

CATV

50EYA 2U Series High Power Er/Yb Doped Fiber Amplifier



■ Performance characteristics

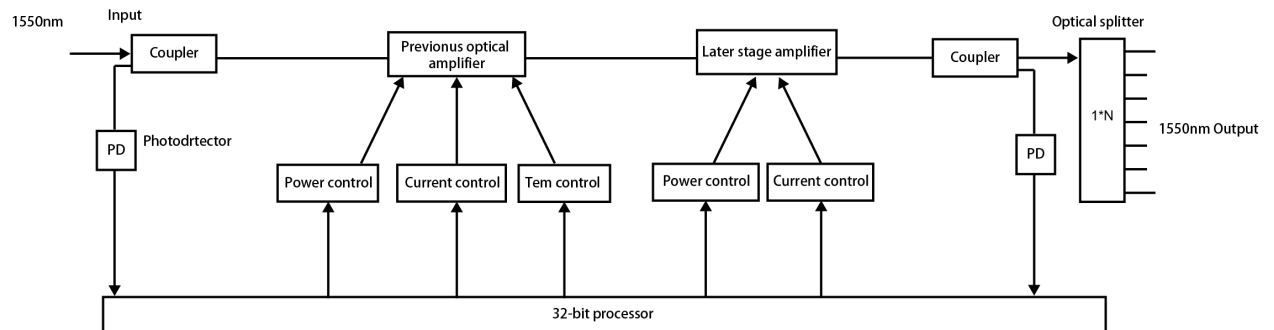
- ◆ Adopts world top brand pump lasers and the OFS fiber of United States, advanced LG switch low-power circuit design, greatly reducing the overall power consumption and heat.
- ◆ Perfect APC, ACC, ATC control, users use in different networks, good ventilation design and temperature-controlled fan, ensure the long life and high reliability of PUMP laser.
- ◆ Using digital control chip, remote or local output power adjustable.
- ◆ Excellent protection circuit design, with light detection, optical return loss monitoring. Great protection of lasers and light path safety.
- ◆ Built-in low-noise preamplifier eliminates the need for cascaded EDFA, allowing input light to be as low as -5dBm, greatly reducing CNR and MER degradation.
- ◆ Demultiplexer for 1310/1490/1550nm EPON and GPON. It greatly facilitates network applications with PON. Low noise figure (type $\leq 4.5\text{dB}$, Max $\leq 5.0\text{dB}$).
- ◆ The total output optical power is optional: 2-10W (33-40dBm).
- ◆ The front panel can be removed and replaced flexibly according to the number of output ports; Can add a built-in optical switch module to facilitate the expansion of the device function; Cooling fan supports online replacement.
- ◆ The front panel LCD provides the operating parameters and alarms of the entire unit. RJ45 provides serial communication and SNMP network management interface; Carrier-grade dual power hot backup, CPU assignable power.

■ Applications

The 50EYAx series high power amplifier is a high power multi-output optical fiber amplifier with a gain spectrum bandwidth of 1535~1565nm. It is mainly designed for CATV or 1~8 continuous strip channels (ITU wavelength) applications. It provides a flexible, low-cost solution for large-scale FTTH coverage of CATV systems in large and medium-sized cities.

50EYAx can achieve single-wavelength cable TV transmission, CWDM single-fiber three-wave, flat-gain type, DWDM; its reliable and excellent performance ratio between the main application of FTTH, FTTB, DBS, MMDS, FTTX pon, is to build CATV large Medium-sized optical fiber transmission network is an important equipmen

■ Block diagram



50EYAx

■ Limited Parameters

Technical Data	50EYAx
Max wavelength	1535-1565nm
Minimum input power	-10dBm
Max input power	+10dBm
Limited working temperature	-25°C ~+70°C
Limited working voltage	AC90~265V&DC30~72V&DC30~72V

