

# **Erbium-Doped Fiber Amplifier (EDFA)**



### 1、Summary

In order to reach high index and dependability, main instruments are all adopted imported famous brand to cooperate microprocessor automatic control circuit and high dependability switch power to assemble up. High dependability, low noise, especially double pump design makes noise index better. Each main technique performance index and technique plane can compare with foreign similar machine. And with high performance to price ratio, it is suitable for using at large or middle-size network.

## 2、Performance Characteristic

• Adopt international famous brand low-noise pump laser, low distortion, wide frequency band, high output optical power.

• Microprocessor automatic control circuit makes both pumps work at best state. Dependability and stability are better.

- Front panel blue VFD display, shows various main work status parameters.
- Various output power for selection.
- RS-485 and RS-232 control interface can realize network management status monitor.
- 19" 1U high-standard framework type installation.
- Accord to the standard Ethernet interface and RS-232 network management interface of IEEE802.3 10 Base-T.

• Support <GB/T 20030-2005 HFC Network Equipment Management System Criterion>, built-in responder, it is convenience for network management control.

• Total SMT structure, small size, low power consumption, high reliability.

ITEM		UNIT	PARAMETER
Optical Wavelength		nm	1535 ~ 1565
Input Optical Power		dBm	-5 ~ +10
Output Optical Power		dBm	13 ~ 24
Output Power Stability		dB	±0.5
Noise Figure		dB	< 5.0 (Input Optical Power 0dBm)
Return Loss	Input End	dB	≥ 45
	Output End	dB	≥ 45
Power of Pump Leak	Input End	dBm	≤ -30
	Output End	dBm	≤ -30
C/CTB		dB	≥ 52
C/CSO		dB	≥ 65
C/N		dB	≥ 65
Connector Type			FC/APC or SC/APC
Supply Voltage		V	AC 160V~250V (50 Hz)
Operating Temperature		°C	-5 ~ +55
Max Relative Humidity		%	Max 95% No Condensation
Storage Temperature		ĉ	-30 ~ +70
Max Relative Humidity for Storage		%	Max 95% No Condensation
Dimension		mm	483 (W) x 381 (L) x 44 (H)

## 3、Performance Parameters

The performance parameters of this manual according to GY/T143-2000 < Network Entry Technical Requirements and Measurements Method of CATV laser Optical Transmitter and Receiver >

#### Testing Environment

Below part of optical receiver: 10km standard optical fiber, no source of optical attenuator and the testing circuit of standard optical transmitter. Set with 59 PAL-D analog TV channel signal at range of 47MHz~550MHz in the fix index loss of circuit. Transmit 640QAM concoct digital TV signal at rang of 550MHz~862MHz, the electricity level (8 MHz bandwidth) digital signal is lower 10dB than analog signal of carrier electricity level; the input of optical receiver is –1dBm, output level of RF is 96dBuV with lean beam of 9dB output, measure C/ CTB, C/ CSO, C/ N.

## 4、Principle Drawing



# 5、Order Direction

Please confirm optical output power, optical connector type and power voltage when order.

# 6、Accessories

1 set of User's Manual