

# 7807LT-2

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

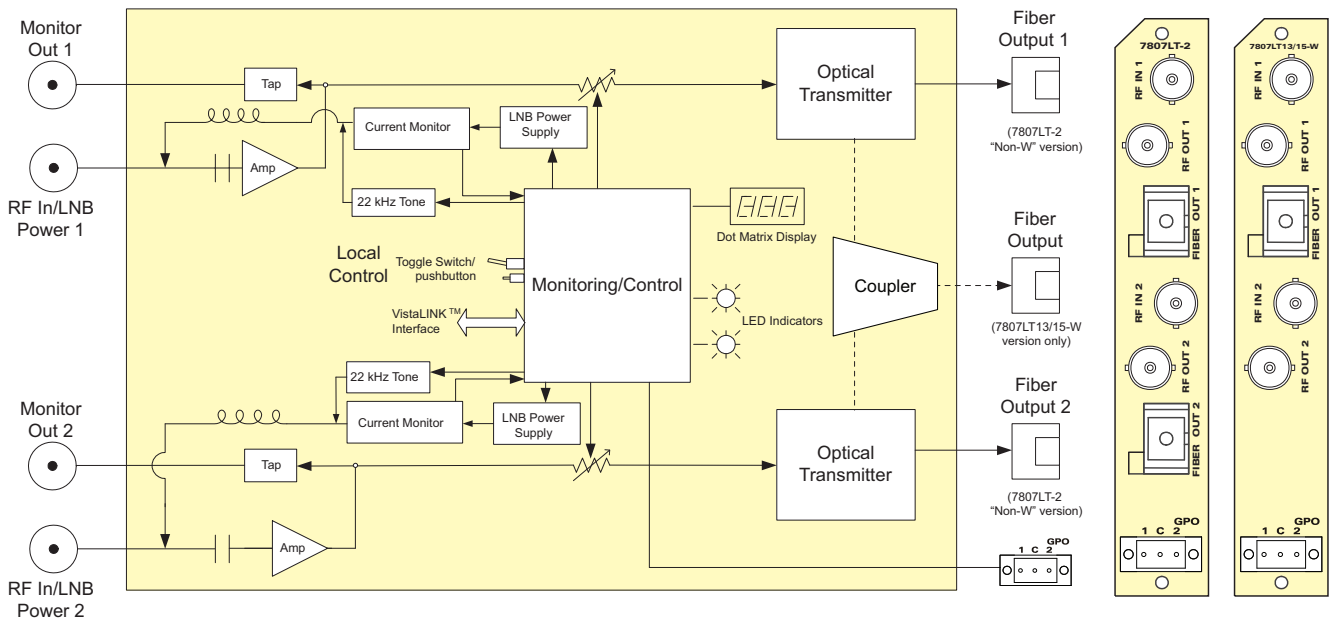


The 7807LT-2 is a dual fiber optic transmitter for RF signals in the extended L-Band or wider frequency range. It accepts two RF inputs from coaxial cable and provides two outputs for optical transmission. An RF monitor output is provided for each input, which offers a convenient means of obtaining peak 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® (requires SmartMON™ capable companion fiber receiver). 13/18V DC selectable LNB power with 22kHz tone is also provided on each RF input.

### 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-V)
- Dual fiber transmitters on a single-slot card provides the industry's highest density solution
- SmartMON™ capability provides remote status monitoring via SNMP without a separate data connection
- VistaLINK® 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
- Form-C dry contact GPO alarm contacts for monitoring
- 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



