

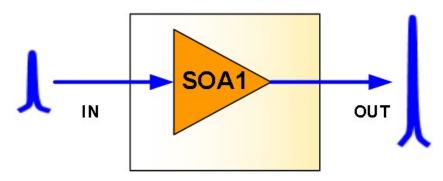
## SOA: 100G semiconductor optical amplifier board

SOA is an O-band semiconductor optical amplification board. Its main function is to amplify the optical signal within the range of 1260~1360nm, with the maximum rate support of 160Gb/s. It has characteristics such as stable output power, low output noise and low polarization dependent gain. The single-board supports the access to 1-4channel independent optical signals. It' suitable for the amplification for 40G or 100G small power signals in the construction of security system.

## **Product diagram**



## **Functional structure**



## **Product specification**

Parameter		Minimum Value	Normal Value	Maximum Value
Work wavelength	40GE	1260nm		1340nm
range	100GE	1290nm		1320nm
Input optical power range		-20dBm		-10 dBm
Saturated output power			10 dBm	
Gain			14dB	
Noise			7.5 dB	
Polarization dependent gain				2dB
Occupied slot number		Occupy 1 slot, applicable to the platform of the whole OTN1000 series		
Network management function		<ul> <li>Support real-time monitoring of work state, including input optical power, output optical power, gain, temperature, etc</li> <li>Support adjustable APC gain</li> <li>Support adjustment of output optical power range and input optical power threshold</li> </ul>		
Optical interface		All interfaces are LC type		
Typical power consumption		20 w		
MTBF		> 100000 hours		