

# 7807LT-2

Dual L-Band/Wideband RF Fiber Transmitter with VistaLINK® and SmartMON™

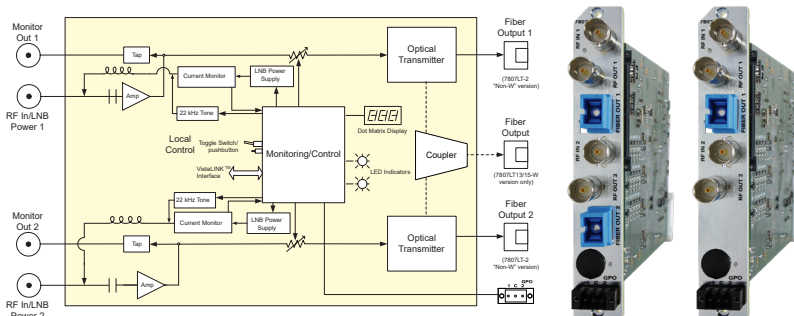


The **7807LT-2** is a dual fiber optic transmitter for RF signals in the extended L-Band or wider frequency range. It accepts two RF inputs from coaxial cable and provides two outputs for optical transmission. An RF monitor output is provided for each input, which offers a convenient means of obtaining peak satellite signal strength, or additional signal distribution. With two optical transmitters per single-slot card, the 7807LT-2 provides a high density economical solution.

Individual monitoring and control is provided for each signal path. Gain may be adjusted manually or managed automatically via AGC. With SmartMON™, incoming RF signal strength, LNB current and other data are relayed over the fiber outputs for monitoring at the receiver side through SNMP/VistaLINK® PRO (requires SmartMON™ capable companion fiber receiver). 13/18V DC selectable LNB power with 22kHz tone is also provided on each RF input.

SmartMON™ capability provides remote status monitoring via SNMP without a separate data connection. VistaLINK® PRO capability is available for monitoring and control when modules are used in a 3RU 7800FR frame and a 7700FC VistaLINK® frame controller is installed in Slot 1 of the frame

Fiber link provides electrical isolation between antenna and facility, mitigating ground loop and lightning issues. Compatible with all 2406LR, 7706LR, 7708LR and 7807LR-2 series receivers, the 7807LT-2 occupies one card slot and can be housed in a 1RU frame that will hold up to four modules, a 7800FR 3RU frame that will hold up to 15 modules, or a standalone enclosure, which holds one module.



## Features & Benefits

- Extended frequency response for extended L-Band, off-air DTV and other signals
- Protocol independent design — transports all modulation formats
- LNB power with selectable 13/18V DC, per input
- LNB current limit and short circuit protection
- LNB current monitoring for advance warning of LNB failure
- 22kHz tone on/off for LNB local oscillator control, per input
- RF monitoring output ports for signal peaking and signal distribution
- Manual gain and AGC modes for tuning optimal CNR performance
- Multiple versions of the 7807LT-2 are available to address single-mode/multi-mode fiber, single/dual fiber and CWDM/DWDM applications
- The 7807LT13/15-2-W is a dual channel card that features an on-board fiber coupler, requiring only a single fiber for the link (companion receiver is the 7807LR-2-W)
- Dual fiber transmitters on a single-slot card provides the industry's highest density solution
- Form-C dry contact GPO alarm contacts for monitoring

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## Specifications

### RF Input:

Number of Inputs: 2  
Connectors: BNC per IEC 61169-8  
Annex A (F-Type optional)  
Input Impedance: 75Ω

### Return Loss:

40MHz-2.3GHz: >14dB to 2100MHz  
2.3-3GHz: >10dB to 2100-2800MHz  
Frequency Range: 40MHz to 3GHz

*Note: 10MHz supported on specific modules. Please contact Evertz for more information on 10MHz transport.*

Input Power Range: -10dBm to -60dBm  
AGC Gain Range: -10dB to +20dB  
Input IP3: +10dBm

### 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: 2  
Connector: BNC per IEC 61169-8  
Annex A (F-Type optional)  
Output Impedance: 75Ω  
Return Loss: >15dB  
Frequency Range: 40MHz to 3GHz  
Output Level: within -2.0dB of input signal

### Optical Output:

Number of Outputs: 2  
Connector: Female SC/UPC, FC/UPC, SC/APC, FC/APC  
Operating Wavelength: 1310nm DFB (1550nm and CWDM optional); DWDM C-Band (ITU G.694.1 compliant)

### Output Power:

Dual Fiber: +2dBm ± 1dBm  
Single Fiber: -2dBm ± 1dBm  
DWDM: +11dBm

### RF System Performance

#### 7807LT-2+7807LR-2 pair:

Flatness:  
850-2250MHz: ± 1.5dB  
40-2800MHz: ± 2dB

### General Purpose Outputs:

Number of Outputs: 2  
Type: "Dry Contact" relay contacts — normally open and normally closed contact provided  
Connector: 3-pin terminal strip

## Ordering Information

<b>7807LT13-2</b>	Dual Lband fiber transmitter with VistaLINK and SmartMON, 1310nm
<b>7807LT13/15-2-W</b>	Dual L-Band fiber transmitter with VistaLINK and SmartMON, 1310 and 1550nm lasers, WDM, single fiber, use with single mode fiber only
<b>7807LTxx/yy-2</b>	Dual L-Band fiber transmitter with VistaLINK and SmartMON, CWDM DFB lasers
<b>7807LTDxxx/yyy-2</b>	Dual RF Fiber transmitter, wideband, with SmartMON and VistaLINK, high power +10dBm DWDM DFB laser

For companion receiver, see the [7807LR-2](#) catalog page.

Also compatible with the [2406LR](#), [7706LR](#) and [7708LRA/7708LR-H](#) receivers.

<b>Ordering Options:</b>	Rear plate and fiber connector must be specified at time of order (eg: Model+3RU+SC)
<b>+3RU</b>	Rearplate

### Connector and Impedance Options:

<b>+F75</b>	75 Ohm F-Type connector
<b>+SC</b>	SC fiber connector
<b>+AP+SC</b>	Angle polish, SC fiber connector
<b>+FC</b>	FC fiber connector
<b>+AP+FC</b>	Angle polish, FC fiber connector

*Note: standard RF connectors are 75Ω F-Type. Consult factory for 50Ω BNC and SMA connector options.*

### Enclosure Options:

<b>7800FR</b>	3RU Multiframe Which Holds up to 15 Single Slot Modules with AC Power Supply
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*Note: cards are physically compatible with the 7700FR-C frame, but LNB power will be automatically disabled.*

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## Specifications (continued)

### Electrical

Voltage: 12V DC  
Power: 6W excluding LNB power

### Physical:

Number of Slots: 1

### Compliance:

Laser safety: Class 1 laser product  
Complies with 24 CFR  
1040.10 and 1040.11  
IEC 60825-1

EMI/RFI: Complies with FCC Part  
15 Subpart B / ICES-003  
CISPR 32/EN55032,  
CISPR 24/EN55024,  
EN 55103-2. Complies  
with EU EMC directive  
89/336/EEC.