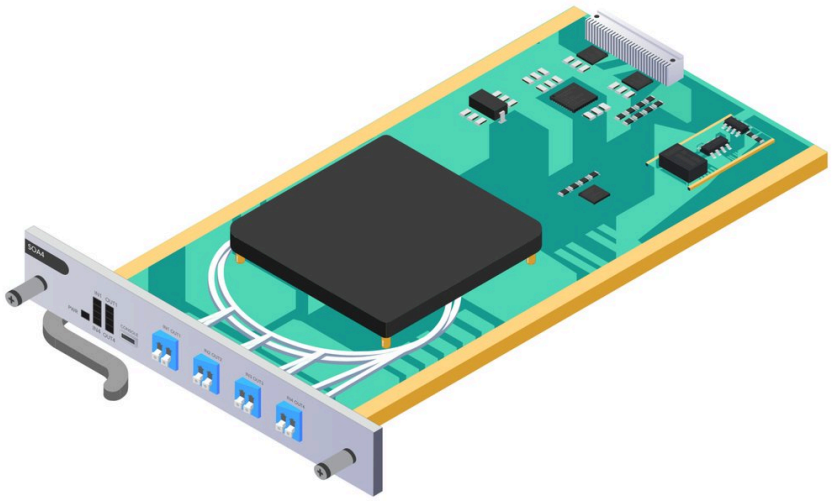
nex·gen

OTN SYSTEMS WDM PLATFORMS

SOA Card for WDM Chassis

The SOA Semiconductor Optical Amplifier Card amplifies 1310nm-window optical signals directly in the fibre path. Each card provides multiple independent amplification channels, with a hot-swappable plug-in design, high integration and stable output power, used across industries to boost weak signals and extend transmission distance on data links.



HIGHLIGHTS

1 to 4 channels per card

Four models (SOA-1 to SOA-4) covering 1, 2, 3 or 4 independent amplification channels on a single card.

1310nm window amplification

Amplifies signals across 1290-1320nm.

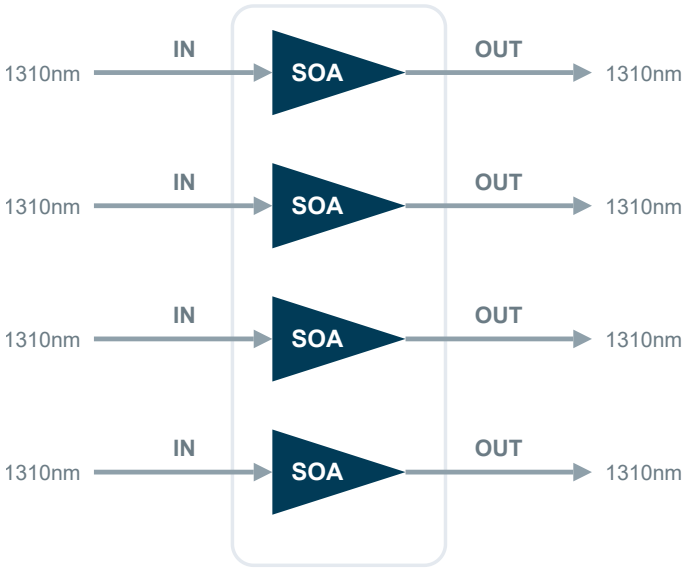
APC / AGC selectable

Automatic power control or automatic gain control, configurable per application.

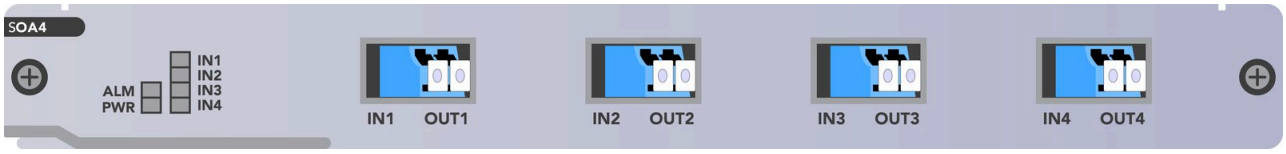
Hot-swappable plug-in

High integration, low power consumption, stable output power.

FUNCTIONAL STRUCTURE



FRONT PANEL



FORMAT

CARD FOR WDM CHASSIS 1 SLOT

SPECIFICATIONS

PARAMETER	MIN	TYPICAL	MAX	UNIT	REMARK
Working Wavelength	1290		1320	nm	
Amplified Channels	1		4	channel	1–4 channels optional, related model SOA1–SOA4
Gain	13			dB	IN=-10dBm, OUT=4dBm
Input Power Range	-20		0	dBm	
Saturated Output Power		6	10	dBm	
Polarization Related Gain			2	dB	
Bias Current		300	400	mA	
Gain Flatness			3.5	dB	4ch @1294–1310nm
Noise Figure			8.5	dB	IN=-10dBm, OUT=4dBm
Working Mode	Automatic power control (APC) or automatic gain control (AGC), configurable				
Occupied Slot Number	Support OTN WDM full series chassis, occupying 1 slot				
Optical Interface	LC/UPC				
Max Power Consumption	15W (4-channel SOA)				

ORDERING INFORMATION

NAME	SOA Card for WDM Chassis
DESCRIPTION	Semiconductor Optical Amplifier Card, amplifies 1310nm-window optical signals, plug-in hot-swappable, APC/AGC selectable. Used for data-link power amplification and extended transmission distance.
PART NUMBER	WDM-SOA-**{Channels}**-1S

{Channels}	1 · 2 · 3 · 4, see Channel Models table above, required