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# **SOA Optical Amplification Subsystem**

The SOA optical amplification subsystem launched by Guangzhou Sintai Co., Ltd is a special amplification platform for 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.

### **Product Feature**

- Wavelength range: 1280nm~1330nm
- Working modes: automatic power control (APC)and automatic gain control (AGC)
- Input power range: -17dBm~-4dBm
- High output power: saturated output optical power can reach +12dBm
- Double power protection: support AC power 220V, DC power -48V, and 1+1 DC power input protection
- Flexible architecture: 1U plug-in card design, flexible capacity configuration

#### Green and easy-to-use: configuration-free installation, plug-and-play

 Unified network management platform: Support multi-kinds of graphical interface network management, such as SNMP, Web

## **Product Specification**

ltem	Parameter	Remark
Working wavelength range	1280nm ~ 1330nm	
Input power range (total power)	-17dBm ~ -4dBm	
Output power range (total power)	2dBm ~ 12dBm	
Gain	≥14dB	
Gain flatness	≤2dB	
Noise figure	≤7.5 dB	
Polarization dependent gain	≤2dB	
Working temperature range	-10°C~60°C	
Working humidity range	5%~95% no condensation	
Storage temperature	-40°C~85℃	
Equipment dimension	1U: 44 mm (H)×442 mm (W)×220 mm (D)	
Network management	Support multi-kinds of graphical interface network management, such as SNMP and Web	Optional
System capacity	16*100G optical signal amplification (4*Quad-SOA card)	1U full load
Optical interface	LC/UPC	
Power supply	AC: 90 ~ 260V or DC: -36 ~ -72 V (1+1 power input backup)	
Typical power consumption	Full configuration <160W (4*Quad-SOA card)	
Heat dissipation	Fan cooling	
MTBF	>100000 hours	

