

## 1550nm High Power EDFA Optical Amplifier



### Description

Montclair's high power EDFA is characterized by low noise and high linearity performance to meet the most demanding requirements of CATV and FTTx applications. It offers a flexible, low-cost solution for large area networks and features an embedded total touch screen LCD for easy operation. The MHFA series of amplifiers are in standard 1U & 2U 19" and come equipped with 3 reliable cooling fans operating in parallel with microprocessor overheating protection.

### Features

- )] Highly stable and reliable
- )] Low noise figure < 5.5dB
- )] Excellent gain flatness
- )] Total Touch Screen LCD Monitoring
- )] Redundant dual power supply
- )] Available in up to 64 output ports
- )] WDM PON 1310/1490/1550nm integration
- )] High performance to cost ratio
- )] Low power consumption
- )] Up to 23dBm output power per port
- )] 3 cooling fans in parallel operation

### Product Reliability & Assurance

Backed by over 20 years of engineering and manufacturing experience each amplifier is strictly qualified and adhered to rigorous standards to guarantee you a maintenance-free and optimal performance network. A two year limited warranty is offered with each amplifier.

### Product Support

Our depth of technical support from an experienced staff is provided at every level to ensure each product configuration and characteristic is specific to your application. Continuous support throughout!

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## Specifications

### Optical Characteristics

Parameter	Unit	Value
Optical Input Wavelength	nm	1545 ~ 1565
Optical Input Power	dBm	-10 ~ +10
Output Optical Power	dBm	See Ordering Information
Typical Output Power	dBm	18
Output Power Stabilization Range	%	30 ~ 100
Port Numbers	–	See Ordering Information
Output Power Tolerance	dB	±0.5
Port Uniformity	dB	± 0.6
Noise Figure	dB	5.5
Optical Test Port	dB	-5 ~ +5
Return Loss Input/Output	dB	45
Isolation Output Input	dB	40
Polarization Dependence	dB	0.3

### PON Characteristics (Optional)

Parameter	Unit	Value
PON Wavelengths	nm	1260 ~ 1360 & 1480 ~ 1500
Insertion Loss	dB	< 1
Isolation CATV PON	dB	50 @ 1545 ~ 1565 nm
Isolation COM PON	dB	15 @ 1545 ~ 1565 nm
Return Loss	dB	50

### Optical Switch for 2 Inputs (Optional)

Parameter	Unit	Value
Insertion Loss	dB	< 0.7
Crosstalk	dB	-55
Repeatability	dB	± 0.05
Switch Time	ms	10
Return Loss	dB	50

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## General Characteristics

Parameter	Unit	Value
Power Supply	pcs	2 (1 default, 1 optional)
Chassis Type	–	1U, 2U, 3U 19" Rack Mounted
AC Input Voltage	V AC	85 ~ 264
DC Input Voltage	V DC	36 ~ 72
Power Consumption	W	65
Dimension (W x D x H)	mm	483 x 416 x 44 (1U)
	mm	484 x 416 x 88 (2U)
Operating Temperature Range	°C	-5 ~ +60

## Management Interface

Parameter	Value
Data Link Layer	Ethernet 10/100 Base-T (and LLDP optional)
Network Layer	IPv4, ICMP
Transport Layer	UDP, TCP
Application Layer	SNMPv1/v2c, DHCP, Web
Connectors	10/100 Base-T
Front Panel Management	3.5" 480 x 320 Color Touch Screen LCD for 2U and 3U
	2.4" 320 x 240 Color Touch Screen LCD for 1U

## Control Mode

Parameter	Value
Stabilization Mode	Pump Current
	Output Optical Power
	Optical Gain
Automatic Pump Shutdown Mode	Low Input Power (LOS)
	High Back Reflection
	Overheating

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Ordering information | MHFA series

MHFA - **1** - **2** - **3** - **4** - 1 - **5** [WDM]

1. Wavelength:		2. Total output power (dBm):	3. Number of output ports:
<b>S</b>	Singlewavelength1550nm	27 ~ 38	02
<b>M</b>	Multi Wavelength		04
	1550+1310/1490nm		08
	WDM PON		16
			24
			32
			64
			Available in other output ports

4. Power supply:		5. Adapter ports:	[WDM] option:
<b>A</b>	-48V DC single	1	SC/APC
<b>AA</b>	-48V DC dual	2	LC/APC
<b>B</b>	220V AC single	3	FC/APC
<b>BB</b>	220V AC dual	4	SC/UPC
<b>C</b>	110V AC single	5	LC/UPC
<b>CC</b>	110V AC dual	6	FC/UPC
			Add to end of P/N for WDM PON enabled

Note:

‘S’ in p/n signifies Single channel wavelength

‘1’ in p/n signifies 19” rack-mount width (amplifiers are only available for 19” rack)