

Service the industry with high-performance & cost-effective solutions

### PRODUCT DETAILS

The UOA (Universal Optical Amplification system) launched by Diamond Optics Pty Ltd allows for a number of diverse network applications in network applications. The UOA system can be standalone amplification or as part of an augmented legacy system. It is capable of low power optical signal of 100G high-speed services in optical networks. It adopts the plug-in card type and hot-plug design with the characteristics of high integration, low power consumption and stable output power. The system is widely used in data link power amplification and extending transmission distance in various industries.

## PRODUCTS AVAILABLE

- 1 RU chassis
- NMS card
- SOA cards single, dual , quad.
- EDFA, single pre and booster.
- AC power card
- DC power card
- Fan Card
- VOA (Variable Optical Attenuators)
- Raman Card
- DWDM card 4 channel
- DWDM card 8 Channel
- Dispersion compensation card up to 220
- Km, very low loss.

# Universal Optical Amplifier



### FEATURES

#### For 1310 nm and 1550 nm Amplification

- Wavelength range: 1280nm~1330nm and 1510 - 1590nm
- Working modes: automatic power control (APC)and automatic gain control (AGC)
- Input power range : -17dBm~-4dBm
- High output power:
- Unified network management platform:
- Support multi-kinds of graphical interface network management, such as SNMP, Web
- Double power protection: support AC power 240V, DC power -48V, and 1+1 power input protection
- Flexible architecture: 1U plug-in card design, flexible capacity configuration.
- Ultra low power consumption.
- Green and easy-to-use: configuration-free



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# APPLICATION SCENARIOS

The transmission distance of traditional 100GBese-LR4 optical link is limited to 10km. In the transmission of long distance or high loss optical fibers, SOA optical amplifier can be configured to amplify the weak optical power signal on the receiving side to meet the receiving requirements of the equipment.



## **TECHNICAL PARAMETERS**

Item	Parameter	Remark
Working wavelength range	1280nm ~ 1330nm "O" band and 1550 <u>+</u> 40nm "C" band	
Input power range (total power)	-17dBm ~ -4dBm or -32 dBm for C band	
Output power range (total power)	2dBm ~ 12dBm or +20 dBm max for C band	
Gain	≥14dB or +30 dB max for C band	
Gain flatness	≤2dB	
Noise figure	≤7.5 dB 5.0dB for C band	
Polarization dependent gain	≤2dB 1.5 dB for C band	
Working temperature range	-10°C~60°C	
Working humidity range	5%~95% no condensation	
Storage temperature	-40°C~85°C	
Equipment size	1U: 44 mm(height)×442 mm(width)×220mm(depth)	
Network management	Support multi-kinds of graphical interface network management, such as SNMP and Web	Optional configuration
System capacity	8*100G optical signal amplification	1U full configuration
Optical interface	LC/APC type	
Power supply	AC: 100 ~ 240V or DC: -36 ~ -72 V (support 1+1 power input backup)	
Typical power consumption	Full configuration <34W maximum	
Heat dissipation	Fan cooling	
МТВЕ	> 100000 hours	

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