



7708/7807LR

L-Band Fiber Receiver Modules

Summary

The 7708/7807LR Series are modular L-Band fiber receiver cards that complete the link to the 402LZ fiber transmitters. These cards mount in the 7800FR series of modular frames, providing a highly flexible and completely hot swappable (without de-cabling coax or fiber) solution. The 7708LRA is a single channel card, while the 7807LR-2 is a dual-channel card which provides a high-density solution of up to 30 fiber receiver channels in a single 3RU frame.

The 7708/7807LR Series provide extensive monitoring and control capabilities both locally at the card edge and remotely through SNMP/VistaLINK[®]. SmartMON[™] capability allows in-band monitoring data sent by a companion 402LZ to also be monitored locally or remotely through VistaLINK[®].

Features

- Built-in gain for optimal signal level tuning.
- Gain may be adjusted manually in 0.5dB steps, or through AGC or IGC modes. AGC automatically maintains a fixed target level, while IGC provides simple automatic compensation for fiber loss by making the output level track the input level at the SmartMON[™]-enabled fiber transmitter.
- Dual, isolated, full-power outputs may be used for extra signal distribution or monitoring functions
- RF output level is independent of optical loss (within available gain range)
- Protocol-independent – passes all modulation formats including 32APSK and other emerging technologies
- Industry's best specs for frequency response, return loss and C/N, preserving signal quality across the fiber link
- Wide frequency range for extended L-Band, over the air DTV and other signals

Specifications: 7708-7807LR L-Band Fiber Receiver Modules

RF Input:

| | |
|---------------------|---|
| Number of Inputs | 2 |
| Connector | BNC per IEC 61169-8 Annex A (F-Type Optional) |
| I/O Impedance | 75Ω (50Ω Optional) |
| Frequency Range | |
| 7708LRA | 120MHz - 3GHz |
| 7708LR-H | 120MHz - 2.3GHz |
| Return Loss | |
| 120MHz to 2.3GHz | > 15dB |
| 2.3GHz to 3GHz | > 12dB |
| Output IP3 | +28dBm |
| IMD | < -55dBc at -3dBm output and 25dB gain |
| Output Signal Level | |
| Return Loss | |
| Manual Gain | 0 to -65dBm (depending on input signal level, gain setting and optical loss) |
| AGC mode | -10 to -40dBm (adjustable, maintainable within available gain range) |
| Available Gain | |
| 7708LRA | -10dB to +31.5dB in 0.5dB steps |
| 7708LR-H | -10dB to +28dB in 0.5dB steps |

Optical Input:

| | |
|----------------------|--|
| Number of Inputs | 1 |
| Connector | Female SC/UPC, ST/UPC, FC/UPC, SC/APC, FC/APC |
| Operating Wavelength | 1270nm-1610nm |
| Maximum Input Power | |
| 7708LRA | +3dBm |
| 7708LR-H | -7dBm |
| Optical Sensitivity | |
| 7708LRA | -14dBm @ 35dB S/N on a 36MHz carrier |
| 7708LR-H | -20dBm @ 35dB S/N on a 36MHz carrier |

Electrical:

| | |
|---------|--|
| Voltage | +12V DC |
| Power | 6 Watts |
| EMI/RFI | Complies with FCC Part 15, Class A EU EMC Directive |

Physical:

| | |
|-----------------|---|
| Number of slots | 1 |
|-----------------|---|

Ordering Information:

| | |
|---------------------|---|
| 7708LRA | L-Band Fiber Receiver with VistaLINK® and SmartMON™ |
| 7708LRA-B50 | L-Band Fiber Receiver with VistaLINK® and SmartMON™, 50Ω BNC connectors |
| 7708LRA-S50 | L-Band Fiber Receiver with VistaLINK® and SmartMON™, 50Ω SMA connectors |
| 7708LR-H | High Sensitivity L-Band Fiber Receiver with VistaLINK® and SmartMON™ |
| 7708LR-H-B50 | High Sensitivity L-Band Fiber Receiver with VistaLINK® and SmartMON™, 50Ω BNC connectors |
| 7708LR-H-S50 | High Sensitivity L-Band Fiber Receiver with VistaLINK® and SmartMON™, 50Ω SMA connectors |