Optical Amplification Sub-system: 1U EDFA Device

The main function of EDFA Optical Amplification Subsystem launched by Sintai Communication is to compensate the power of the signal light in the transmission link and extend the transmission distance of the optical signal. According to the function can be divided into BA(booster amplifier), LA(line amplifier), PA(pre amplifier), etc., of which BA is commonly used in the system sending end, to improve the system into the fibre optical power; LA is commonly used in the line relay section, to compensate for the loss of optical power on the line; PA is commonly used in the system receiving end, to improve the system to receive optical power, EDFA features the use of erbium-doped optical fibre as a gain medium, with 980 or 1480 nm pump laser as a pump source, using one or two-stage amplification to form a set for the input signal, and then the EDFA can be used for the transmission of optical signals to extend the transmission distance. It adopts one-stage or two-stage amplification to form the aggregate amplification for the input signal, which is the DWDM system and the future high-speed system, all-optical network It is an indispensable part of DWDM system and future high-speed system and all-optical network.

Product features

- Support C-band 48-wave/96-wave DWDM signal unified amplification
- Automatic Gain Control (AGC)
- Flat gain and small noise index
- Supports built-in VOA
- Support SNMP, Web and other graphical interface network management
- Support AC 220V/110V and DC-48V power supply options, 1+1 power input protection
- 1U plug-in design with flexible capacity configuration
- Configuration-free installation, plug-and-play device

Product specifications

Parameter	Description			Remark
Operating wavelength range	Conventional: 1529nm~1561nm Extended: 1528nm~1568nm			
Type of EDFA	BA	LA	PA	
Minimum input optical power (conventional)	-26dBm	-34dBm	-39dBm	
Saturated output optical power (conventional)	+20dBm	+20dBm	+20dBm	Custom up to +22dBm
Rated gain (conventional)	17dB	25dB	30dB	Custom
Gain flatness	≤1.5dB			
Coefficient of noise	≤5.5 dB			
Operating temperature range	-10℃~60℃			
Operating humidity range	5% to 95% Non-condensing			
Storage temperature	-40℃~85℃			
Device size	1U: 44 mm (H) x 442 mm (W) x 280 mm (D)			
Network management	Support SNMP, Web and other graphical interface network management			Optional Configurations
Expertise	Built-in VOA			Optional configurations
Optical interface	LC/UPC type			
Power supply method	AC: 90 ~ 260V or DC: -36 ~ -72 V (1+1 power input backup)			
Typical power consumption	Whole machine full <50W			
Heat dissipation	Fan cooling			