

## DEVICE 43 Gb/s Transmitter

The Optilab LTD-43 is a C-band wavelength electrical to optical converter designed for applications requiring dynamic wavelength allocation and high bitrate transmission. The LTD-43 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 43 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**

**OVERVIEW** 

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

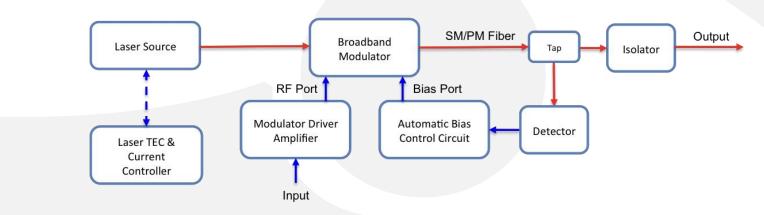
- RFoF Transmitter with 40 GHz Bandwidth
- High Dynamic Range with low RIN Source Laser
- Highly Linear for Analog Transmission

### **USE IN**

- RF Amplifiers
- DWDM Networks

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

#### **FUNCTIONAL DIAGRAM**







# LTD-43

### **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	2.0 : 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	8D 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)
Accessories Included	110 -240 V AC Adaptor and Cable

# ORDERING OPTIONS

LTD-43-y-zz

y Housing Type (R: Rackmount)

zz Output Fiber Type: Maintaining, None, SM, PM

