



DATASHEET

Customized FTTx PON High Power 1550nm EYDFA

OTN Solutions for Metro, Regional & Long Haul

Description

EYDFA is a Er/Yb Doped Fiber Amplifier that utilizes multimode laser pumping and Erbium/Ytterbium double-clad technology to achieve high output power in conjunction with low cost. This amplifier employs the laser pumping (Patent No. ZL200820150412.3), and the laser driver circuit (Patent No. ZL200820150413.8) to reach better and more stable performance. Inimitable ATC or APC circuit ensures the stability of output power. The MPU system with high accuracy and high stability is controllable and adjustable. It offers a flexible and low-cost FTTx solution for CATV large area coverage of metropolises and medium-sized cities.

Features

- Controllability and maneuverability: Dual CPUs deal with control loop and communication separately
- High stability and reliability: MTBF > 150000 hours
- Redundant hot swap power module: 220VAC/-48VDC
- Ethernet, RS-485 and RS-232 interface
- Support Telnet and SNMP network management
- OEM available
- Bellcore GR-1312-CORE compliant
- Employ intelligent temperature control system:
 - (1) Adopt special temperature control circuit where heat dissipation and power consumption can be reduced by 30%.
 - (2) The professional design for air volume also ensures the ideal temperature. The fan starts up when the temperature of the cabinet exceeds 45 °C, and the product runs down below 40 °C. This technology ensures thermal stability of system and fan's long life.

Application

- Analog and Digital CATV Optical Network
- FTTH
- Tri-networks integration
- Free space communications
- R&D

Optical Characteristics

| | | | |
|----------------------|---------------|-----------------------|------------------|
| Operating Wavelength | 1529~1564nm | Max Output Power | 26dBm |
| Output Per Path | 26dBm | Output Port Number | 1 |
| Input Power | -10~10dBm | Noise Figure | 5dB |
| Input Isolation | ≥ 30 dB | Output Isolation | ≥ 30 dB |
| Return Loss | ≤ -45 dB | Gain Stability | ± 0.05 dB |
| Consumption | ≤ 35 W | Fiber Optic Interface | LC/UPC or LC/APC |

Electrical Characteristics

| Parameter | Symbol | Min | Typ | Max | Unit |
|--------------|--------|-------|-------|-----|------|
| Power Supply | Vps | 170 | ----- | 264 | VAC |
| Consumption | P | ----- | ----- | 50 | W |

Environmental Characteristics

| Parameter | Symbol | Min | Typ | Max | Unit |
|-----------------------|--------|-----|-------|-----|------|
| Operating Temperature | Tw | -5 | ----- | 60 | °C |
| Storage Temperature | Ts | -40 | ----- | 80 | °C |
| Humidity (1) | ----- | 10 | ----- | 85 | % |

(1) No condensation

Order Information

| | | | |
|-----------------------|---------------------------|---------------------------|-------------------------|
| Housing | 1U/2U rack mount | | |
| WDM | without | with | |
| Single Channel Output | 17dBm 21dBm | 18dBm 22dBm | 19dBm 20dBm 23dBm |
| Input Power | -3dBm~10dBm 0dBm~10dBm | -8dBm~10dBm 5dBm~15dBm | |
| Output Power | 17dBm-23dBm | | |
| Connector | LC/APC | SC/APC | |
| Power 1 | 100V-240VAC | 36V-72VDC | |
| Power 2 | 100V-240VAC | 36V-72VDC | None |

*Customized specifications are available upon request.



 <https://www.fs.com>



The information in this document is subject to change without notice. FS has made all efforts to ensure the accuracy of the information, but all information in this document does not constitute any kind of warranty.