



DEVICE

23 Gb/s Lightwave Transmitter with RF Driver

The Optilab LTD-23 is a C-band wavelength electrical to optical converter designed for applications requiring dynamic wavelength allocation and high bitrate transmission. The LTD-23 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 23 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.

OVERVIEW

FEATURES

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

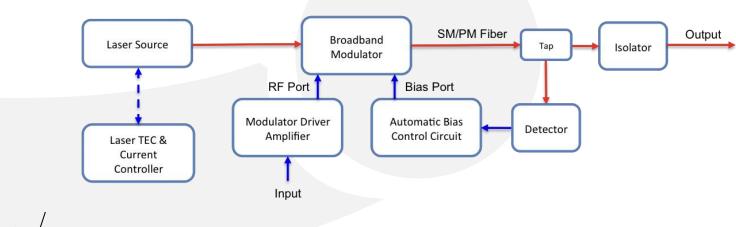
- RFoF Transmitter with 20 GHz Bandwidth
- High Dynamic Range with low RIN Source Laser
- Highly Linear for Analog Transmission

USE IN

- RF Amplifiers
- DWDM Networks

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

FUNCTIONAL DIAGRAM





LTD-23

SPECIFICATIONS

GENERAL

DFB Laser Wavelength	1550 nm ± 10 nm, can be ordered w/ ITU wavelength
Operational Bandwidth	0.01 to 20 GHz
Optical Output Level	+4 dBm to +6 dBm
Optical Return Loss	40 dB typ.
Linewidth (FWHM)	1 MHz typical
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.D: 1 max.
RF Driver Gain	14 dB to 26 dB variable

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 Connectors	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), 16" (L), 1.75" (H)

110 -240 V AC Adaptor and Cable

MECHANICAL

ORDERING OPTIONS

LTD-23-xx

Accessories Included

xx Output Type: SM or PM

EYE DIAGRAM W/ OPTIMAL BIAS POINT