The Complete Solution Provider



### Specifications

<b>RF Input:</b>		<b>Optical Output:</b>		<b>Electrical</b>	
Number of Inputs:	2	Number of Outputs:	2	Voltage:	12 VDC
Connectors:	BNC per IEC 61169-8 Annex A (F-Type optional)	Connector:	Female SC/UPC, ST/UPC, FC/UPC, SC/APC, FC/APC	Power:	6W excluding LNB power
Input Impedance:	75Ω	Operating Wavelength:	1310nm DFB (1550nm and CWDM optional)	<b>Physical (number of slots):</b>	
Return Loss:	>14dB to 2100MHz		DWDM C-Band (ITU G.694.1 compliant)	7800FR:	1
Frequency Range:	50-2800MHz	Output Power:		7701FR:	1
Input Power Range:	-10dBm to -60dBm	<i>Dual Fiber:</i>	+2dBm ± 1dBm	S7701FR:	1
AGC Gain Range:	-10dB to +20dB	<i>Single Fiber:</i>	-2dBm ± 1dBm	<b>Compliance:</b>	
Input IP3:	+10dBm	<i>DWDM:</i>	+11dBm	Laser safety:	Class 1 laser product
<b>LNB Power:</b>		<b>RF System Performance 7807LT-2+7807LR-2 pair:</b>		Complies with 24 CFR 1040.10 and 1040.11	
Voltage:	13V DC, 18V DC, off (selectable)	Flatness:		IEC 60825-1	
Current:	500mA	850-2250MHz:	± 1.5dB	Complies with FCC regulations for Class A devices. Complies with EU EMI/RFI:	
Protection:	Short circuit, current limited	50-2800MHz:	± 2dB	EMC directive 89/336/EEC	
LO Control:	22kHz on/off (selectable)	<b>General Purpose Outputs:</b>			
<b>RF Monitor Output:</b>		Number of Outputs:	2		
Number of Outputs:	2	Type:	"Dry Contact" relay contacts — normally open and normally closed contact provided		
Connector:	BNC per IEC 61169-8 Annex A (F-Type optional)	Connector:	3-pin terminal strip		
Output Impedance:	75Ω				
Return Loss:	>15dB				
Frequency Range:	50-2800MHz				
Output Level:	within -2.0dB of input signal				

### Ordering Information

<b>7807LT13-2</b>	Dual L-Band RF fiber transmitter, 1310nm DFB laser, SmartMON™, VistaLINK®
<b>7807LT13/15-2-W</b>	Dual L-Band/Wideband RF fiber transmitter, 1310nm & 1550 DFB laser, onboard coupler with single fiber output, SmartMON™, VistaLINK®; companion receiver is 7807LR-2-W
<b>7807LTxx/yy-2</b>	Dual L-Band/Wideband RF fiber transmitter, CWDM, DFB laser, SmartMON™, VistaLINK®
<b>7807LTDxxx/yyy-2</b>	Dual RF fiber transmitter, wideband, with SmartMON™ and VistaLINK®, high power ± 10dBm DWDM DFB laser, 75Ω BNC

#### Rear Plate Suffix:

<b>+3RU</b>	3RU rear plate for use with 7800FR multiframe
<b>+1RU</b>	1RU rear plate for use with 7701FR multiframe
<b>+SA</b>	Standalone enclosure rear plate

#### Enclosures:

<b>7800FR</b>	3RU multiframe, holds up to 15x single-slot modules
<b>7701FR</b>	1RU multiframe, holds up to 3x single- or dual-slot modules
<b>S7701FR</b>	Standalone enclosure

Rear plate and fiber connector must be specified at time of order (eg: Model+3RU+SC)

#### Connector Suffix:

<b>+SC</b>	SC/UPC
<b>+AP+SC</b>	SC/APC (angle polished)
<b>+ST</b>	ST/UPC
<b>+FC</b>	FC/UPC
<b>+AP+FC</b>	FC/APC (angle polished)
<b>+F75</b>	75Ω, F-Type rear connector

Note: 75Ω BNC connectors are standard. Consult factory for 500Ω BNC and SMA connector options. Cards are physically compatible with the 7700FR-C frame, but LNB power will be automatically disabled. For companion receiver see the 7807LR-2 catalog page. Also compatible with the 2406LR, 7706LR and 7708LRA/7708LR-H receivers.

