

EDFA Optical Amplification Card FW6600-EDFA

The EDFA (Erbium-Doped Fiber Amplifier) optical amplification Card is a module developed by FIBERWDM for long-distance transmission in digital optical fiber communications. The core component of this board utilizes highly encapsulated Pump lasers. It incorporates unique ATC (Automatic Temperature Control) circuitry and ACC (Constant Pump Current Control) circuitry, ensuring high stability and reliability of the output power. With a professionally designed GFF (Gain Flattening Filter) and an excellent optical path design, it achieves optimal performance in terms of flatness and noise reduction. The board also features APC (Automatic Power Control) and AGC (Automatic Gain Control) functions.

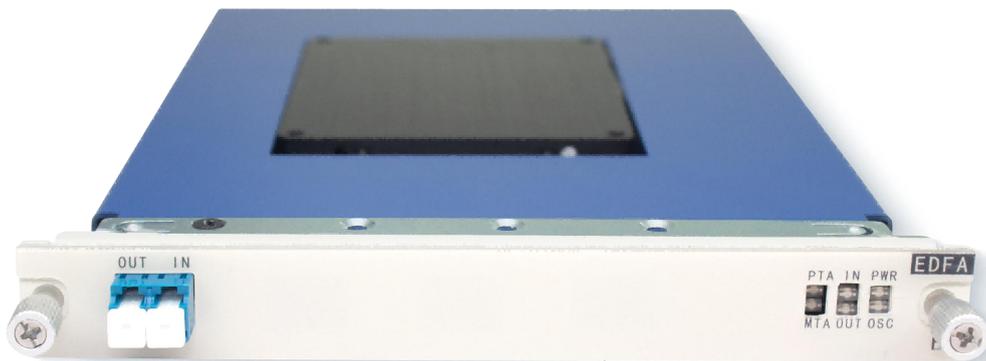


Figure 1: EDFA Optical Amplification Module

Product Features

- ◆ Supports optical amplification for C-band DWDM systems.
- ◆ Supports amplification with OSC signal input.
- ◆ Supports maximum saturated output power of +23dB and minimum input power of -35dB.
- ◆ Supports power amplification, line amplification (two-stage optical amplification), and pre-amplification.
- ◆ Monitoring capabilities include: pump drive current, pump output power, pump switch status, pump temperature, input optical power, output optical power, and

module temperature.

- ◆ Supports configuration of pump switch, AGC mode, and APC mode (adjustable input/output optical power).
- ◆ Supports SNMP-based unified network management platform with management options including CLI (telnet and console), Web, and NetView (graphical interface).
- ◆ Includes optical monitoring port (MON).

Product Specifications

System Parameters	Technical Specifications
Wavelength Range	Standard type: 1529nm~1561nm Applicable to 40 wavelength(100GHz) or 80 wavelength(50GHz)DWDM system
	Extension type: 1528nm~1568nm Applicable to 48 wavelength(100GHz) or 96 wavelength(50GHz)DWDM system
Input Power Range	Power Amplification (BA): -15dBm~+5dBm Line Amplification (LA): -35dBm~-7dBm Pre-Amplification (PA): -35dBm~-7dBm
Gain Range	10dB~30dB
Noise Figure	4.5dB~6dB
Gain Flatness	1.0dB
Input/Output Isolation	30dB
Input/Output Return Loss	45dB
Output Pump Leakage	-30dBm
Polarization-Dependent Loss	0.5dB
Polarization Mode Dispersion	0.5ps
Management Functions	CDR Function (Real-time DDM Monitoring) Adaptive Setting for Different Rates

		Unidirectional or Bidirectional Business Setting
Management Methods		Web、NetView
Board Dimensions		156 (W) × 20 (H) × 225 (D) (mm)
Environmental Requirements	Operating Temperature	-10°C ~ 50°C
	Storage Temperature	-40°C ~ 80°C
	Relative Humidity	5% ~ 95% (non-condensing)
Safety and EMC Compliance		Complies with FCC, UL, CE, TUV, CSA standards
Power Consumption		<30W

Order Information

Part No.	Specifications
FWOP25G20	DWDM EDFA Card 1529nm~1561nm PA G25/20 Gain:25dB +-3dB,Max output 20dB, LC/UPC used in FW6600 series take one slot
FWOB15G20	DWDM EDFA Card 1529nm~1561nm BA G15/20 Gain15dB +-3dB,Max output 20dB, LC/UPC used in FW6600 series take one slot
FWOL25G20	DWDM EDFA Card 1529nm~1561nm LA G25/20 Gain25dB +-3dB,Max output 20dB, LC/UPC used in FW6600 series take one slot
FWOP25G20H	DWDM EDFA Card 1528nm~1568nm PA G25/20 Gain:25dB +-3dB,Max output 20dB, LC/UPC used in FW6600 series take one slot
FWOB15G20H	DWDM EDFA Card 1528nm~1568nm BA G15/20 Gain15dB +-3dB,Max output 20dB, LC/UPC used in FW6600 series take one slot

FWOL25G20H	DWDM EDFA Card 1528nm~1568nm LA G25/20 Gain25dB +-3dB,Max output 20dB, LC/UPC used in FW6600 series take one slot
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