

# EMLT-1550-SR



## Externally Modulated Laser Transmitter, Standard

The Optilab EMLT-1550-SR transmitters are a cost-effective and versatile transmission solution for HFC/ RFoG/PON networks regardless of architecture. The EMLT-1550-SR laser transmitters include a high quality Distributed Feedback laser (DFB), adjustable  $\pm 1.5$  nm. The EMLT-1550-SR incorporates a broadband external modulator and a pre-distortion circuit which allows up to 90 km transmission range, while maintaining a high OMI level and excellent CSO and CTB performance. The SBS suppression setting allows the launch power to be adjusted from +13.5 dBm to +16.5 dBm, and is available with output power levels from +6 dBm to +8 dBm. The EMLT-1550-SR transmitter supports up to 77 NTSC analog channels, and because it's designed to be digitally ready, it can also be loaded with additional QAM modulated data or HDTV channels making it the best cost/ performance ratio in the industry. Contact Optilab for more information.

### Features

- High power DFB with narrow linewidth
- Up to 90 km transmission range
- Adjustable SBS suppression up to +16.5 dBm
- 77 channel NTSC plus QAM digital
- Automatic Gain and Manual Gain Control
- 45 to 870 MHz bandwidth standard
- **3 year warranty standard**

### Applications

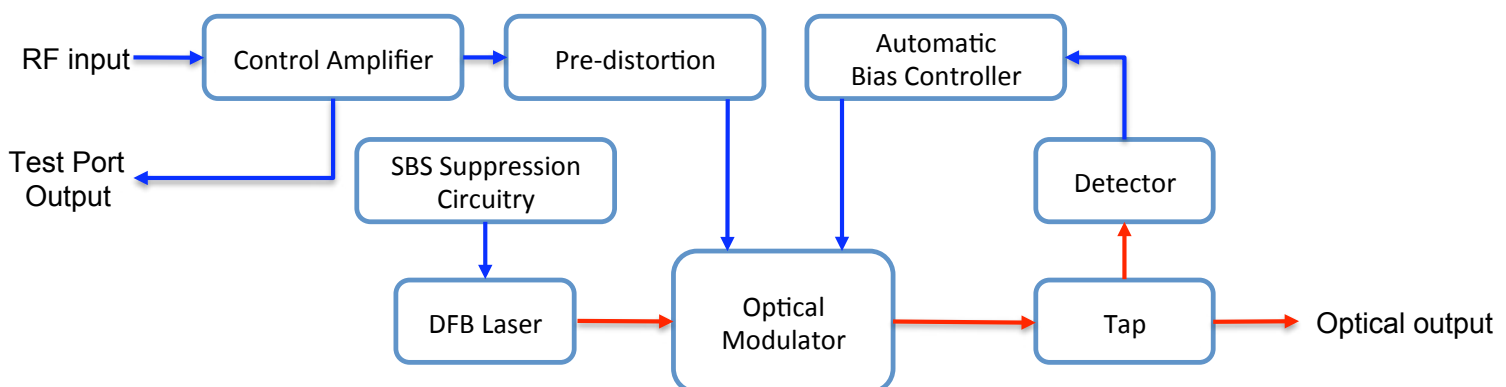
- HFC
- FTTH
- RFoG
- For RUS/USDA projects



This Optilab product meets Buy American and is RUS accepted

### Functional Diagram

EMLT-1550-SR



# EM Laser Transmitter, Standard Range | EMLT-1550-SR

## OPTIONS

**EMLT-1550-SR-xx**

xx Output power

## TECHNICAL INFO

For technical info and support:

[sales@optilab.com](mailto:sales@optilab.com)

[www.optilab.com](http://www.optilab.com)

## WEB ORDER

To orde, please visit [OEQuest.com](http://OEQuest.com).



## Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

Optical Specifications	
Laser Wavelength Range	1550 nm ± 15 nm, Specific Wavelength on ITU Grid optional
Transmission Range	Up to 90 km
Output Power Level	+6, to +8 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
AGC Adjustment Range	6 db (optional)
Frequency Plan	77 NTSC analog channels + Digital QAM Channels
Frequency Range	45 MHz to 870 MHz, 1 GHz available
Flatness in Frequency Range	±0.75 dB
RF Impedance	75 Ω
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