

HWT-EDFA-MINI Series

Key Features

Output Power up to +30 dBm

Industry Standard Form Factor
(70x90x12mm)

Single Channel, Fixed Gain
or Variable Gain

Gain-Flattened Version for
Wideband Amplification

Mid Stage Access Optional

ACC, APC and AGC modes

Low Power Consumption

Uncooled Pump Option

Telcordia Qualified

ROHS Compliant

Applications

Long Haul and Metro Networks

Dynamic Metropolitan Networks

Transmitter and Receiver Amplification

Single Channel, Narrowband
and Wideband DWDM

YOUR APPLICATION

For more info

Please contact us at:

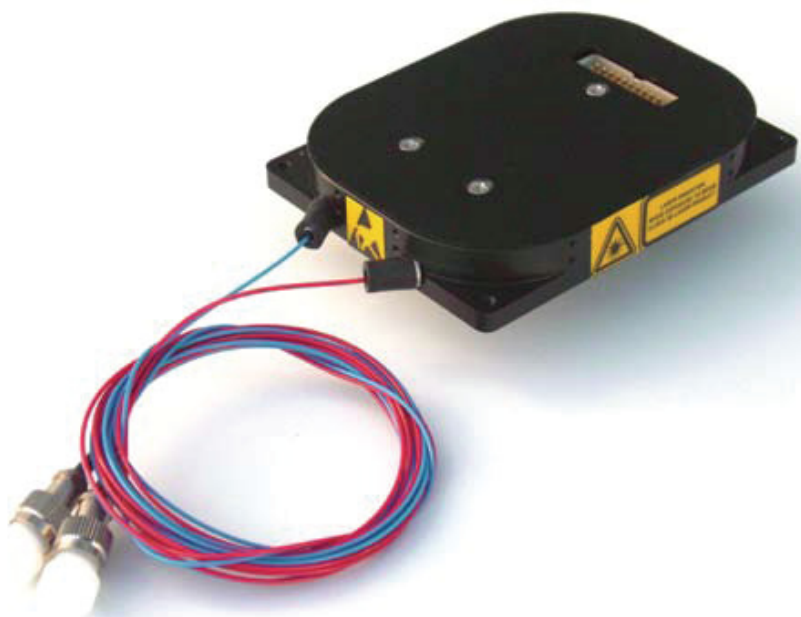
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MiniEDFA Product Line

1.5 μ m Erbium Doped Fiber Amplifier

The Manlight MiniEDFA is field proven and offers excellent optical performance and reliability. The MiniEDFA gain block is intended for DWDM applications in the C- & L-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 EDFA can be configured to use an uncooled pump laser that enables low power consumption which allows system designers to achieve compact solutions, lower costs and flexibility in system design. This unique market standard platform is available for single channel applications, WDM fixed gain networks and a variable gain (VG) version enables flat gain across a wide gain range of 15dB. This VG version supports up to 9dB of mid-stage loss for DCMs and OADM and other high-loss optical components.



MiniEDFA Product Line

1.5µm Erbium Doped Fiber Amplifier



HWT-EDFA-MINI

aa-bb-xxCyy-zzz (-MSA)

aa: GM for Gain Module or GB for Gain Block (no electronics)

bb: SC for Single Channel or FG for Fixed Gain or VG for Variable Gain

xx: Amplifier gain (from 8 to 40dB)

yy: Output power in dBm

zzz: connector type

MSA: Mid-Stage Access option (only for VG and FG)

SPECIFICATIONS* OPTICAL CHARACTERISTICS

Parameters	Booster Single-Channel	Pre-Amp Single-Channel	Fixed Gain	Variable Gain	Unit
Wavelength Range	1529 - 1565	1529 - 1565	1529 - 1565	1529 - 1565	nm
Maximum Output Power	+30	+5	+30	+23	dBm
Input Power Range	-10 to +4	-30 to -10	-25 to -5	-25 to -5	dBm
Nominal Gain	20	30	25	15	dB
Gain Flatness (typ) @ Nominal Gain	N/A	N/A	1.0	1.0	dB
Gain Flatness (max) @ Nominal Gain	N/A	N/A	1.5	1.5	dB
Noise Figure (typ) @ Nominal Gain	5.0	5.0	5.0	5.0	dB
Noise Figure (max) @ Nominal Gain	5.5	5.5	5.5	5.5	dB
Polarization Mode Dispersion	0.3	0.3	0.3	0.3	ps
Polarization Dependent Gain	0.3	0.3	0.4	0.4	dB

ELECTRICAL & ENVIRONMENTAL CHARACTERISTICS

Power Consumption (typical)	4.0 / 8.0	2.0 / 3.0	4.0 / 8.0	4.0 / 8.0	W
Consumption (maximum EOL, worst case)	1.0 / 1.5	0.5 / 1.0	1.0 / 1.5	1.0 / 1.5	W
Mechanical dimensions	90 x 70 x 15 - Gain Module • 90 x 70 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

ELECTRICAL PIN-OUT

Revised March 2012

Pin #	Description	Pin #	Description
1	GND	11	Thermoelectric Cooler, Positive
2	Input Monitor Cathode	12	Thermoelectric Cooler, Positive
3	Input Monitor Anode	13	Thermoelectric Cooler, Positive
4	Output Monitor Cathode	14	Thermoelectric Cooler, Negative
5	Output Monitor Anode	15	Thermoelectric Cooler, Negative
6	Thermistor	16	Thermoelectric Cooler, Negative
7	Laser Diode Anode	17	GND
8	Laser Diode Anode	18	Thermistor
9	Backface Monitor Cathode	19	Laser Diode Cathode
10	Backface Monitor Anode	20	Laser Diode Cathode

The electrical connector is a 20-pin male connector.

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.



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