redundant AC PSUs, Support SNMP V3 Network Management#39214
Chassis	FMT-CH	FMT-CH, Customized 4/8/16 Slots 1U/2U/4U Managed Chassis Unloaded Platform, Redundant AC/DC PSUs, Support SNMP Network Management#70413
	FMT04-CH1U	Customized FMT04-CH1U, 4 Slots 1U Managed Chassis Platform, Redundant AC PSUs, Support SNMP Network Management#190253

WDM TRANSCEIVERS

100G/200G CFP2	CFP2-DCO-200G-M	C14 1566.31nm CFP2-DCO 100G/200G DWDM C-band Tunable 96Chs ITU CH13-CH60 50GHz 80km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#120128
	DW-SFP25G10-17	Cisco C17 DWDM-SFP25G-63.86 Compatible SFP28 25G DWDM 1563.86nm 100GHz 10km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#87000
25G SFP28	CW-SFP25G30-27	Cisco CWDM-SFP25G-1270-30 Compatible SFP28 25G CWDM 1270nm 30km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#100112
	CW-SFP25G10-27	Cisco CWDM-SFP25G-1270-10 Compatible SFP28 25G CWDM 1270nm 10km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#76003
	LW-SFP25G40-86	Cisco LWDM-SFP25G-86.66 Compatible SFP28 25G LWDM 1286.66nm 40km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#93786
	DW-SFP10G80-21-I	Cisco C21 DWDM-SFP10G-60.61-I Compatible SFP+ 10G DWDM 1560.61nm 100GHz 80km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission (Industrial)#113562
10G SFP+	DW-SFP10G40-21-I	Cisco C21 DWDM-SFP10G-60.61-I Compatible SFP+ 10G DWDM 1560.61nm 100GHz 40km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission (Industrial)#113511
	CW-SFP10G80-47	Cisco CWDM-SFP10G-1470 Compatible SFP+ 10G CWDM 1470nm 80km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#19367
	CW-SFP10G40-27-I	Cisco CWDM-SFP10G-1270-I Compatible SFP+ 10G CWDM 1270nm 40km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission (Industrial)#112392
	DWDM-SFP1G-EZX	Cisco C17 DWDM-SFP-6386 Compatible SFP 1000BASE-DWDM 1563.86nm 100GHz 100km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#54150
1G SFP	DWDM-SFP1G-ZX	Cisco C17 DWDM-SFP-6386-80 Compatible SFP 1000BASE-DWDM 1563.86nm 100GHz 80km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#47697
	CWDM-SFP1G-ZX	Cisco CWDM-SFP-1270 Compatible SFP 1000BASE-CWDM 1270nm 80km DOM Duplex LC/UPC SMF Optical Transceiver Module for Transmission#33234



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