

Single Channel EDFA for Telecom



Application

- Pre-Amplifier
- Online Amplifier
- Booster Amplifier
- DWDM Optical System

Features

- Low Noise Figure: Typical 4.5
- High Flatness: Typical 1dB
- Cover Whole C-Band: Carrier 40 or 80 CHs
- Redundancy hot swap power module: 110/220VAC and 48VDC can plug Mix
- Perfect Network Interface: Ethernet, RS-485 and RS-232 port
- Support Telnet Interface and SNMP network management
- Gain can be adjustable by network and manual
- High precise AGC and ATC circuit
- High saturation output power
- Flexible Mechanics and circuit structure(Module, 1U rack and Gain Block)
- Compatible with Telcordia GR1312-CORE

Description

The product is high stability output power EDFA. The stability Pump Laser and unique ATC (automatic temperature control) and APC (automatic power control) circuit are employed in it as the key component to ensure the high stability and reliability of output power. The unique optical circuit design ensures the excellent optical character. The high stability and high precision MPU system are employed to ensure the control adjustment and display is intelligent and easy.

The optical circuit is specially designed for digital optical fiber communication system including:(1)lower noise figure;(2)high

output booster and high sensitivity Pre-Amplifier improve the system loss budget(3)Broad input power range and output power adjustable make it use easily

The design of dual power mixed hot swap make it has longer MTBF. Also the power system can be backup.

Employ the intelligent temperature control system, the fan is on when the module temperature above 45°C, meanwhile it will stop as the temperature is below 40°C, which ensure the thermal stability and fan life-time. Professional air duct design ensure the best temperature stability.

Intelligent monitor and manage system. Perfect network management interface: RS232 RS485 and Ethernet, and the open mib ensures the connectivity with all network management system.

Optical Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Wavelength	λ_c	1529	1550	1564	nm
Saturated output power (1)	Po	-----	-----	20	dBm
Input Power	Pi	-35	-----	+6	dBm
Gain	G	-----	20	33	dB
Noise Figure (2)	NF	-----	4.5	-----	dB
Output Power Stability	ΔP_o	-----	± 0.05	± 0.1	dB
Return Loss	RL	-----	-----	-45	dB
Polarization Dependent Gain	PDG	-----	-----	0.3	dB
PMD	PMD	-----	-----	0.5	ps
Wavelength	λ_c	1529	1550	1564	nm

Notes:

1. Optional
2. Test at 0dBm input

Electric Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Voltage Supply	Vps	85/170	110/220	132/264	VAC
Consumption	P	-	-	20	W

Notes:

1. 10VAC, 220VAC and -48VDC is optional
2. Actual consumption depend on the output power and environment temperature

Environmental Characteristics

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	T _w	-5	-	60	°C
Storage Temperature	T _s	-40	-	80	°C

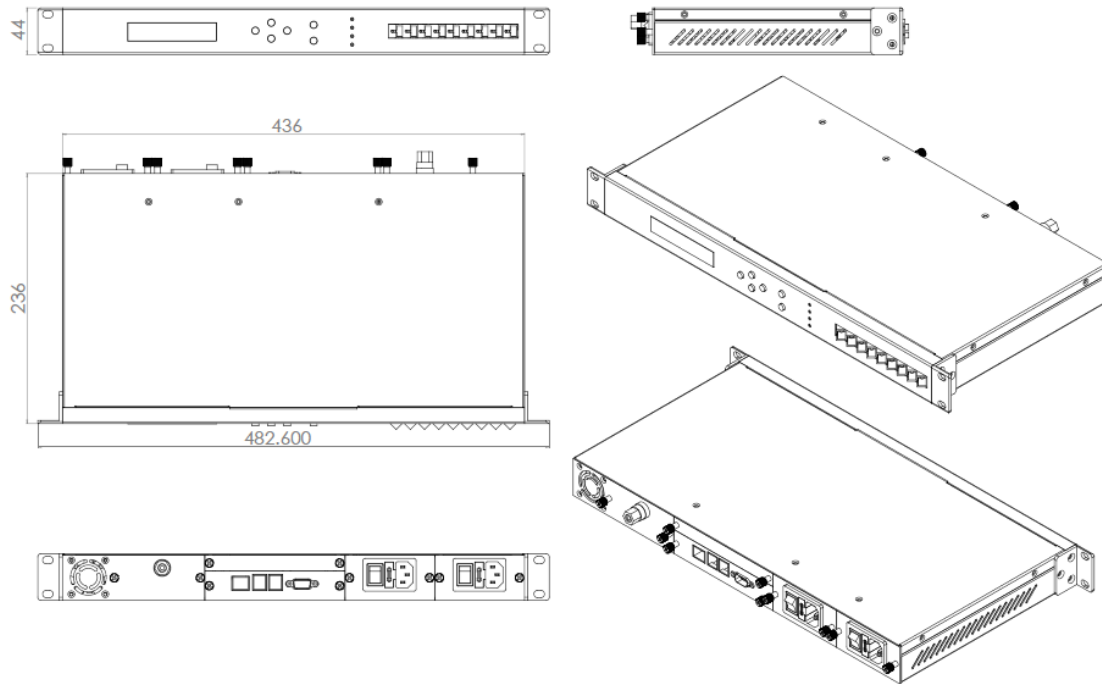
Humidity	-	10	-	85	%
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Notes:

1. Non-condensing

Mechanical Structure

483*236*44 (mm)



Category	Application	Input power	Output power	voltage1	voltage2	Interface
EDFA	1: Single channel fiber	2: Pre-amplifier 3: online-amplifier 4: booster-amplifier 9:other	010: -10dBm ... 24:24dBm	1:110VAC 2:220VAC 3:110~220VAC 4:-48VDC 9:other	1:110VAC 2:220VAC 3:110~220VAC 4:-48VDC 9:other 0: W/O	1;SC/PC 1:FC/PC 3:LC/PC 4:other