High Performance Optical Amplifier

AT5000 EDFA Series

AT5000 1RU or 2RU Erbium-Doped Fiber Amplifier (EDFA) offers a flexible and scalable optical amplification for high quality video transmission in CATV networks. Together with ACT 1RU 1550nm transmitter, the AT5000 EDFA provides an ideal video overlay solution in high density FTTX networks to bring the video services to business and home premises.

AT5000 EDFA series simplifies the application by offering low noise, high output power, and intuitive front panel LCD display to make operator's life easier. The optical amplifier is packaged in a self-contained 19" sub-rack of 1 or 2 RU with universal mains power supply and SNMP management.

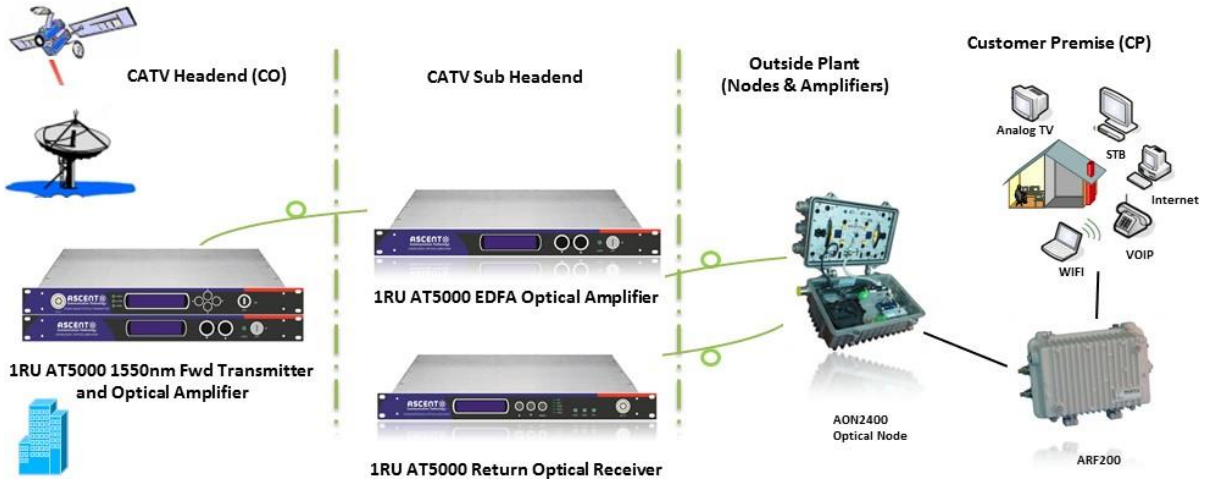
The optical output power level can be ordered from 13 dBm to 26dBsm with variable output features from 20dBm up. Multiport EDFAs accommodates up to 16 output ports in 1RU setting and 32 output ports in 2RU setting. Combined with our AT5000 1550nm direct or externally modulated laser transmitter, MSOs can quickly deploy and activate advanced multi-media services in long distance video transmission and high subscriber count FTTH networks.

- **Video-Overlay for FTTx Applications**
- **Up to 32 Output Ports**
- **Low noise, High Performance**
- **Intuitive Front Panel LCD Display**
- **Adjustable Output**
- **Universal Management with Craft Interface**
- **SNMP Management**

Key Features

- Low noise, high performance
- Suitable for analog and digital CATV systems, DOCSIS, FTTH and more applications
- Suitable for 1550 nm DWDM applications for multiple wavelengths on single fibre
- Nominal output powers from 13 dBm to 22 dBm per port
- Adjustable output power
- Extend analog and digital CATV to suit long distance feeders or larger FTTH distribution systems
- Local or remote monitoring and configuration
- SNMP/HTTP monitoring, management and control

Application Diagram



Specifications

AT5000 EDFA Erbium-Doped Fiber Amplifier - 19” 1RU

Item	Description
Operating Wavelength	1540 nm to 1563 nm
Input Power	-8 dBm to +10 dBm, +3 dBm typical
Maximum Output Power	22 dBm per port (adjustable -3 dB)
Maximum Output Ports	16 (SC/APC), 32 (LC/APC)
Output Power Stability	±0.3 dB
Noise Figure (PIN = 0 dBm)	<5 dB (o/p < 27 dBm) <6 dB (o/p < 40 dBm)
Polarization Dependence Loss	0.3 dB
Polarization Dependence Gain	0.4 dB
Polarization Mode Dispersion	0.5 ps
Input / Output Isolation	30 dB
Return Loss	45 dB
SNMP	RJ45
Serial Interface	RS232
Power Supply	AC: 90 V to 265 V DC: -48 V
Power Consumption	50 W max. (o/p < 27 dBm) 80 W max. (o/p < 40 dBm)
Operating Temperature	-5 °C to +65 °C
Storage Temperature	-40 °C to +80 °C
Operating Humidity	-5 % to 95 % RH (non-condensing)
Dimensions (W x D x H)	Standard version: 483 mm × 368 mm × 44 mm Short version: 483 mm × 256 mm × 44 mm (available for selected configurations)
Weight	≤6 kg

Ordering Information

AT 5000 Series 1RU Optical EDFA Ordering Information

AT-	5X-	EDFA-	XX-	XX-	XX-	XX-	X-	X

	Gain Type
50	Standard
51	Gain Flattened

	Output Power
13	13dBm
16	16dBm
17	17dBm
18	18dBm
19	19dBm
20	20dBm
21	21dBm
22	22dBm
23	23dBm

	Optical Connector
SC	SC/APC
LC	LC/APC

	Power Supply
	Default Single PS
2	Dual PS for multiple output version

	Output Ports
01	1 Optical Output
02	2 Optical Outputs
04	4 Optical Outputs
08	8 Optical Outputs
16	16 Optical Outputs
32	32 Optical Outputs

	Power Supply
AC	90 to 265 VAC Australia Plug
DC	30 to 72 VDC
A3	90 to 265 VAC with Continental EU Plug
A4	90 to 265 VAC with North America Plug

	Optical Switch or Receiver
-	No Optical Switch or RX
S	Built-in Optical Switch
R	Built-in Optical RX
O	Built-in Optical Switch & RX

* The maximum optical port per 1RU is 32 x LC/APC or 16 x SC/APC. The maximum output power per port is 22dBm. Contact ACT Sales Representative for customized output ports or more information.

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Specifications and product availability are subject to change without notice.

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