X8600-EDFA

XenOpt Optical Amplification Subsystem

Features

- Support the unified amplification of 48CH/96CH DWDM signal of C band
- Automatic gain control (AGC)
- Flat gain and low noise figure
- Support built-in VOA and automatic adjustment of optical power
- Support two-stage amplification with OADM or DCF modules to be configured in the line
- Support multi-kinds of graphical interface network management, such as SNMP, Web
- Support AC power 220 V, DC power -48 V, and 1+1 power input protection
- 1U pluggable rack mount, flexible capacity configuration
- Free of configuration installation and support plug and play
- Working temperature range -10℃~+60℃

Applications

- DWDM system and high speed transmission system to compensate the signal's optical power to extend the signal transmission distance
- BA is deployed at the transmitting end
- LA is deployed at the optical repeater station
- PA is deployed at the receiving end

Description

The main function of the EDFA (Erbium-Doped Fiber Amplification) optical amplification subsystem is to compensate the signal's optical power in the transmission link, which can finally extend the optical signal transmission distance. There are three EDFA types - BA, LA and PA. BA is usually used at the transmitting end to boost the output optical power of the system. LA is usually used at the repeater section to compensate the power loss of the line. PA is usually used at the receiving end of the system to improve the input optical power. The EDFA can amplify all the input optical signals by using the erbium-doped fiber as the gain medium and using the 980 nm or 1480 nm pump laser as the pump source with one-stage or two-stage amplification. It's one of the most indispensable and important parts of the DWDM system, high speed transmission system and all optical network in the future.

Technical Specifications

Parameter	Technical Indicators			Note
Working wavelength range	Stand type: 1529 nm~1561 nm, applicable to C band 40 CH (100 GHz) or 80 CH (50 GHz) DWDM system			
	Extended type:1528 nm~1568 nm, applicable to C band 48 CH (100 GHz) or 96 CH (50 GHz) DWDM system			
EDFA type	BA (2017N(V))	LA (L2025N(V))	PA (P1620N(V))	

Minimum input power (typical)	-22 dBm	-30 dBm	-32 dBm	
maximum input power (typical)	+3 dBm	-5 dBm	-4 dBm	
Saturation output power (typical)	+20 Bm	+20 dBm	+16 dBm	Customized with maximum +23 dBm
Rated gain (typical)	17 dB	25 dB	20 dB	Customized
Gain flatness	≤ 1.5 dB			
Noise figure	≤ 5.5 dB			
Working temperature range	-10℃ ~ 60℃			
Working humidity range	5% ~ 95% no condensation			
Storage temperature	-40℃ ~ 85℃			
Equipment size	1U: 44 mm (height)×442 mm (width)×280 mm (depth)			
Network management	Support multi-kinds of graphical interface network management, such as SNMP and Web			Optional configuration
Power supply	AC: 90 ~ 260 V or DC: -36 ~ -72 V (support 1+1 power input backup)			Optional configuration
Typical power consumption	Full configuration < 60 W			
Heat dissipation	Fan cooling			
MTBF	> 100000 hours			

Ordering information

Part number	Product Description
X8600-EDFA BA	X8600-EDFA Optical Amplification Subsystem, Type BA, -10℃~+60℃
X8600-EDFA LA	X8600-EDFA Optical Amplification Subsystem, Type LA, -10℃~+60℃
X8600-EDFA PA	X8600-EDFA Optical Amplification Subsystem, Type PA, -10℃~+60℃

Notes

[1] For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice.

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