

High-Power Optical Amplifier



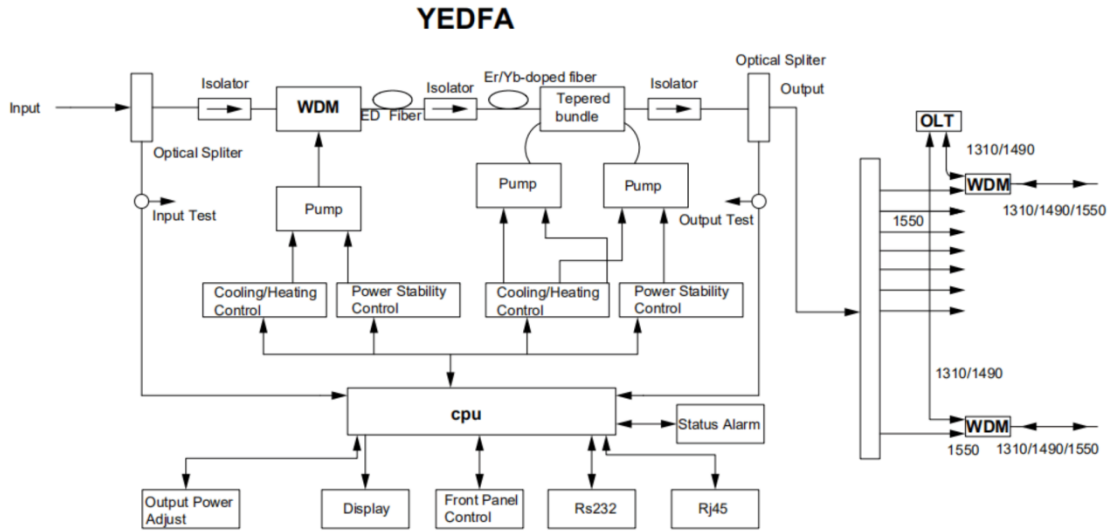
1. Overview

The High Power EDFA series Ytterbium and Erbium Doped Fiber Amplifiers (YEDFA) are designed for using in CATV, FTTX and HFC application. It is optimized for 1550nm wavelength and is packaged in a 2U 19 inch rack housing. The product is flexible enough to perform all the requirements of CATV, FTTX and HFC applications. The device chooses a high performance PUMP laser and circuit (include ACC and APC) and optical output power is adjustable and flexible for network link loss budget. The High Power EDFA series products also provide monitors and associated alarms for all vital characteristics. The status and management of the device can be monitored and managed either from the LCD front panel display, WEB or remotely via Ethernet based-SNMP NMS. The device also support multiple optical output by build-in PLC splitter and FWDM (1310nm/1490nm) optical multiplexer for Triple-play FTTX network applications.

2. Features

- Standard 19 inch 2U Rack YEDFA
- 8/16/32 output ports with WDM
- Output powers range - 8/16/32*16, 8/16/32*19, 8/16/32*22dBm
- Output optical power adjustable +3~+10dB
- Wide input dynamic range(0 to +10dBm)
- High Isolation input & output(30dB for max)
- Web browser management
- Automatic Power Control (APC) or Automatic Current Control (ACC)
- LCD front panel display for local monitor
- Remote management via SNMP (Ethernet Interface)

3. Diagram



4. Parameters

Description	Unit	Value	Conditions / Notes
EDFA Optical Specifications			
Fiber Connector	nm	TV input:1550nm COM:1550/1490/1310nm SC/APC	OLT:1310/1490nm SC/UPC
Optical Wavelength	nm	1540 ~1560	
Input Power	dBm	+3~+10 (1550nm)	Recommend ≥5dBm
Output Power	dBm	8/16/32*16 8/16/32*19 8/16/32*22	
Laser Bias Current	Pump	16*16dBm 2300mA±200mA @+6dBm input	Alarm range: Out of 1000mA~3300mA
Laser Bias Current	Pump	16*19/32*16dBm 3300mA±200mA @+6dBm input	Alarm range: Out of 1500mA~4800mA
Laser Bias Current	Pump	16*22/32*19dBm 3100mA±200mA @6dBm input	Alarm range: Out of 1800mA~4600mA
Output Optical Power Stability	dB	0.1	@+6dBm Input
Noise Figure	dB	4(max 5.8)	@+6dBm Input
Isolation (Input/Output)	dB	30	

Return Loss (Input/Output)	dB	55	
Polarization Dependent Gain	dB	max 0.5	
Polarization Mode Dispersion	ps	max 0.5	
Electrical Specifications			
Communication Interface		RJ45	Supporting Web and SNMP NMS
Input voltage	VAC	90-265	+12/-48 V DC(optional)
Consumption	W	50 maximum	8/16/32*16/19, 8/16*22
		100 maximum	32*22
Fuse	A	2	
Connector	IEC	Male power connector	
Environmental Specifications			
Operating Temperature	°C	-5 ~50	
Storage Temperature	°C	-20 ~85	
Storage Humidity	RH%	≤95	No Condensation
Mechanical Specifications			
Dimension (LxWxH)	mm	483 × 422 × 88	Carton:590 × 590 × 200
Weight	kg	Net weight 11.5 gross weight :14.8	8/16 port
		Net weight 11.7 gross weight :15	32 port
Mounting		19" EIA rack, 2U Rack	