



DWDM Rack mounted EDFA

OP-8000-EDFA-6U/OP-8000-EDFA-2.5U/OP-8000-EDFA-1U Series EDFA



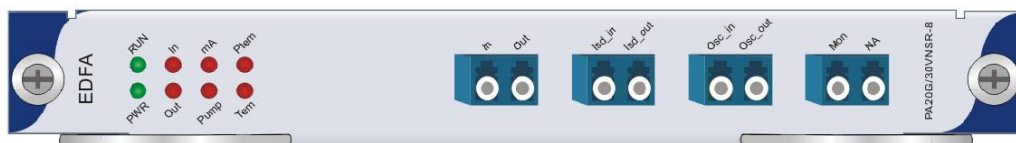
OP-8000-6U



OP-8000-2.5U



OP-8000-1U

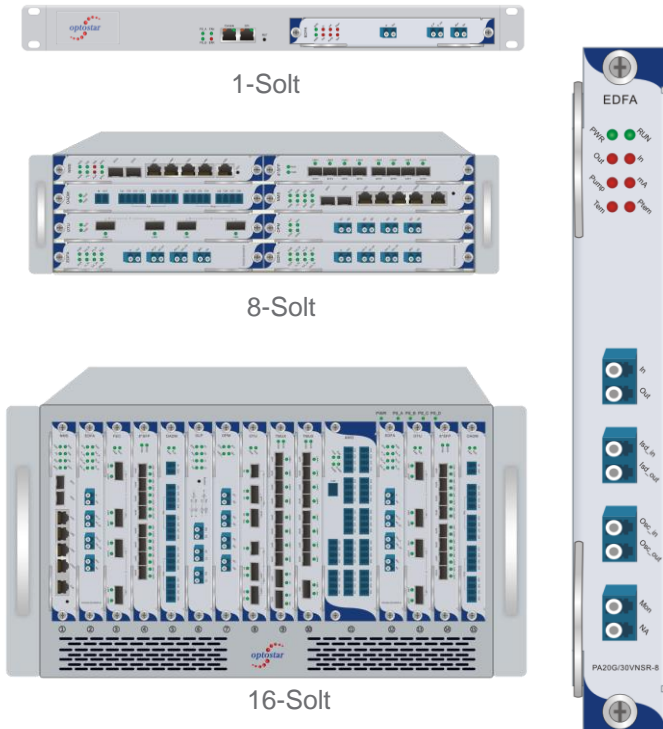


EDFA Module

Shenzhen Optostar Optoelectronics Co., Ltd
2016. 9 (Version 1)

OP-8000 optical amplifier modules provide multi-function, low noise, Erbium-Doped Fiber Amplifier (EDFA) solutions that are ideal for metro Dense Wavelength Division Multiplexing (DWDM) applications.

Product Image



- The OP-8000 Frame of C-Band EDFA Optical Amplifiers is part of the OP-8000 optical multi-service transmission platform solution. Many model options serve all the traditional amplifier applications in an extended optical link: booster, in-line, and pre-amplifier
- **A booster amplifier** operates at the transmission side of the link. It features high input power, high output power, and medium optical Gain . Boosters are designed to amplify aggregated optical input power for reach extension.
- **An in-line amplifier** operates in the middle of an optical link. It features medium to low input power, high output power, high optical Gain , and a low noise figure. In-line amplifiers are designed for optical amplification between two network nodes on the main optical link.
- **A pre-amplifier** operates at the receiving end of an optical link. It features medium to low input power, medium output power, and medium Gain . Pre-amplifiers are designed for optical amplification to compensate for losses in a demultiplexer located near the optical receiver.
- Some EDFA models include an additional mid-stage port designed for insertion of a Dispersion Compensation Management (DCM) unit without its inherent insertion loss. The design of these models maximizes the DCM benefits to increase deployment flexibility. New placement options require fewer amplifiers in the link, and they can open the door to applications that were not possible with older technology.
- Some EDFA models include an Red and blue port designed for Single fiber DWDM Solution. The design of these models is used for single-fiber

Highlights

- Three Optical Amplifier C-Band applications:
 - Booster
 - In-line
 - Pre-amplifier
- Applications:
 - Metro DWDM distance extension
 - Single wavelength distance extension
- Low noise figure: typ 5dB
- Gain flattening filters (GFF) assure flat Gain (<1 dB variance) over the entire amplified band (Wide-Band models only)
- I Multiple operating modes:
 - AGC adjustable Gain ,
 - APC output is adjustable,
 - ACC voltage adjustable
- Transient response control: high performance transient response control to ensure power, Gain and stability, without affecting existing

➤ customization:

Support more saturated output power 13 ~ 24dBm customization

Support a variety of specifications 8 ~ 35dB Gain customization

Support red and blue port ,The design of these models is used for single-fiber DWDM transmission systems.

