



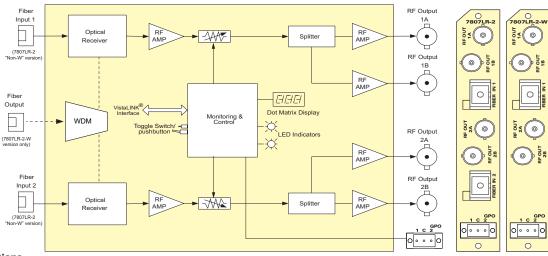
The 7807LR-2 and 7807LR-2-H are dual fiber optic receivers for RF signals in the extended L-Band or wider frequency range. They accept two fiber optic inputs from a companion transmitter(s) and provide two pairs of electrical outputs. With two optical receivers per single-slot card, the 7807LR-2 and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

Features & Benefits

- · Extended frequency response for extended L-Band, off-air DTV and other
- 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 and 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 occupies one card slot and can be housed in a 1RU frame that will hold up to three modules, a 7800FR 3RU frame that will hold up to 15 modules, or a standalone enclosure, which holds one module



Specifications

RF Outputs: Number of Outputs: 2 + 2 (two per optical input) BNC per IEC 61169-8 Annex A Connectors (F-Type Optional) Output Impedance: 750 > 15dB Return Loss: Frequency Response: 88MHz-2800MHz Output IP3 +28dBm

AGC Gain Range -10 to +30dB Output Signal Level: Manual Gain: -10 to -65dBm (depending on input signal level, gain setting and optical

-10 to -40dBm (adjustable, within

AGC hold range)

Optical Input: Number of Inputs: Female SC/UPC, ST/UPC, FC/UPC, Connector:

SC/APC, FC/APC Operating Wavelength: 1270-1610nm

Maximum Input Power: 7807LR-2: +3dBm 7807LR-2-H -7dBm 7807I R-2-W--6dRm Optical Sensitivity:

7807LR-2: -14dBm @ 35dB S/N on a 36MHz

-20dBm @ 35dB S/N on a 36MHz 7807LR-2-H: carrier 7807LR-2-W: -13dBm @ 35dB S/N on a 36MHZ

+FC

+F75

+3RU

+AP+FC

Electrical Voltage Power:

Physical (number of slots): 7800FR: 7701FR S7701FR

Compliance:

EMI/RFI: Complies with FCC regulations for Class A devices. Complies with EU

12 VDC

EMC directive 89/336/EEC

Ordering Information

AGC Mode:

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

Ordering Options Rear plate and Fiber Connector must be specified at the time of order (Eq: Model+3RU+SC)

Connector Suffix

+SC SC/LIPC

SC/APC (Angle polished) +AP+SC

Rear Plate Suffix

1RU Rear Plate for use with 7701FR Multiframe +1RU

FC/APC (Angle polished)

75Ω, F-Type rear connector

Enclosures

7800FR 3RU Multiframe which holds up to 15 single slot modules 7701FR 1RU Multiframe which holds up to 3 single or dual slot modules S7701FR

Standalone Enclosure

FC/UPC

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

3RU Rear Plate for use with 7800FR Multiframe

