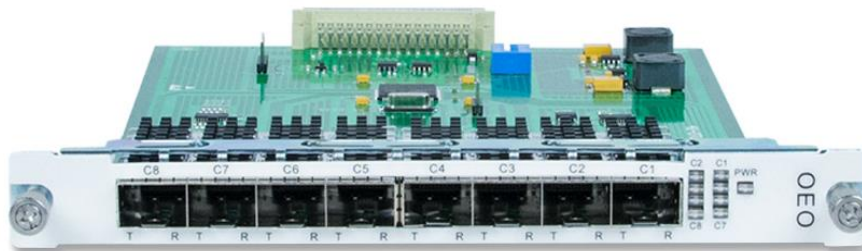


25G OEO Amplifier

CWDM/DWDM System



Specification

25G OEO optical amplifier is a device for gaining optical signals in optical fiber links, which compensates the attenuation of optical signals during transmission, thereby increasing the non-relay transmission distance in the link and achieving optical fiber links long-distance transmission. It can amplify services with any rate protocol from 1.25Gbit/s~25.78Gbit/s. It is a protocol and rate-transparent optical fiber converter that uses OEO("optical-electrical-optical") technology to regenerate, amplify, and shape signals during optical transmission. It can effectively save fiber resources and networking costs, OEO optical amplifiers are widely used in backbone networks such as SAN, LAN, and MAN, and because of their wavelength and mode conversion functions, they are also widely used in network links such as Ethernet, SDH, Fibre Channel, OTN, and digital video.

OEO optical amplifiers can replace optical power amplifiers, effectively solve the problem that the fiber transmission distance exceeds the equipment transmission distance capability, and can be used for wavelength and mode conversion in the fiber link, which can achieve seamless integration of different fiber types and cooperate with Visint® other network equipment(Such as DWDM, ODM, DCM, EDFA, etc.) to form a complete set of optical network transmission system.

Functions and features

- Supports single-mode to multi-mode conversion, optical power amplification and other applications.
- Supports 850nm, 1310nm, CWDM or DWDM wavelength amplification.
- Supports 4 channels bidirectional or 4 channels 1.25Gbit/s~25.78Gbit/s unidirectional any rate protocol service access.
- Supports SNMP-based unified network management platform, network management methods CLI, Web, NetRiver (graphical interface).
- Supports DDM signal monitoring and link detection (ASL).
- Supports software to close the port.

Parameters

System Parameter	Technical Index	
Maximum capacity of single card	4*25G bidirectional transmission. 4*25G unidirectional transmission.	
Wavelength range	CWDM: 1271~1611nm, Multimode: 850nm, 1310nm. DWDM: C-Band (100GHZ or 50GHZ).	
Service access types	PDH, SDH: STM-1/STM-4/STM-16, SONET: OC-3/OC-12/OC-48, FE, GE, 1G, 2G, CPRI 1~3, POS, FICON, ESCON.	
3R technology	3R functions: (Re-amplifying), (Retiming), (Re-shaping).	
Network management functions	CDR function (DDM real-time monitoring), no optical signal shutdown function, service access one-way or bidirectional setting.	
Network management mode	CLI, NetRiver, WEB.	
Product dimension	177 (W)*20(H)*225(D)(mm).	
Environmental requirements	Working temperature	-10°C ~ 70°C
	Storage temperature	-40°C ~ 80°C
	Relative humidity	5% ~ 95% no condensation
Safety and EMC	Compliance with FCC, UL, CE, TUV, CSA standards.	
Power consumption	<20W.	

Networking Applications

The products optical amplifier equipment is widely used in data room interconnection, metropolitan area network, access network and other networks. The device is connected in series on the service line to efficiently re-amplify, re-time and re-shape the signal, completely transparent to the service, and supports multiple rates from 100Mbps to 100Gbps.

Application 1: Multichannel Amplification

Multichannel amplification is an optical amplifier device (EDFA) connected in series in service line, which can amplify multiple wavelength optical signals in a single core optical fiber uniformly.

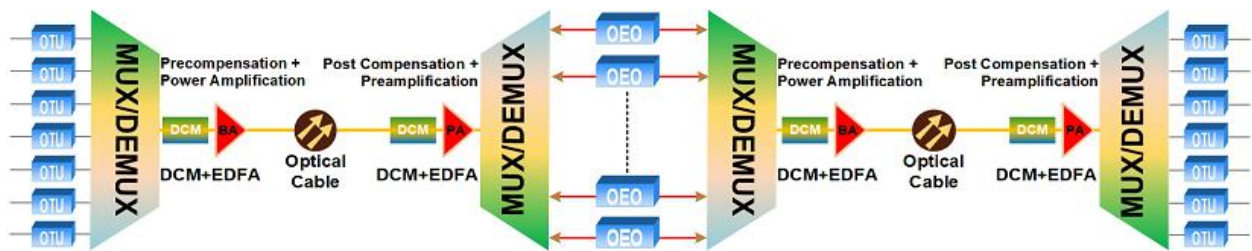


Figure 1: Multichannel Amplification Application

Application 2: Single Channel Amplification

Single channel amplification (SCA) is a relay amplifier (OEO) connected in series in the link, which is widely used to amplify single channel optical signals in optical fiber networks.

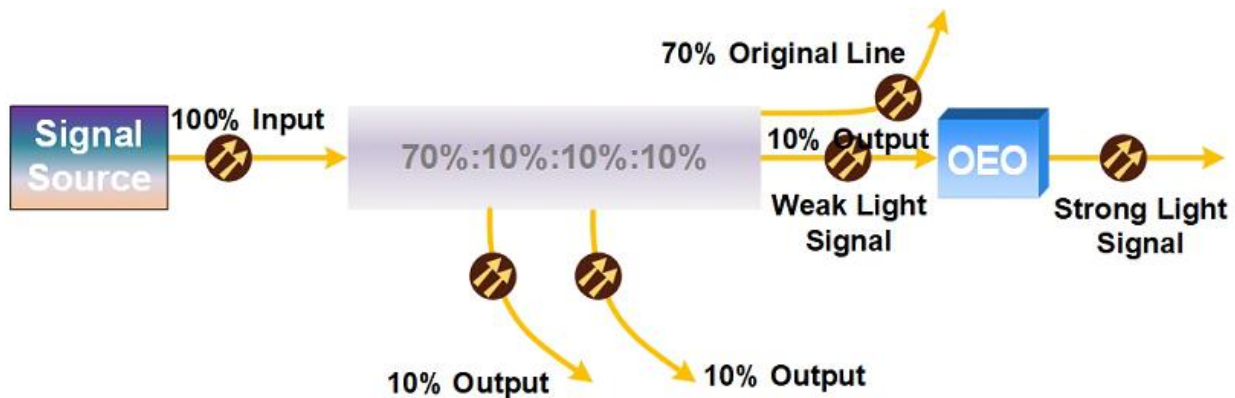


Figure 2: OEO Amplification Application