➤ Midstage access:

Designed for insertion of a DCM unit without its inherent insertion loss.;

Designed for insertion of a OADM unit without its inherent insertion loss;

➤ Advanced network management features:
Optional OSC management channel for remote management

MON own monitoring port, on-line monitoring optical power and OSNR

Supports SNMP, Web, console management;

➤ OP-8000 chassis compatibility

Fit OP-8000-1U 1-slot powered chassis

Fit OP-8000-2.5U 8-slot powered chassis

Fit OP-8000-6U 16-slot powered chassis

Specification

Parameter		Min	Typ	Max	Unit
Operating Wavelength		1528		1565	nm
Output Power				22	dBm
Gain		8		33	dB
Input Power	BA	-10		Max.Output -Gain	dBm
	PA/LA	(Max.input-25)		Max.Output -Gain	
Noise Figure			5.0		dB
Gain Flatness			1.0		dB
Input threshold		-34		Can be adjusted	dBm
Polarization dependence loss				0.3	dB
Polarization dependence Gain				0.4	dB
Polarization mode dispersion				0.5	ps
Pump power leakage				-30	dBm
Return Loss		45			dB
Power Consumption		≤30 ,			W
size	EDFA model	26.5 (W) × 195 (H) × 252 (D)			mm
	1-slot chassis	482.6(W)x350(D)x43.6(H)			
	8-slot chassis	482.6(W)x360(D)x109(H)			
	16-slot chassis	482.6(W)x360(D)x261.6(H)			
Operating temperature		-5~60			°C
Storage temperature		-40~85			°C
Relative Humidity		5~95			RH%

B16-12NSB	BidiBooster , Max.Output 16dBm , Gain 12dB , Without OSC , Pass 1528~1543.2 (Blue) , Reflection 1547~1561nm (Red)	12dB	16dB	-10dBm	4dBm	5dB
B20-12B	BidiBooster , Max.Output 20dBm , Gain 12dB , With OSC , Pass 1528~1543.2 (Blue) , Reflection 1547~1561nm (Red)	12dB	20dB	-10dBm	8dBm	5dB
B20-12NSB	BidiBooster , Max.Output 20dBm , Gain 12dB , Without OSC , Pass 1528~1543.2 (Blue) , Reflection 1547~1561nm (Red)	12dB	20dB	-10dBm	8dBm	5dB
B16-12R	BidiBooster , Max.Output 16dBm , Gain 12dB , With OSC , Pass 1547~1561nm (Red) , Reflection 1528~1543.2 (Blue)	12dB	16dB	-10dBm	4dBm	5dB
B16-12NSR	BidiBooster , Max.Output 16dBm , Gain 12dB , Without OSC , Pass 1547~1561nm (Red) , Reflection 1528~1543.2 (Blue)	12dB	16dB	-10dBm	4dBm	5dB
B20-12R	BidiBooster , Max.Output 20dBm , Gain 12dB , With OSC , Pass 1547~1561nm (Red) , Reflection 1528~1543.2 (Blue)	12dB	20dB	-10dBm	8dBm	5dB
B20-12NSR	BidiBooster , Max.Output 20dBm , Gain 12dB , Without OSC , Pass 1547~1561nm (Red) , Reflection 1528~1543.2 (Blue)	12dB	20dB	-10dBm	8dBm	5dB
Pre-Amp Pre-amplifier						
P16-20	Pre-amplifier , Max.Output 16dBm , Gain 20dB , With OSC	20dB	16dB	-29dBm	-4dBm	4.5dB
P16-20NS	Pre-amplifier , Max.Output 16dBm , Gain 20dB , Without OSC	20dB	16dB	-29dBm	-4dBm	4.5dB
P16-20-8	Midstage access Pre-amplifier , Max.Output 16dBm , Gain 20dB , With OSC , Midstage insertion loss 8dB	20dB	16dB	-29dBm	-4dBm	5dB
P16-20NS-8	Midstage access Pre-amplifier , Max.Output 16dBm , Gain 20dB , With OSC , Midstage insertion loss 8dB	20dB	16dB	-29dBm	-4dBm	5dB
P16-25	Pre-amplifier , Max.Output 16dBm , Gain 25dB , With OSC	25dB	16dB	-32dBm	-9dBm	4.5dB
P16-25NS	Pre-amplifier , Max.Output 16dBm , Gain 25dB , Without OSC	25dB	16dB	-32dBm	-9dBm	4.5dB
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In-Line-Amp						
L16-20	In-Line-Amp , Max.Output 16dBm , Gain 20dB , With OSC	20dB	16dB	-29dBm	-4dBm	5dB
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L20-20NS	In-Line-Amp , Max.Output 20dBm , Gain 20dB , Without OSC	20dB	20dB	-25dBm	0dBm	5dB
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OP-8000-6U	16-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies
OP-8000-6UAC	16-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies , Matching one 220V AC power supply
OP-8000-6U2AC	16-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies , Matching two 220V AC power supply
OP-8000-2.5U	8-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies ,
OP-8000-2.5UAC	8-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies , Matching one 220V AC power supply
OP-8000-2.5U2AC	8-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies , Matching two 220V AC power supply
OP-8000-2.5U	8-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies ,
OP-8000-2.5UAC	8-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies , Matching one 220V AC power supply
OP-8000-2.5U2AC	8-slot chassis , Y-cable protection , Comes standard with two -48V DC power supplies , Matching two 220V AC power supply

OP-8000-1U2AC	1-slot chassis , Y-cable protection , 2AC power supply
OP-8000-1UAD	1-slot chassis , Y-cable protection , 1AC 220V power and 1 DC -48V supply
OP-8000-1U2D	1-slot chassis , Y-cable protection , 2 DC -48V supply

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