

DMLT-1310



1310 nm Directly Modulated Laser Transmitter

The Optilab DMLT-1310 laser transmitter is a reliable and cost-effective solution for HFC, PON and deep fiber applications. The DMLT-1310 uses a highly linear 1310 nm DFB laser module and an advanced pre-distortion RF drive circuit to deliver 50+ dB of CNR, while maintaining optimal CSO and CTB performance. The DMLT-1310 has a standard transmission range up to 20 km, and is available at output power levels from +6 dBm to +13 dBm. With the best cost/performance ration in the industry, the DMLT-1310 transmitters support up to 75 NTSC analog channels and an additional 60 QAM channels. Contact Optilab for more information.

Features

- Analog-modulated 1310 nm DFB laser
- Pre-distortion circuit minimizes CSO & CTB
- Optional Automatic Gain Control (AGC)
- 75 channel NTSC plus 60 digital channels
- -20 dB front panel RF test port
- 45 MHz to 870 MHz bandwidth
- LED front panel digital display and indicators
- **3 year warranty standard**

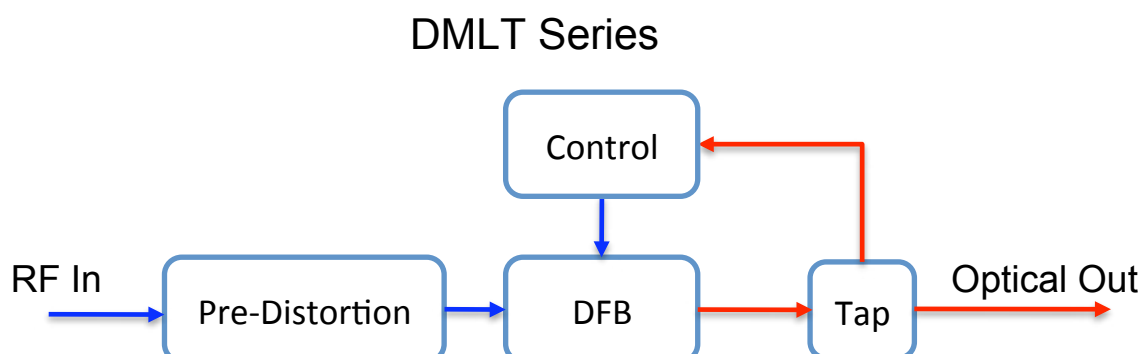
Applications

- HFC
- PON
- RFoG
- Deep fiber applications
- For RUS/USDA projects



This Optilab product meets Buy American and is RUS accepted

Functional Diagram



1310 nm Directly Modulated Laser Transmitter | DMLT-1310

OPTIONS

DMLT-1310-x-yy

- x a: (Without AGC);
b: (With AGC)
- yy Output Power

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

To order, please visit OEQuest.com.



Optilab Advantage

- > Innovation
- > Performance
- > Quality
- > Customization
- > Warranty

Optical Specifications	
Laser Wavelength Range	1310 nm \pm 15 nm
Transmission Range	Up to 20 km in SMF-28 fiber
Output Power Level	+6 dBm to +13 dBm
Number of Outputs	1 output standard, multiple output available
Optical Return Loss	50 dB min.
Carrier to Noise Ratio (CNR)	52 dB typ. @ 0 dBm
Composite Second Order (CSO) Distortion	-60 dBc max.
Composite Triple Beat (CTB) Distortion	-62 dBc max.
RF Test Port Ratio	-20 dB
AGC Adjustment Range	6 dB (optional)
Input RF Power Level	13 to 18 dBmV per channel
Frequency Range	45 MHz to 870 MHz
Flatness in Frequency Range	\pm 0.75 dB
Input Impedance	75 Ω
Input RF Return Loss	16 dB min.
Mechanical Specifications	
Operation Temperature Range	0°C to +50°C
Storage Temperature Range	-40°C to +70°C
Power Supply	80 – 240 V, 43 – 63 Hz AC
Power Consumption	30 W max.
Housing Dimensions	1RU 19"(W) x 14"(D) x 1.75"(H)
Control / Monitoring	DFB Laser Temperature and Current
Display	Output Power Level, TEC temperature
Alarm	Over Temperature , Over Current
Optical Connectors	SC/APC or Customer Specified