OA (Optical Amplifier Card)

OA (Optical Amplifier Card)

OA (Optical Amplifier Card)

Details

Product Overview:

The main function of the OA (Optical Amplifier) board launched by D Tech Trading is to compensate the power of the optical signal in the transmission link, which can simultaneously amplify the optical signal of up to 48 channels (channel interval of 100GHz) or 96 channels (channel interval of 50GHz) in C-band, with the features of flat gain, adjustable gain and small noise index, etc. Meanwhile, the card has built-in OSC optical monitoring channel to support OSC-based DCN communication, which is an indispensable and important part of DWDM system and future high-speed system and all-optical network long-distance transmission.

Application case:

Suitable for optical terminal stations (OTM), used as booster amplifier for multiplexed signals and pre-amplifier for de multiplexed signals

Suitable for optical relay stations (OLA) to amplify bi-directional transmission signals and extend the transmission distance.

Product Specification:

Component	Description
Slot number	1 slot
EDFA	
	Optional built-in 1*EDFA (BA, PA, LA parameters optional)
	Optional built-in 2*EDFA (BA, PA, LA parameters optional)
OSC	
	Optional without OSC
	Optional built-in 1*OSC
	Optional built-in 2*OSC
	Working wavelength: 1510nm
	Working rate: 1.25Gb/s
VOA	
	Optional built-in VOA, the same number as EDFA
	Location: EDFA input front

Component	Description
	Inherent insertion loss: 1dB
	Adjustment range: 0 ~ 15dB
	Power down state is inherent insertion loss
MON monitoring port	
	Standard, the number of ports is the same as EDFA
	MON and the main optical channel optical power difference of 21 ~ 23dB
OTDR measurement port	
	Optional, the number of ports is the same as the line interface
	OTDR signal wavelength: 1625nm
	OTDR channel loss: 1dB

EDFA Parameters:

Parameter	20G17	20G25	20G30

Wavelength range (nm)	1528 ~ 1568	1528 ~ 1568	1528 ~ 1568
Gain range (dB)	14 ~ 20	22 ~ 28	27 ~ 33
Maximum total output optical power (dBm)	?20	?20	?20
Noise (dB)	5.5	5.5	5.5
Gain flatness (dB)	1.5	1.5	1.5
Polarization correlation loss (dB)	0.5	0.5	0.5
Input optical power detection range (dBm)	-23 ~ 8	-31 ~ 0	-36 ~ -5
Output optical power detection range (dBm)	-6 ~ 20	-6 ~ 20	-6 ~ 20
Reflection coefficient (dB)	-30	-30	-30
Gain stability (dB)	±0.5	±0.5	±0.5