

7807LR-2/7807LR-2-H

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

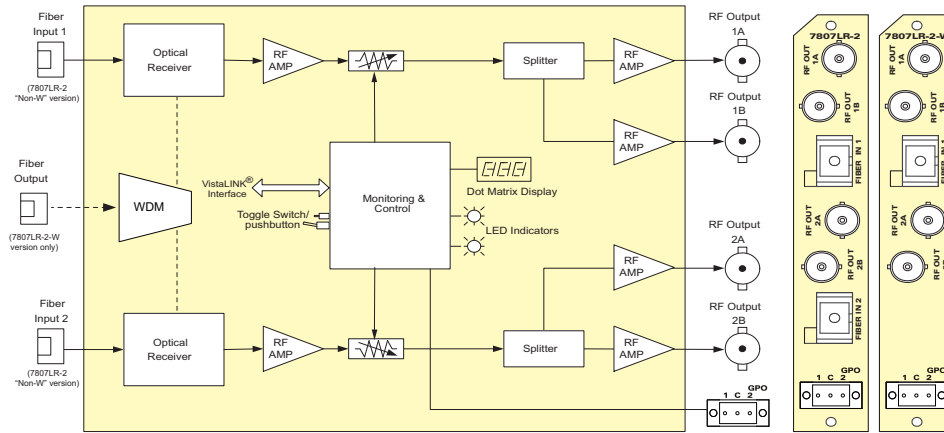


The 7807LR-2 and 7807LR-2-H are dual fiber optic receivers for RF signals in the extended L-Band or wider frequency range. They accept two fiber optical inputs from a companion transmitter(s) and provide two pairs of electrical outputs. With two optical receivers per single-slot card, the 7807LR-2 and 7807LR-2-H provide a high density economical solution.

Individual monitoring and control is provided for each signal path. Gain may be adjusted manually in 0.5dB increments or managed automatically via AGC or IGC modes. SmartMON™ capability decodes and displays incoming information from the paired SmartMON™-enabled companion transmitter. Two versions of the card are available, including the 7807LR-2 which has standard-sensitivity receivers, and the 7807LR-2-H which utilizes high-sensitivity receivers for medium/long-haul applications.

Features & Benefits

- Extended frequency response for extended L-Band, off-air DTV and other signals
- Protocol independent design — transports all modulation formats
- Supports manual, automatic (AGC), and intelligent (IGC) gain control modes
- IGC mode provides simple automatic compensation for fiber loss while output level tracks LNB level input at SmartMON™ capable fiber transmitter
- 0.5dB gain adjustment granularity for setting manual gain or AGC target power levels
- Dual, full power outputs provided from each input to facilitate signal distribution or monitoring
- Dual fiber receivers on a single-slot card provides the industry's highest density solution
- The 7807LR-2-W is a dual channel card that features an on-board fiber WDM, requiring only a single fiber for the link (companion transmitter is the 7807LT13/15-2-W)
- Fully hot-swappable from front of frame
- SmartMON™ capability for display of monitored parameters from companion SmartMON™ capable fiber transmitters
- 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 2408LT, 7706LT, 7708LT and 7807LT-2 transmitters
- Wide range optical inputs (1270nm to 1610nm)
- Supports single-mode and multi-mode fiber optic cable
- Available with SC/UPC, ST/UPC, FC/UPC, SC/APC and FC/APC connector options
- The 7807LR-2/7807LR-2-H occupy one card slot and can be housed in a 1RU frame that holds up to 3 modules, a 7800FR 3RU frame that holds up to 15 modules, or a standalone enclosure that holds one module



Specifications

RF Outputs:		Optical Input:		Electrical	
Number of Outputs:	2 + 2 (two per optical input)	Number of Inputs:	2	Voltage:	12V DC
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
Output Impedance:	75Ω	Operating Wavelength:	1270-1610nm	Physical (number of slots):	
Return Loss:	> 15dB	Maximum Input Power:		7800FR:	1
Frequency Range:	55-2800MHz	7807LR-2:	+3dBm	7701FR:	1
Output IP3:	+28dBm	7807LR-2-H:	-7dBm	S7701FR:	1
AGC Gain Range:	-10 to +20dB	7807LR-2-W:	-6dBm	Compliance:	
Output Signal Level:		Optical Sensitivity:		EMI/RFI:	Complies with FCC regulations for Class A devices. Complies with EU EMC directive 89/336/EEC
Manual Gain:	-10 to -65dBm (depending on input signal level, gain setting and optical loss)	7807LR-2:	-14dBm @ 35dB S/N on a 36MHz carrier		
AGC Mode:	-10 to -40dBm (adjustable, within AGC hold range)	7807LR-2-H:	-20dBm @ 35dB S/N on a 36MHz carrier		
		7807LR-2-W:	-13dBm @ 35dB S/N on a 36MHz carrier		

Ordering Information

7807LR-2	Dual Wideband RF Fiber Receiver, SmartMON™, VistaLINK®
7807LR-2-H	Dual Wideband RF High-Sensitivity Fiber Receiver, SmartMON™, VistaLINK®
7807LR-2-W	Dual Wideband RF Fiber Receiver, single fiber input with onboard WDM, SmartMON™, VistaLINK®. Companion transmitter is the 7807LT13/15-2-W.

Connector Suffix:	
+SC	SC/UPC
+AP+SC	SC/APC (Angle polished)
+ST	ST/UPC
+FC	FC/UPC
+AP+FC	FC/APC (Angle polished)
+F75	75Ω, F-Type rear connector

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

Rear Plate Suffix:	
+3RU	3RU rear plate for use with 7800FR multiframe
+1RU	1RU rear plate for use with 7701FR multiframe

Enclosures:	
7800FR	3RU multiframe, holds up to 15x single-slot modules
7701FR	1RU multiframe, holds up to 3x single- or dual-slot modules
S7701FR	Standalone enclosure

Note: 75Ω BNC connectors are standard. For companion transmitter, see the 7807LT-2 catalogue page. Also compatible with 7706LT, 7708LT and 2408LT series transmitters.