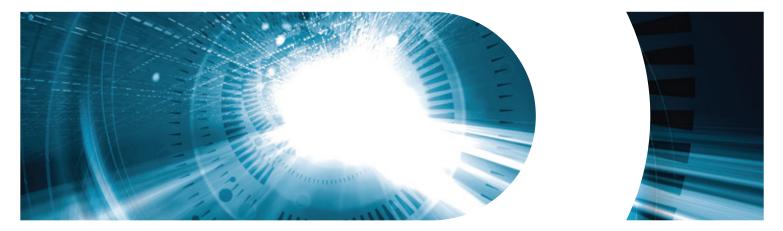
# **3SP**Group



# HWT-EDFA-NANO

Series

### **Key**Features

Output Power up to +18 dBm Ultra Miniaturized Form Factor (50x30x8mm)

Uncooled Pump Laser

Gain-flattened version

ACC, APC and AGC modes

Low Power Consumption

Telcordia Qualified

**ROHS** Compliant

### **Applications**

40/100G Transponders amplification

Single Channel and Narrowband DWDM

Booster and Pre-amp Applications

YOUR APPLICATION

### For moreInfo

Please contact us at: North America: **514.748.4848 888.922.1044** Europe & Asia: **+33 (0) 2 96 04 20 00** or via e-mail at **sales@3spgroup.com** 

# NanoEDFA Product Line

# **1.5µm Erbium Doped Fiber Amplifier**

The Manlight NanoEDFA offers excellent optical performance and reliability in an ultra compact form factor. This NanoEDFA is intended for single channel and narrowband applications in the C-band wavelength range and is the ideal solution for amplification in the 40/100G transponders due to its miniaturized package. The NanoEDFA uses an uncooled pump laser that enables very low power consumption which allows system designers to achieve compact solutions, lower costs and flexibility in system design.



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#### HWT-EDFA-NANO aa-bb-xxCyy-zzz

aa: GM for Gain Module or GB for Gain Block (no electronics) bb: SC for Single Channel or FG for Fixed Gain xx: Amplifier gain (from 8 to 40dB) yy: Output power in dBm zzz: connector type





#### 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	+18	+5	+18	dBm
Input Power Range	-10 to +4	-30 to -10	fixed from 8 to 40	dBm
Nominal Gain	20	30	25	dB
Noise Figure (typ) @ Nominal Gain	5.0	5.0	5.0	dB
Noise Figure (max) @ Nominal Gain	5.5	5.5	6.5	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
Consumption (maximum EOL, worst case)	1.0 / 1.5	0.5 / 1.0	1.0 / 1.5	W
Mechanical dimensions	55 x 35 x	mm		
Operating Case Temperature		°C		
Storage Temperature	-40 to +85			°C
Operating Humidity (non-condensing)		% RH		

#### **ELECTRICAL PIN-OUT**

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

North America: 514.748.4848

Europe and Asia: +33 (0) 2 96 04 20 00

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







**MAN**LIGHT

**3SPGroup** 

888.922.1044

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