

7707IFRA

70/140MHz IF Fiber Receiver with VistaLINK® Monitoring



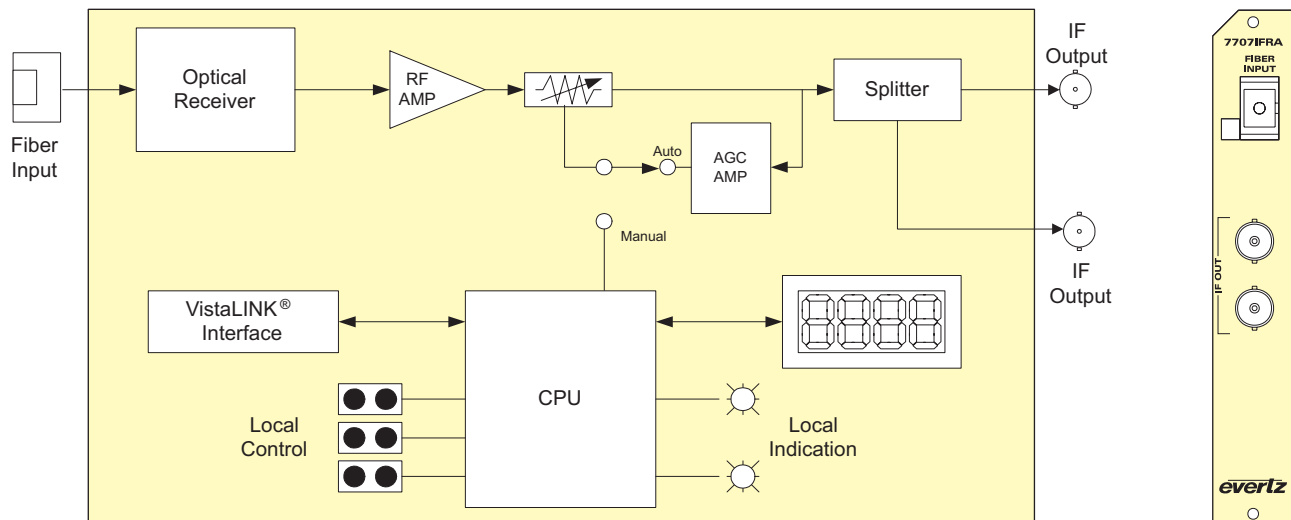
The 7707IFRA is a VistaLINK® -capable fiber optic receiver for 70/140 MHz IF signals. The 7707IFRA accepts a fiber optic input from the companion 7707IFTA and provides two 70/140 MHz IF output signals. Monitoring and control of card status and parameters is provided locally at the card edge and remotely via VistaLINK® capability.

The 7707IFRA 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

- 30MHz-200MHz bandwidth
- Protocol transparent - receives all video, audio and data modulation formats
- Supports manual and automatic gain control (AGC)
- Two IF outputs for extra signal distribution or monitoring functions
- IF output power 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 (contact factory for multi-mode applications)
- 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/30km	7707IFTA13	0dBm	7707IFRA	-14dBm	1310nm FP laser on Tx
Medium Haul	16dB/45km	7707IFTA13L	+2dBm	7707IFRA	-14dBm	1310nm DFB laser on Tx
Long Haul	16dB/64km	7707IFTA15	+2dBm	7707IFRA	-14dBm	1550nm DFB laser on Tx
Long Haul	25dB/71km	7707IFTA13L	+2dBm	7707IFRA-H	-23dBm	1310nm DFB laser on Tx, High Sensitivity RX
Long Haul	25dB/100km	7707IFTA15	+2dBm	7707IFRA-H	-23dBm	1550nm DFB laser on Tx, High Sensitivity RX
MULTI-SIGNAL PER FIBER (WAVELENGTH MUX/DEMUX)						
Medium Haul	12.5dB/50km*	7707IFTAxx	+2dBm	7707IFRA	-14dBm	1470nm-1610nm CWDM DFB laser on Tx, with 8 Ch CWDM Mux/Demux*
Long Haul	21.5dB/86km*	7707IFTAxx	+2dBm	7707IFRA-H	-23dBm	1470nm-1610nm CWDM DFB laser on Tx, High Sensitivity RX, 8 Ch CWDM Mux/Demux*
Long Haul	16dB/70km**	7707IFTADxxx	+7dBm	7707IFRA	-14dBm	DWDM DFB laser on Tx, with 8 Ch DWDM Mux/Demux**
Long Haul	25dB/100km**	7707IFTADxxx	+7dBm	7707IFRA-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						





► Specifications

IF Output:		Optical Input:	Physical (number of slots):
Connector:	2 BNC per IEC 61169-8 Annex A	Number of Inputs:	1
I/O Impedance:	75Ω (50Ω optional) (See Ordering Information)	Connector:	Female SC/PC, ST/PC, FC/PC, SC/APC, FC/APC
Return Loss:	18dB (min)	Operating Wavelength:	1270nm - 1610nm
Frequency Range:	30MHz-200MHz	Maximum Input Power:	Standard Version: +3dBm -H Version: -7dBm
Flatness:	±1dB @ 30MHz-200MHz ±0.2dB @ 36MHz BW	Optical Sensitivity:	Standard Version: -14dBm @35dB C/N @36MHz BW -H Version: -23dBm @35dB C/N @36MHz BW -29dBm @25dB C/N @36MHz BW
Output Signal Level:		Optical Attenuation:	AGC Hold range: 10dB optical
7707IFRA:		Electrical:	
AGC Mode:	-10dBm constant (within AGC range)	Voltage:	+12V DC
Manual Mode:	-5 to -65 (depends on RF input level, optical loss & gain setting)	Power:	5W
7707IFRA-20:		EMI/RFI:	Complies with FCC Part 15, Class A EU EMC Directive
AGC Mode:	-20dBm constant (within AGC range)		
Manual Mode:	-15 to -65 (depends on RF input level, optical loss & gain setting)		
Intermodulation Products:			
	-50dBc (-10dBm at IFTA input & 3dB optical loss)		

► Ordering Information

(Replaces the 7707IFR and offers improved performance and wider operating range)
Note: 75Ω I/O impedance ships standard

7707IFRA	70/140MHz IF Fiber Receiver, VistaLINK® Monitoring
7707IFRA-H	70/140MHz IF High Sensitivity Fiber Receiver, VistaLINK® Monitoring
7707IFRA-20	70/140MHz IF Fiber Receiver, VistaLINK® Monitoring, -20dBm AGC output
7707IFRA-H-20	70/140MHz IF High Sensitivity Fiber Receiver, VistaLINK® Monitoring, -20dBm AGC output

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
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