

7707LR & 7707LR-WB

L-Band Fiber Receiver with VistaLINK® Monitoring

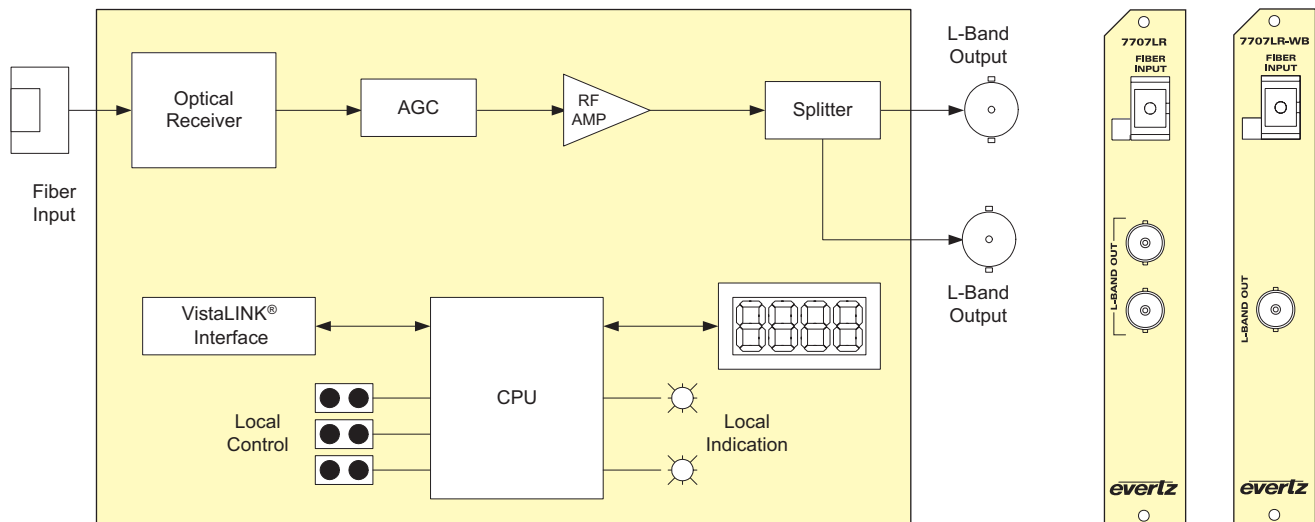
The 7707LR and 7707LR-WB are VistaLINK® -capable fiber optic receivers for L-Band Satellite signals. The 7707LR-WB offers extended bandwidth from 250 to 2250MHz vs 950 to 2250MHz for the 7707LR version. Both 7707LR and 7707LR-WB accept a fiber optic input from the companion L-Band transmitters and provide L-Band RF output signals. Monitoring and control of card status is provided locally at the card edge and remotely via VistaLINK®.

The 7707LR and 7707LR-WB occupies one card slot and can be housed in either a 1RU frame which will hold up to 3 modules, a 3RU frame which will hold up to 15 modules, 350FR portable frame that holds up to 7 modules or a standalone module which will hold 1 module.

►Features & Benefits

- Band operation:
 - 7707LR: 950 to 2250MHz
 - 7707LR-WB: 250 to 2250MHz
- Protocol transparent - receives all video, audio and data modulation formats
- Supports manual and automatic gain control (AGC)
- Wide AGC hold range (50dB) using 7707LTA/LTA-WB + 7707LR/LR-WB
- Two L-Band RF outputs (7707LR only) for extra signal distribution or monitoring functions
- RF output independent of optical loss (within AGC range)
- Available with BNC or F-Type connector options
- Wide range optical input (1270nm to 1610nm)
- Supports single-mode and multi-mode fiber optic cable
- Available in SC/PC, ST/PC, FC/PC and APC connector options
- 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

