



## HWT-EDFA-MICRO Series

### Key Features

Output Power up to +20 dBm

Ultra Compact Form Factor  
(70x45x12mm)

Uncooled Pump Laser

Low Power Consumption

Telcordia Qualified

ROHS Compliant

### Applications

Long Haul and Metro Networks

Access Networks

Transmitter and Receiver  
Amplification

Single Channel and Narrowband  
DWDM

Booster and Pre-amp Applications

YOUR APPLICATION

### For more info

Please contact us at:

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**888.922.1044**

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or via e-mail at [sales@3spgroup.com](mailto:sales@3spgroup.com)

## MicroEDFA Product Line

### 1.5 $\mu$ m Erbium Doped Fiber Amplifier

The Manlight Micro EDFA offers excellent optical performance and reliability in an ultra compact form factor. This Micro EDFA is intended for single channel and narrowband applications in the C-band wavelength range. It can be optimized to perform as a booster, line or pre-amplifier in DWDM systems and subsystems for metro and long haul applications. The gain block contains input and output monitor diodes and isolators. The Micro EDFA uses an uncooled pump laser that enables low power consumption which allows system designers to achieve compact solutions, lower costs and flexibility in system design.



## MicroEDFA Product Line

1.5µm Erbium Doped Fiber Amplifier



### HWT-EDFA-MICRO Series

### SPECIFICATIONS\* OPTICAL CHARACTERISTICS

Parameters	Booster Single-Channel	Pre-Amp Single-Channel	Fixed Gain	Unit
Wavelength Range	1529 - 1565	1529 - 1565	1529 - 1565	nm
Maximum Output Power	+20	+5	+20	dBm
Input Power Range	-10 to +4	-30 to -10	-30 to -5	dBm
Nominal Gain	20	30	fixed from 8 to 40	dB
Noise Figure (typ) @ Nominal Gain	5.0	5.0	5.0	dB
Noise Figure (max) @ Nominal Gain	5.5	5.5	6.0	dB
Polarization Mode Dispersion	0.3	0.3	0.3	ps
Polarization Dependent Gain	0.3	0.3	0.3	dB

### ELECTRICAL & ENVIRONMENTAL CHARACTERISTICS

Power Consumption (typical)	0.8	0.4	0.4 to 1.5	W
Power Consumption (maximum EOL,	1.5	1.0	2.0	W
Mechanical dimensions	70 x 45 x 15 - Gain Module 70 x 45 x 12 - Gain Block mm			
Operating Case Temperature		0 to +70	°C	
Storage Temperature		-40 to +85	°C	
Operating Humidity (non-condensing)		5 - 95	% RH	

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Mechanical Drawing and Electrical Pin-Out



Pin#	Description
1	Ground
2	Input Monitor Cathode
3	Input Monitor Anode
4	Output Monitor Cathode
5	Output Monitor Anode
6	Not Connected
7	Laser Diode Anode
8	Laser Diode Anode
9	Laser Diode Monitor Cathode
10	Laser Diode Monitor Anode
11	Laser Diode Cathode
12	Not Connected
13	Ground
14	Laser Diode Cathode

Please note: information in this document is typical and must be specifically confirmed in writing by your supplier before it becomes applicable to any order or contract. Information is subject to change without notice.

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## ORDERING INFO

Please contact your Sales Manager. 3SPGroup can also develop custom products to meet a wide range of technical requirements.