EIT Series

EDFA Integrated Transmitter

The Optilab EIT series is an innovative, high-density solution for RFOG, PON, and deep fiber applications, which includes an EDFA, Externally Modulated Laser Transmitter (EMLT), and 1x16 splitter all housed in a single 1RU. The EIT series is designed to replace three products into one at the headend location providing the most cost-effective solution, while conserving rackmount space, lowering power consumption, and simplifying maintenance. Constructed with long term uninterrupted service in mind, the EIT features excellent reliability, PON integration, and larger network coverage. The Optilab EIT series emcompasses the following:

- **Externally Modulated 1550 nm Laser Transmitter** with an 80 km range
- **Erbium-doped Fiber Amplifier** with +30 dBm output power
- **Optical Splitter** with up to 16 output ports

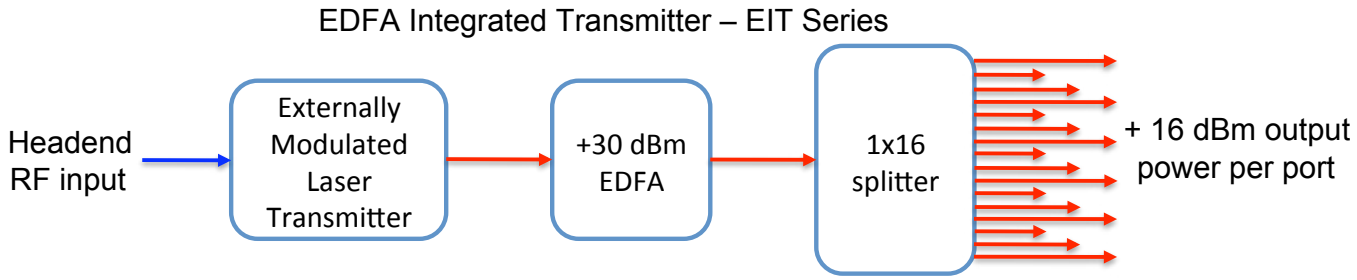
Features

- 3-in-1 Fully Integrated Sub-system
- EMLT, EDFA, and splitter in 1RU
- Saves money, space, and maintenance
- Best cost/performance solution
- Customizable to fit customer's specifications
- 16 ports each with up to +16 dBm/port
- PON integration
- **3 year warranty standard**

Applications

- RFoG
- HFC
- PON
- Deep Fiber Applications
- Optilab is RUS/USDA certified

Functional Diagram



EDFA Integrated Transmitter | EIT Series

OPTIONS

EIT-xx-yy

xx Total Output Power:

yy # of Outputs:

TECHNICAL INFO

For technical info and support:

sales@optilab.com

www.optilab.com

WEB ORDER

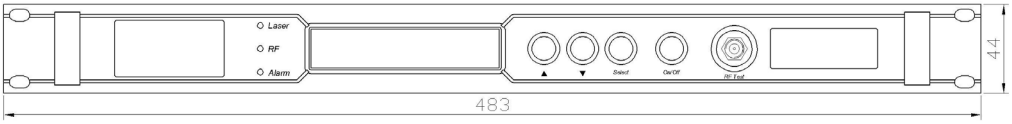
To order, please visit OEQuest.com.

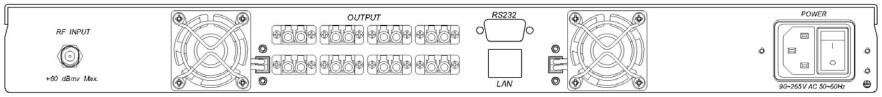
OEQuest.com

Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

EM Transmitter Specifications	
Laser Wavelength Range	1540 nm - 1570 nm ± 10 nm, or specific DWDM
Transmission Range	Up to 90 km
Noise Bandwidth	4 MHz
Carrier to Noise Ration (CNR)	52 dB typ. @ 0 dBm
Composite Second Order (CSO)	-63 dBc max.
Composite Triple Beat (CTB)	-65 dBc max.
RF Gain / OMI Adjustment Range	+6 dB / -6 dB
SBS Suppression Level	Select from +13 dBm and +16 dBm
Input RF Power Level	13 to 25 dBmV per channel
Frequency Range	45 MHz to 870 MHz, 1 GHz optional
Flatness over Frequency	±1.0 dB
EDFA Specifications	
Total EDFA output power	+30 dBm standard, +27, +32 dBm optional
Optical Output Isolation	30 dB
Noise Figure	5.0 dB typ.
Splitter Specifications	
Number of Output Ports	16 ports standard; 4, 8 optional
Output Power per Port	> +16 dBm (with 16 ports)
Optical Connectors	LC/APC standard
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	80 W max.
Housing Dimensions	1RU 19"(W) x 17.5"(D) x 1.75"(H)
Control / Monitoring	Laser Temperature, EDFA power
Remote Interface	SNMP
Alarm	Over Temperature, Over Current
Accessories Included	LC to SC/APC (16) patchcord included





Optilab
photonics for the future