

7807LR-2, 7807LR-2-H

Dual L-Band/Wideband RF Fiber Receiver with
VistaLINK® PRO 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 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.

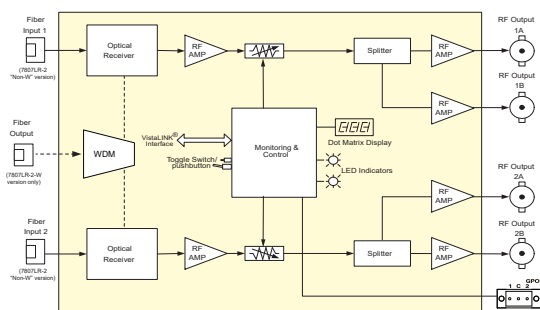
SmartMON™ capability decodes and displays incoming information from the paired SmartMON™ enabled companion transmitter. Two versions of the card are available, including the 7807LR-2 which has standard-sensitivity receivers, and the 7807LR-2-H which utilizes high-sensitivity receivers for medium/long-haul applications.

SmartMON™ capability for display of monitored parameters from companion SmartMON™ capable fiber transmitters. 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 2408LT, 7706LT, 7708LT and 7807LT-2 transmitters. 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.

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
- 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
- Form-C dry contact GPO alarm contacts for monitoring.
- Wide range optical inputs (1270–1610nm).
- Supports single-mode and multi-mode fiber optic cable.
- Available with SC/UPC, ST/UPC, FC/UPC, SC/APC and FC/APC connector options.



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Specifications

RF Outputs:

Number of Outputs: 2 + 2 (two per optical input)
Connectors: BNC per IEC
61169-8 Annex A
(F-Type optional)

Output Impedance: 75Ω
Return Loss: > 15dB

Frequency Range:

7807LR-2: 40MHz-3GHz

7807LR-2-H: 40MHz-2.3GHz

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

Output IP3: +28dBm
AGC Gain Range: -10 to +20dB

Output Signal Level:

Manual Gain: -10 to -65dBm (depending on input signal level, gain setting and optical loss)

AGC Mode: -10 to -40dBm (adjustable, within AGC hold range)

Optical Input:

Number of Inputs: 2
Connector: Female SC/UPC, FC/UPC, SC/APC, FC/APC

Operating Wavelength: 1270-1610nm

Maximum Input Power:

7807LR-2: +3dBm

7807LR-2-H: -7dBm

7807LR-2-W: -6dBm

Optical Sensitivity:

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

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

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

Electrical

Voltage: 12VDC
Power: 6W

Physical:

Number of Slots: 1

Compliance:

EMI/RFI: Complies with FCC Part 15 Subpart B / ICES-003
CISPR 32/EN55032,
CISPR 24/EN55024,
EN55103-2. Complies with EU EMC directive 89/336/EEC

Ordering Information

7807LR-2

Dual L-Band/Wideband fiber receiver with VistaLINK and SmartMON.

7807LR-2-H

Dual Electrical Outputs per Channel, GPO Dry Alarm Contacts

Dual Lband/wideband high-sensitivity fiber receiver with VistaLINK and SmartMON

7807LR-2-W

Dual L-Band fiber receiver with VistaLINK and SmartMON, WDM, single fiber, use with single mode fiber only.

For companion transmitter, see the [7807LT-2](#) catalogue page.

Also compatible with [7706LT](#), [7708LT](#) and [2408LT](#) series transmitters.

Ordering Options:

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

+3RU

Rearplate

Connector and Impedance Options: (note: standard RF connectors are 75Ω F-Type)

+F75

75 Ohm F-Type connector

+SC

SC fiber connector

+AP+SC

Angle polish, SC fiber connector

+FC

FC fiber connector

+AP+FC

Angle polish, FC fiber connector

Enclosures:

7800FR

3RU Multiframe Which Holds up to 15 Single Slot Modules with AC Power Supply