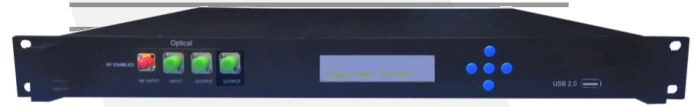# LTD-12.5

DEVICE

12.5 Gb/s Transmitter

OVERVIEW

The Optilab LTD-12.5 is a C-band wavelength electrical to optical converter designed for applications requiring dynamic wavelength allocation and high bit-rate transmission. The LTD-12.5 transmitter utilizes a wide wavelength laser source, a driver, and a broadband optical modulator all in one cost-effective unit to provide pure and efficient modulation. These products are ideal for DWDM or TDM digital data transmission up to 12 Gb/s, and is also an excellent solution for electro-optic component characterization, DWDM networks, secure communication, and laboratory test and measurement. Contact Optilab for more information.
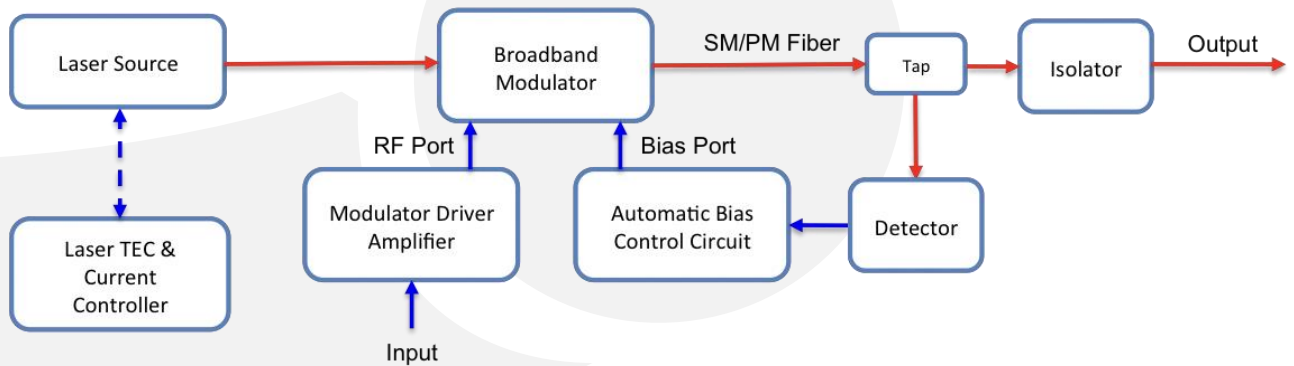
FEATURES

- RS-232 Monitor Interface
- Broadband RF driver
- 1 year warranty

- RFoF Transmitter with 12 GHz Bandwidth
- High Dynamic Range with low RIN Source Laser
- High Linear for Analog Transmission

USE IN

- DWDM Networks
- RF Amplifiers

- TDM digital data transmission
- Dynamic wavelength allocation
- High bit-rate transmission

FUNCTIONAL DIAGRAM

LTD-12.5

SPECIFICATIONS

GENERAL

DFB Laser Wavelength	1550 nm ± 10 nm, can be ordered w/ ITU wavelength
Operational Bandwidth	0.01 to 12 GHz
Optical Output Level	+4 dBm to +6 dBm
Optical Return Loss	40 dB typ.
Linewidth (FWHM)	1 MHz typ.
DFB Side Mode Suppression Ratio	50 dB typ.
Relative Intensity Noise (RIN)	-145 dB/Hz max.
Impedance	50Ω
Frequency Response Flatness	± 0.5 dB in any 1 GHz bandwidth
VSWR	2.0 : 1 max.
RF Driver Gain	14 dB to 26 dB variable

MECHANICAL

Operating Temperature	10 °C to +40 °C
Storage Temperature	-40 °C to +70 °C
Operating Humidity	0% to 85% Relative Humidity
Power Supply Requirements	80-240 V, 43-63 Hz AC or 40-58 V DC (optional)
Power Consumption	80 W max.
Optical Connector	FC/APC, FC/UPC, SC/APC, SC/UPC, PM (optional)
Fiber Type	SMF-28 (Single Mode), PANDA (Polarization Maintaining)
Alarms	Over Temperature, Over Current
Control	Current, Output Power, Bias Control Mode
Display	Current, Output Power, Wavelength, Bias Voltage
Dimensions	Rackmount: 19" (W) x 16" (L) x 1.75" (H)
Accessories Included	110 V – 240 V AC Adaptor & Cable

ORDERING OPTIONS

LTD-12.5-y-zz

y   Housing Type (R: Rackmount)

zz   Output Housing Type; None for Single Mode, PM for Polarization Maintaining