EMLT-1550-SR

EM Laser Transmitter, Standard Range

The Optilab EMLT-1550-SR series laser transmitters are designed for use in HFC, RFoG and FTTH applications. The EMLT-1550-SR series transmitters are a cost-effective and versatile transmission solution for HFC/RFoG/FTTH networks regardless of architecture.

The EMLT-1550-SR transmitters incorporate a zero-chirp external modulator and a pre-distortion circuit which allows a 65 km transmission range, while maintaining a high OMI level and excellent CSO and CTB performance. The launch power level can be adjusted from +13.5 dBm to +16.5 dBm.

The EMLT-1550-SR transmitters support up to 77 NTSC analog channels. Designed to be digitally ready, the transmitters can also be loaded with additional QAM modulated data or HDTV channels. The Optilab EMLT-1550-SR transmitters are available in four output power level versions: +6 dBm, +7 dBm, +8 dBm and +9 dBm.

Features

- High power CW DFB laser module
- Zero-chirp lithium niobate external modulator
- 65 km standard transmission range, can be extended to 90 km
- Adjustable SBS suppression level range of +13.5 dBm to +16.5 dBm
- Supports 77 channel NTSC plus QAM modulated digital channels
- AGC (Automatic Gain Control) and MGC (Manual Gain Control) RF Input Control
- -20 dB front panel RF test port
- 45 to 870 MHz modulation bandwidth

Applications

- HFC
- FTTH
- RFoG

EM Laser Transmitter, Standard Range

OPTIONS

EMLT-1550-SR-xx

xx	**Output power level +6 to +9 dBm**

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

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To order, please click below.

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Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

Optical Specifications	
Laser Wavelength Range	1550 nm ± 15 nm, Specific Wavelength on ITU Grid optional
Transmission Range	65 km in SMF-28 Fiber, Extendable to 90 km
Output Power Level	+6, +7, +8, and +9 dBm
Noise Bandwidth	4 MHz
Carrier to Noise Ration (CNR)	52 dB typ. @ 0 dBm
Composite Second Order (CSO) Distortion	-63 dBc max.
Composite Triple Beat (CTB) Distortion	-63 dBc max.
Front Panel RF Gain / OMI Adjustment Range	+6 dB / -6 dB
SBS Suppression Level	Adjustable +13.5 dBm to +16.5 dBm
Input RF Power Level	8 to 20 dBmV per channel
Frequency Plan	77 NTSC analog channels + Digital QAM Channels
Frequency Range	45 MHz to 870 MHz
Flatness in Frequency Range	±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	75 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