OTA (Optical Terminal Station Amplifier Board)

OTA (Optical Terminal Station Amplifier Board)

OTA (Optical Terminal Station Amplifier Board)

Details

Product Review:

The main function of OTA (Optical Terminal Amplifier) launched by D Tech Trading is to compensate the power of the optical signal in the transmission link, and 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 Terminal Stations (OTM), to amplify the power of the mux signal and pre-amplify the mux signal

Product Specification:

Parameter	Description
Function	Support power amplification and preamplification of the mux signal with built-in 1 directional OSC channel
Slot number	2 slots
Integration level	Built-in 1*BA*, *1*PA, unidirectional OSC, VOA, passive filter, etc.
Safety	Support 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	PA front input (BA without VOA)
VOA Intrinsic insertion loss	1dB
VOA Adjustment range	0 ~ 15dB

Parameter	Description
OSC operating wavelength	1510nm
OSC operating rate	1.25Gb/s
OTDR channel wavelength	1625nm
OTDR Channel Loss	1dB

Optical amplification parameter:

Parameter	BA: 21G13V	PA: 21G20V	PA: 21G30V
Wavelength range (nm)	1528 nm~1568nm	1528 nm~1568nm	1528 nm~1568nm
Operating modes	AGC or APC configurable	AGC or APC configurable	AGC or APC configurable

Parameter	BA: 21G13V	PA: 21G20V	PA: 21G30V
Gain Range (dB)	8 ~ 18dB configurable	15 ~ 25dB configurable	22 ~ 35dB configurable
Maximum total optical power output (dBm)	?21 dBm	?21 dBm	?21 dBm
Gain Flatness	1.5dB	1.5dB	1.5dB
Gain slope	-3 ~ 0dB	-3 ~ 0dB	-3 ~ 0dB
Polarization-related losses	0.5dB	0.5dB	0.5dB
Input Optical Power Measurement Range (dB)	-18 ~ 13dB	-28 ~ 6dB	-35 ~ 0dB
Output Optical Power Measurement Range (dB)	-2 ~ 22dB	-2 ~ 22dB	-2 ~ 22dB
Reflection Coefficient	-30dB	-30dB	-30dB
Gain Stability	±0.5dB	±0.5dB	±0.5dB