EDFA Optical Amplification Subsystem

The main function of the EDFA optical amplification subsystem launched by NewNets is to compensate the signal's optical power in the transmission link, which can finally extend the optical signal transmission distance. It can be divided into BA, LA and PA based on the application scene. 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 980nm or 1480nm pump laser as the pump source with one- stage or two-stage amplification. It's one of the most indispensable and important part of the DWDM system, high speed transmission system and all optical network in the future.

Product Feature

- 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
- 1U pluggable rack, flexible capacity configuration
- Support AC power 220V, DC power -48V, and 1+1power input protection
- Free of configuration installation and support plug andplay
- Support multi-kinds of graphical interface network management, such as SNMP, Web

Product Specification

Item	Parameter			Remark
Working wavelength range	Stand type: 1529nm~1561nm, extended type: 1528nm~1568nm			
EDFA type	BA)	LA	PA	
Min input power (typical)	-22dBm	-26dBm (10G SFP+ 40KM) -28dBm (10G SFP+ 80KM) -30dBm (100G CFP DWDM)	-26dBm (10G SFP+ 40KM) -28dBm (10G SFP+ 80KM) -32dBm (100G CFP DWDM)	
Saturation output power (typical)	+20dBm	+20dBm	+16dBm	To be customized with max +22dBm
Rated gain (typical)	17dB	25dB	20dB	To be customized
Gain flatness	≤1.5dB			
Noise figure	≤5.5 dB			
Working temperature range	-10℃~60℃			
Working humidity range	5%~95% no condensation			
Storage temperature	-40℃~85℃			
Equipment dimension	1U: 44 mm (H)×442 mm (W)×280 mm (D)			
Network management	Support multi-kinds of graphical interface network management, such as SNMP and Web			Optional
Special technology	Built-in VOA with automatic adjustment of optical power			Optional
Optical interface	LC/UPC			
Power supply	AC: 90 ~ 260V or DC: -36 ~ -72 V (1+1 power input backup)			
Typical power consumption	Full configuration <60W			
Heat dissipation	Fan cooling			