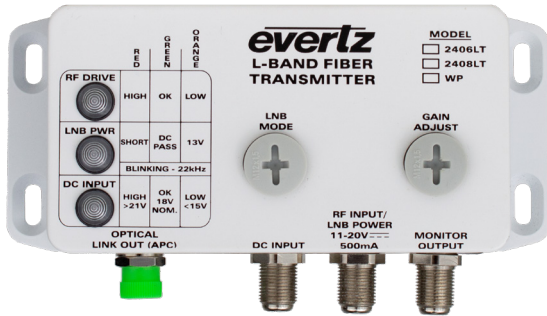


2408LT

L-Band/Wideband Standalone Fiber Transmitter Series



The **2408LT** is an outdoor fiber optic transmitter for RF signals in the satellite L-Band or wider frequency range. It accepts a single RF input on coaxial cable and provides a single output for optical transmission. Packaged in a compact, standalone enclosure, the 2408LT is ideal for mounting on or near the satellite dish antenna structure. The -WP version features dust and water protection allowing outdoor mounting without a secondary enclosure. A full power RF monitor output provides a convenient means of obtaining peak satellite signal strength, or additional signal distribution.

Gain may be adjusted manually or managed automatically via AGC. With SmartMON™, incoming RF signal strength, LNB current, status of connected 2400PSU-8 power supply and other data are relayed over the fiber output for monitoring through SNMP/VistaLINK® PRO (requires SmartMON™ capable companion fiber receiver). The 2408LT also provides a DC passthrough mode for LNB power and comprehensive indicators that provide status information on the input DC power and RF drive level as well as LNB power status.

For GPS applications, 2408LTA13-5V-B50 can be used to power-up GPS antenna with 5V supply and transport GPS signals over fiber. For applications that require 10MHz transport for timing, the 2408T13-10MHz-B50 offers an ideal solution when paired with an Evertz 10MHz fiber receiver. For injection of 10MHz into the LNB or BUC, Evertz offers the [2406BIAS-2](#) dual-channel bias-tee.

Features & Benefits

- Minimizes coaxial cable length for improved CNR
- Provides electrical isolation, mitigating ground loop and lightning issues
- CWDM multiplexing options
- IP65 weatherproof option
- Wide frequency range for extended L-Band, IF, FM, UHF/VHF, over-the-air DTV and more
- Protocol-independent design transports all modulation formats
- 13/18V DC LNB power +22kHz tone
- LNB current limiting, short circuit protection and current monitoring
- GPS & 10MHz transport options

2408LT

L-Band/Wideband Standalone Fiber Transmitter Series



Specifications

RF Input:

Number of Inputs: 1
 Connector: F-Type (50Ω BNC optional)
 Conductor Range: 23–18 AWG (0.26–0.82 mm²)
 Input Impedance: 75Ω (50Ω optional)
 Frequency Range: 88–3000MHz
 Return Loss:
 88–500MHz: > 11dB
 500MHz–3GHz: > 15dB
 Input Power Range: -10dBm to -60dBm
 Manu. Gain Range: +2 to +30dB in 2dB steps
 AGC Hold Range: -8 to -38dBm ± 2dBm
 Input IP3: +10dBm
 IMD: < -55dBc at -15dB input and min. gain

LNB Power:

Voltage: 13V DC, 18V DC, off (selectable)

Current:

500mA
 Protection: Short circuit, current limited
 LO Control: 22kHz on/off (selectable)

RF Monitor Output:

Number of Outputs: 1
 Connector: F-Type (50Ω BNC optional)
 Conductor Range: 23–18 AWG (0.26–0.82 mm²)
 Output Impedance: 75Ω (50Ω optional)
 Return Loss: > 15dB
 Frequency Range:
 Output Level: Within -2dB of input signal

Optical Output:

Number of Outputs: 1
 Connector: Female FC/APC
 Operating Wavelength:
 Standard: 1310nm DFB
 CWDM: 1270–1610nm
 Output Power:
 Standard 1310nm: +2dBm
 CWDM: +2dBm