APPLICATION	OPTICAL/LINK BUDGET	TRANSMITTER SIDE		RECEIVER SIDE		DESCRIPTION
		ORDERING PRODUCT INFO	TX POWER	ORDERING PRODUCT INFO	RX SENSITIVITY	
ONE SIGNAL PER FIBER						
Short to Medium Haul	14dB/40km	7707LTA13	0dBm	7707LR	-14dBm	1310nm FP laser on Tx
Medium Haul	16dB/45km	7707LTA13L	+2dBm	7707LR	-14dBm	1310nm DFB laser on Tx
Long Haul	16dB/64km	7707LTA15	+2dBm	7707LR	-14dBm	1550nm DFB laser on Tx
Long Haul	25dB/71km	7707LTA13L	+2dBm	7707LR-H	-23dBm	1310nm DFB laser on Tx, High Sensitivity RX
Long Haul	25dB/100km	7707LTA15	+2dBm	7707LR-H	-23dBm	1550nm DFB laser on Tx, High Sensitivity RX
MULTI-SIGNAL PER FIBER (WAVELENGTH MUX/DEMUX)						
Medium Haul	12.5dB/50km	7707LTAxx	+2dBm	7707LR	-14dBm	1470nm-1610nm CWDM DFB laser on Tx, with 8 Ch CWDM Mux/Demux*
Long Haul	21.5dB/86km*	7707LTAxx	+2dBm	7707LR-H	-23dBm	1470nm-1610nm CWDM DFB laser on Tx, High Sensitivity RX, 8 Ch CWDM Mux/Demux*
Long Haul	16dB/64km**	7707LTADxxx	+7dBm	7707LR	-14dBm	DWDM DFB laser on Tx, with 8 Ch DWDM Mux/Demux**
Long Haul	25dB/100km**	7707LTADxxx	+7dBm	7707LR-H	-23dBm	DWDM DFB laser on Tx, High Sensitivity RX, 8 Ch DWDM Mux/Demux**
Fiber loss = 0.35/0.25dB per km @ 1310nm/1550nm						
*Assumes 8 Channel upper band CWDM Mux/Demux loss of 3.5dB						
**Assumes 8 Channel DWDM Mux/Demux loss of 5dB						



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► Specifications

<p>RF Outputs: Number of Outputs: 2 (7707LR) 1 (7707LR-WB) Connector: 2 BNCs (F-type optional) I/O Impedance: 75Ω (50Ω optional) (See Ordering Information) Return Loss: > 10dB Frequency Range: 950MHz-2250MHz (7707LR) 250MHz-2250MHz (7707LR-WB) Flatness: ±1.5dB @ 950MHz-2250MHz (7707LR) ±2dB @ 250MHz-2250MHz (7707LR-WB) ±0.25dB @ any 36MHz BW</p> <p>Output Signal Level: AGC Mode: -20dBm constant (within AGC range) Manual Mode: -20 to -65dBm (depends on RF level and optical loss) OIP3: +10dBm (-40dBm input level) Intermodulation Products: -55dBc (-20dBm RF in on TX, 1m fiber, AGC mode on TX & RX)</p>	<p>Optical Input: Number of inputs: 1 Connector: Female SC/PC, ST/PC, FC/PC, SC/APC, FC/APC Operating Wavelength: 1270nm-1610nm Maximum Input Power: Standard Version: +3dBm -H Version: -7dBm Optical Sensitivity: Standard Version: -14dBm @ 35dB S/N -H Version: -23dBm @ 35dB S/N -29dBm @ 25dB S/N Optical Attenuation: AGC Hold Range: 10dB optical</p>	<p>Electrical: Voltage: +12V DC Power: 5W EMI/RFI: Complies with FCC Part 15, Class A EU EMC Directive</p> <p>Physical (number of slots): 350FR: 7700FR-C: 1 7800FR:</p>
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► Ordering Information

L-Band Satellite Fiber Receiver with VistaLINK®
Note: 75Ω I/O impedance ships standard

7707LR	L-Band Satellite Fiber Receiver
7707LR-H	L-Band High Sensitivity Satellite Fiber Receiver
7707LR-WB	L-Band Satellite Fiber Receiver, Wideband
7707LR-H-WB	L-Band High Sensitivity Satellite Fiber Receiver, Wideband

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

Impedance Suffix
+50 50Ω I/O impedance

Connector Suffix

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

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

