

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.

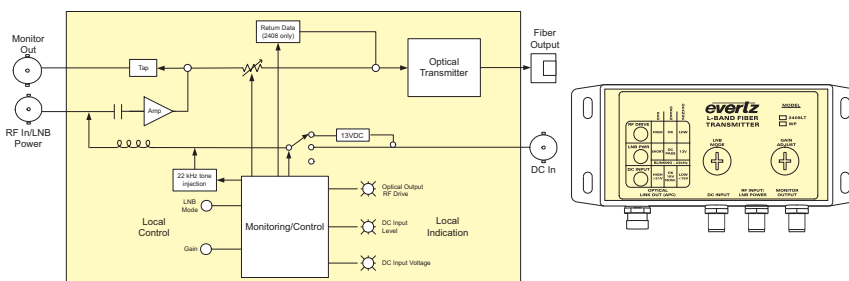
Gain may be adjusted manually or managed automatically via AGC. With

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® (requires SmartMON™ capable companion fiber receiver). The 2408LT also provides a DC pass through 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, 2408LT13-5V-B50 can be used to power-up GPS antenna with 5V supply and transport GPS signals over fiber when combined with 2406LR-5V-B50 receiver.

► Features & Benefits

- Directly mount to antenna structure or other outdoor locations
- -WP Weatherproof version — does not require secondary enclosure
- Wide frequency range for extended L-Band, over the air DTV and other signals
- Protocol-independent design — transports all modulation formats
- DC pass-through and 13V DC modes for LNB power
- LNB current limit & short circuit protection
- LNB current monitoring
- Minimizes coaxial cable length for superior CNR performance
- 22kHz tone on/off for LNB local oscillator control
- RF monitor output for signal peaking and signal distribution
- Manually adjustable or AGC gain modes
- Tri-color LED status indicators for Link RF drive strength, LNB voltage and DC input voltage level
- SmartMON™ capability provides remote status monitoring via SNMP without a separate data connection
- Fiber link provides electrical isolation between antenna and facility mitigating ground loop and lightning issues
- GPS antenna systems



► 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:

1310nm DFB laser: 850MHz–3000MHz
 CWDM or DFB laser: 88MHz–3000MHz

Return Loss:

88–500MHz: > 11dB
 500MHz–3GHz: > 15dB

Input Power Range:

–10dBm to –60dBm

Manual 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: DC Input–0.5V DC, 13.5V 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°C to +70°C)

DC Input:

Voltage:

2408LT13–5V–B50: 4.8–5.2V DC (range must be

supplied by a regulated 5V source)

Other 2408LT models: +18V DC nominal, +11 to +20V

DC range (>LNB min input voltage

required when powering an LNB)

Power: 2W max excluding LNB Power

Connector: F-Type

Conductor Range: 23–18 AWG (0.26–0.82 mm²)

Physical Dimensions (with flanges):

5.4"L x 2.4"W x 1.2"H

(138mm L x 61mm W x 31mm H)

Compliance:

Laser safety: Class 1 laser product, Complies

with 24 CFR 1040.10 and 1040.11

IEC 60825–1

Complies with FCC Part 15, Class A

EU EMC directive

CSA Listed to CSA C22.2

No. 60065–03, UL 60065–03

IEC 60065 — (2001–12) 7th Edition

Environmental:

Temperature:

1310nm: –20 to +70°C

CWDM: –20 to +60°C

Dust & Water Protection: IP65 (–WP version only)

► Ordering Information

2408LT13	L-Band Standalone Fiber Transmitter with SmartMON™, 1310nm DFB laser
2408LT13-WP	L-Band Standalone/Weatherproof Fiber Transmitter with SmartMON™, 1310nm DFB laser
2408LT13-B50	L-Band Standalone Fiber Transmitter with SmartMON™, 1310nm DFB laser, 50Ω BNC Connectors
2408LT13-WP-B50	L-Band Standalone/Weatherproof Fiber Transmitter with SmartMON™, 1310nm DFB laser, 50Ω BNC Connectors
2408LT27 TO 61	L-Band Standalone Fiber Transmitter with SmartMON™, CWDM DFB laser
2408LT27 TO 61-WP	L-Band Standalone/Weatherproof Fiber Transmitter with SmartMON™, CWDM DFB laser
2408LT27-61-B50	L-Band Standalone Fiber Transmitter with SmartMON™, CWDM DFB laser, 50Ω BNC Connectors

2408LT27-61-WP-B50	L-Band Standalone/Weatherproof Fiber Transmitter with SmartMON™, CWDM DFB laser, 50Ω BNC Connectors
2408LT13-5V-B50	L-Band Standalone/Weatherproof Fiber Transmitter with SmartMON™, CWDM DFB laser, 50Ω BNC Connectors

Ordering Options

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

Note: For power supply see 2400PSUA-8 catalog page. For companion receiver see 2307LR, 7708LRA/7708LR-H and 7807LR-2 catalog page. For integrated outdoor solution with enclosure see 2400ODU catalog page.