7708LRA, 7708LR–H
Wideband RF Fiber Receiver with VistaLINK® and SmartMON®
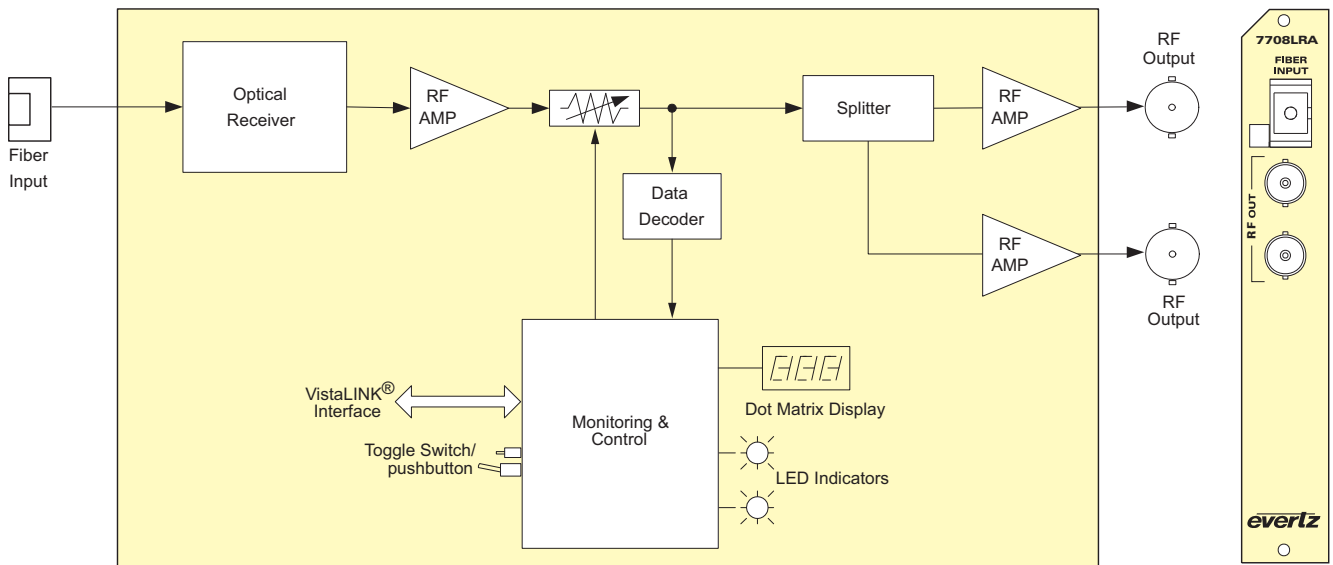
The 7708LRA/7708LR–H are VistaLINK®–capable fiber optic receivers for extended L–Band and other signals. They accept a fiber optic input from a companion transmitter and provide an electrical output signal. Monitoring and control of card status is provided locally at the card edge and remotely via VistaLINK®. SmartMON™ capability allows in–band monitoring data sent by a companion SmartMON™–enabled transmitter to be displayed locally or via SNMP/VistaLINK®.

The 7708LRA/7708LR–H occupies one card slot and can be housed in a 1RU frame that will hold up to four modules, a 3RU frame that will hold up to 15 modules, a 350FR portable frame that will hold up to seven modules or a standalone enclosure, which holds one module.

▸Features & Benefits

• Protocol transparent — receives all video, audio and data 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 input level at SmartMON™–capable fiber transmitter
• Two buffered RF outputs for extra signal distribution or monitoring functions
• RF output independent of optical loss (within AGC/IGC gain range)
• Available with BNC, SMA or F–Type connector options
• Wide range optical input (1270–1610nm)
• Supports single–mode and multi–mode fiber optic cable (contact factory for multi–mode applications)

• Available with SC/UPC, ST/UPC, FC/UPC, SC/APC and FC/APC connector options
• Wide range adjustable gain in 0.5dB steps for fine–tuning signal levels
• 7708LR–H with high–sensitivity input for long–haul applications
• Fully hot–swappable from front of frame
• Comprehensive signal and card status monitoring via four digit card edge display or remotely through SNMP and VistaLINK®
• VistaLINK® capability is available when modules are used with the 3RU 7800FR or 350FR portable frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame
• SmartMON™ capability for display of monitored parameters from companion SmartMON™–capable fiber transmitters

▸Specifications

RF Outputs:

Number of Outputs:	2
Connector:	BNC per IEC 61169–8 Annex A (F–type Optional)
I/O Impedance:	75Ω (50Ω optional) (See Ordering Information)

Frequency Range:

7708LRA:	88MHz–3GHz
7708LR–H:	88MHz–2.3GHz

Return Loss:

88MHz–2.3GHz:	> 15dB
2.3–3GHz:	> 12dB
Output IP3:	+28dBm
IMD:	< –55dBc at –3dBm output and 25dB gain

Output Signal Level:

Manual Gain:	–10 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:	–10 to +31.5dB in 0.5dB steps
7708LR–H:	–10 to +28dB in 0.5dB steps

See System Performance Specifications of the chosen companion transmitter for more details.

Optical Input:

Number of inputs:	1
Connector:	Female SC/UPC, ST/UPC, FC/UPC, SC/APC, FC/APC
Operating Wavelength:	1270–1610nm

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:	6W
EMI/RFI:	Complies with FCC Part 15, Class A EU EMC Directive

Physical (number of slots):

350FR:	1
7700FR–C:	1
7800FR:	1

The Complete Solution Provider

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▶ Ordering Information

7708LRA	L–Band Fiber Receiver with VistaLINK® and SmartMON™
7780LRA–B50	L–Band Fiber Receiver with VistaLINK® and SmartMON™, 50Ω BNC
7780LRA–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

Ordering Options   Rear Plate and Fiber Connector must be specified at time of order *(Eg. Model +3RU +SC)*

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 connectors

Note: 75Ω BNC Connectors are standard

Rear Plate Suffix

+3RU	3RU Rear Plate for use with 350FR, 7700FR–C or 7800FR Multiframe
+1RU	1RU Rear Plate for use with 7701FR Multiframe
+SA	Standalone Enclosure Rear Plate

Enclosures

350FR	3RU Portable Multiframe which holds up to 7 single slot modules
7700FR–C	3RU Multiframe which holds up to 15 single slot modules
7800FR	3RU Multiframe which holds up to 15 single slot modules
7801FR	1RU Multiframe which holds up to 4 single or 2 dual slot modules
7701FR	1RU Multiframe which holds up to 3 single or dual slot modules
S7701FR	Standalone Enclosure