RF System Performance

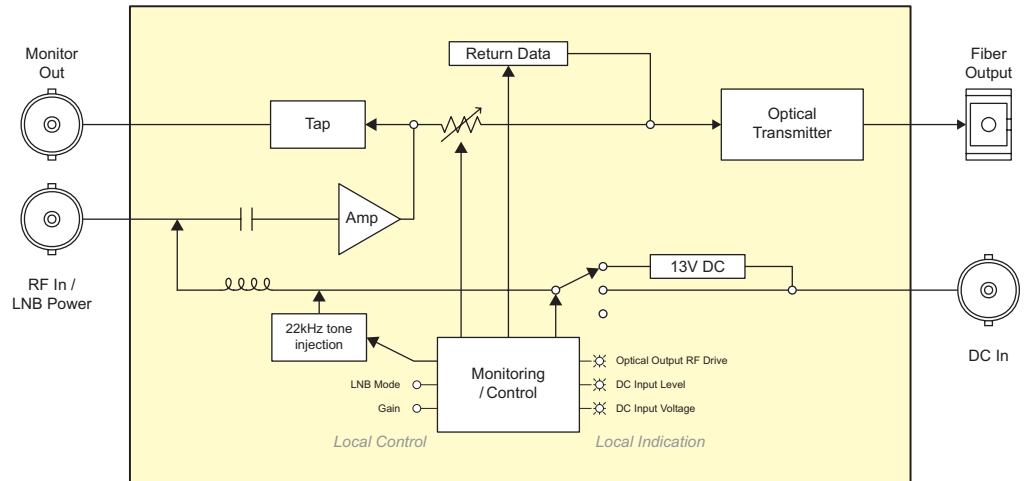
2408LT+7708LRA pair:
 Flatness:
 950–2150MHz: ± 1.5dB
 88MHz–3GHz: ± 2.0dB, ± 0.25dB on 36MHz BW to 2.3GHz
 Gain Variation over Temperature: ± 2dB (from -20° to 70°C)

10MHz Performance

2408T13–10MHz+7708R–10MHz pair:
 Manu. Gain Range: -5 to +10dB
 Input Power Range: +10 to -40dBm
 OIP3: +29dB
 Harmonic Rejection: +60dB

DC Input:

Voltage: +18V DC nominal, +11 to +20V DC range (>LNB min. input voltage req. when powering an LNB)
 Power: 2W max. excluding LNB Power
 Connector: F-Type
 Conductor Range: 23–18 AWG (0.26–0.82 mm²)



Ordering Information

2408LT13	L-Band Standalone Fiber Transmitter with VistaLINK and SmartMON, FC/APC fiber connectors
2408T13–10MHz–B50	Standalone 10MHz RF over Fiber Transmitter, 1310nm DFB laser, 50 Ohm BNC connectors
2408LTA13–5V–B50	Standalone L-Band fiber transmitter, 1310nm DFB laser, 5VDC powering for GPS antenna. 50 Ohm BNC Connectors
2408LTxx	2408LTxx L-Band Standalone Fiber Transmitter with SmartMON, CWDM DFB laser, FC/APC fiber connectors (Wavelength 27 to 61)
2408Txx–10MHz–B50	Standalone 10MHz RF over Fiber Transmitter, CWDM DFB laser, FC/APC, 50 Ohm BNC connectors

Ordering Options:

+PS	18VDC external power supply, 100–240V AC auto-ranging input, indoor mounting with F-Type connector
-WP	Weatherproof

Connector and Impedance Options: (note: standard RF connectors are 75Ω F-Type)

-B50	50 Ohm BNC connectors
-S50	50 Ohm SMA connectors

2408LT

L-Band/Wideband Standalone Fiber Transmitter Series



Specifications (continued)

Physical:

Dimensions: 5.4" L x 2.4" W x 1.2" H
(138mm x 61mm x 31mm)
including flanges

Compliance:

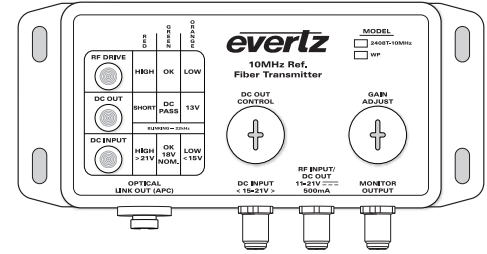
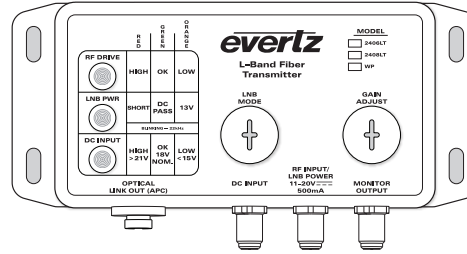
Laser Safety: Class 1 laser product,
complies with 24 CFR
1040.10 and 1040.11
IEC 60825-1

Safety: CSA listed to
CAN/CSA 60065-03
UL Std No. 60065-2006
IEC 60065:2001 +
Amd 1:2005,
IEC 62368-1:2014
EN 62368-1:2014 +
A11:2007,
CAN/CSA-C22.2
No. 62368-1:14,
UL 62368-1 2nd Ed.

EMI/RFI: Complies with FCC
Part 15, Subpart B EN
55022:1998 ICES-003

Environmental:

Temperature: -30 to 75°C
Dust/Water Protection:
IP65 (-WP version only)



Illustrated comparison of 2408LT Series transmitters, L-Band (left) vs. 10MHz RF over fiber models.