■ Technical parameters

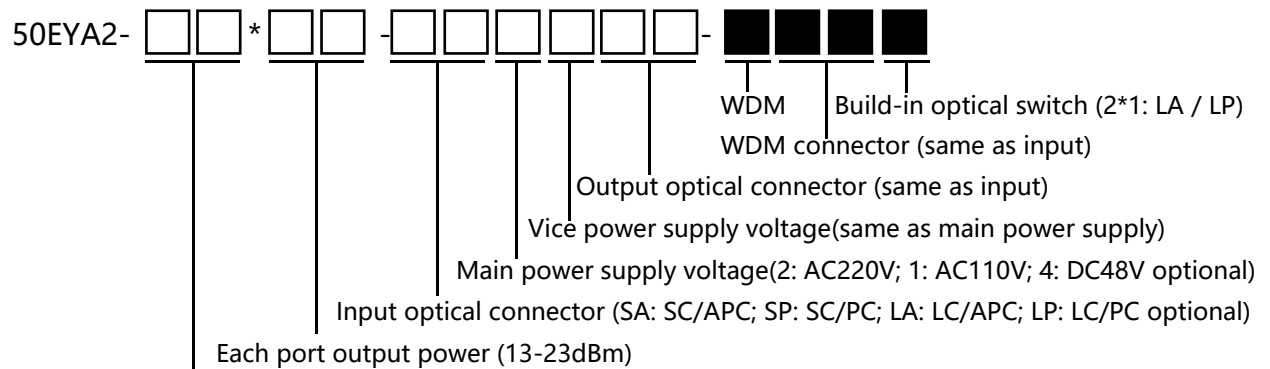
Technical parameters	50EYAx
Wavelength	1535-1565nm
Input power	-5dBm~+10dBm (normal input -2dBm~+5dBm)
Output power	33dBm~41dBm (WDM -1dBm)
Output port	SC: 16/32/64; LC: 32/64/128
Each output power	10~23dBm or customized
Noise	< 5.0dB (Pin=0dB)
Polarization dependence loss (PDL)	< 0.3dB
Polarization dependence gain (PDG)	< 0.4dB
Polarization mode dispersion (PMD)	< 0.3dB
Pump leakage power	< -30dBm
Echo loss	≥ 55dB

Optical connector	SC/APC&SC/UPC&LC/APC&LC/UPC
Supply voltage	220V(AC90V~265V)&110V(AC90V-130V)&48V(DC30~72V)
Consumption	≤100w
Working temperature	-5°C ~+42°C
Storage temperature	-40°C ~+80°C
Working relative humidity	5~95%
Product net size	450(L)*482(W)*89(H)
Package dimension	640(L)*640(W)*200(H)

Model guide

2U chassis high power optical amplifier series products naming method:

50EYA2-output port*each port power+input port optical connector+main power supply voltage+vice power supply voltage +output port optical connector+with WDM+WDM connector+with optical switch.

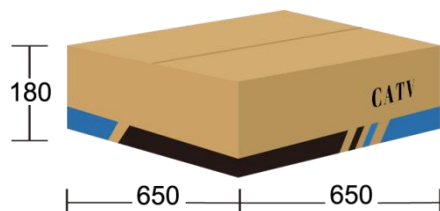


Output port (LC: 32-128 port of SC: 4-16 port)

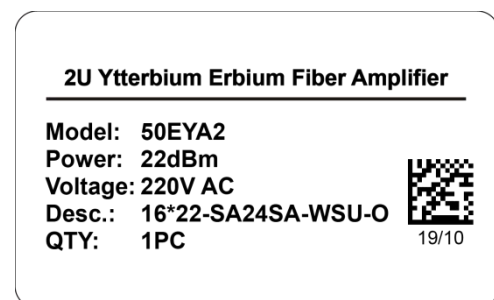
Example: 50EYA-16*22-SA24SA-WSU-O

Explanation: This is 2U chassis high power ytterbium optical amplifier device, 16 output ports, each port output power is 22dBm, input optical connector is SC / APC, main power supply voltage is 220V. Vice power supply voltage is 48V, output port optical connector is SC / APC, with WDM, WDM connector is SC / UPC, built in optical switch

Package & Label



1pc package



Product label