



## DMLT-1310 | DM Transmitter – 1310nm



The QAMnet DMLT-1310 series laser transmitters are reliable and cost-effective for use in HFC, FTTH 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 distortion specifications.

The DMLT-1310 has a standard transmission range up to 20 km. DMLT-1310 transmitters support up to 75 NTSC analog channels. Designed to be digitally ready, they can be loaded with 60 additional QAM modulated signal channels.

The DMLT-1310 is available at five output power levels: +6 dBm, +8 dBm, +10 dBm, +11 dBm and +13 dBm.

### Features

- Highly linear, analog-modulated 1310 nm DFB laser source
- Advanced pre-distortion circuit minimizes CSO and CTB distortion
- Automatic Gain Control (AGC) for optimal RF drive level
- 75 channel NTSC plus 60 digital channels loading plan
- -20 dB front panel RF test port
- LED front panel digital display and status indicators
- 45-870 MHz modulation bandwidth

### Ordering Information

- DMLT-1310-xx-y
- xx: 06, 08, 10, 11, 13 (Output Power in dBm)
- y: a (No AGC), b (with AGC)



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## Technical Specifications

Laser Wavelength Range	1310 nm $\pm$ 15 nm
Transmission Range	Up to 20 km in SMF-28 fiber
Output Power Level	6dBm, 8dBm, 10dBm, 11dBm, 13dBm
Number of Outputs	1 output standard, multiple output can be ordered
Optical Return Loss	50 dB Minimum
Carrier to Noise Ratio (CNR)	52 dB Typical @ 0 dBm
Composite Second Order (CSO) Distortion	-60 dBc Maximum
Composite Triple Beat (CTB) Distortion	-62 dBc Maximum
RF Test Port Ratio	-20 dB
AGC Adjustment Range (Optional)	6 dB
Input RF Power Level	13 - 18 dBmV per Channel
Frequency Range	45 MHz to 870 MHz
Flatness in Frequency Range	$\pm 0.75$ dB
Input Impedance	75 $\Omega$
Input RF Return Loss	16 dB Minimum

## Environment / Mechanical Specifications

Temperature Range	0°C to +50°C (operation) -40°C to +70°C (storage)
Power Supply	80 – 240 V, 43 – 63 Hz AC
Power Consumption	30 W Maximum
Housing Dimensions	1U Rack: 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



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