OLA (Optical Line Station Amplifier Board)

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Details

Product Overview:

The main function of OLA (Optical Line Amplifier) launched by D Tech Trading is used at the intermediate optical amplifier station in the line, to periodically compensate for the loss of each section of the optical fiber, and to extend the transmission distance It can simultaneously amplify the optical signals of up to 48 channels in C-band (100GHz channel spacing) or 96 channels (50GHz channel spacing), with the features of flat gain, adjustable gain, small noise index, and so on. Meanwhile, the board has built-in OSC optical monitoring channel and supports DCN communication based on OSC, which is an indispensable part of DWDM system and future high-speed system and all-optical network for long-distance transmission.

Application case:

Suitable for Optical Line Stations (OLA), to amplify bidirectional transmission signals and extend transmission distance

Product Specification:

Parameter	Description

Function	Supports bidirectional relay amplification of combined mux signals from optical relay stations, with built-in OSC channels in both east and west directions
Slot number	2 slots
Integration level	Built-in 2*LA, bidirectional OSC, VOA, passive filter, etc.
Safety	Supports Automatic Power Reduction (APR) technology
Monitoring Port	Reserved OCM and OTDR monitoring port for line side transmit and receive directions, can be connected to external OCM and OTDR board
Line side VOA location	LA front input
VOA Intrinsic insertion loss	1dB
VOA Adjustment range	0 ~ 15dB
OSC operating wavelength	1510nm

OSC operating rate	1.25Gb/s
OTDR channel wavelength	1625nm
OTDR Channel Loss	1dB

Optical Amplification Parameter:

Certainly! Here's the optical amplification parameter information presented in a tabular format:

Parameter	**LA: 21G20V**	**LA: 21G30V**
Wavelength range	1528 nm~1568nm	1528 nm~1568nm
Operating modes	AGC or APC configurable	AGC or APC configurable
Gain Range	15 ~ 25dB configurable	22 ~ 35dB configurable

Parameter	LA: 21G20V	LA: 21G30V
Maximum total optical power output	?21 dBm	?21 dBm
Gain Flatness	1.5dB	1.5dB
Gain slope	-3 ~ 0dB	-3 ~ 0dB
Polarization-related losses	0.5dB	0.5dB
Input Optical Power Measurement Range	-28 ~ 6dB	-35 ~ 0dB
Output Optical Power Measurement Range	-2 ~ 22dB	-2 ~ 22dB
Reflection Coefficient	-30dB	-30dB
Gain Stability	±0.5dB	±0.5dB