

70/140MHz IF Fiber Transmitter

Model 7707IFT



The 7707IFT is a VistaLINK™ - enabled fiber optic transmitter for 70/140 MHz IF signals. The 7707IFT accepts one 70/140 MHz coaxial input and provides a fiber optic output signal at 1310nm, 1550nm or up to sixteen CWDM wavelengths. An IF BNC output is also provided for monitoring or further signal distribution. Monitoring and control of card status and parameters is provided locally at the card edge and remotely via VistaLINK™ capability.

The 7707IFT 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 or a standalone enclosure which will hold 1 module.

Features

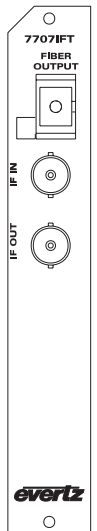
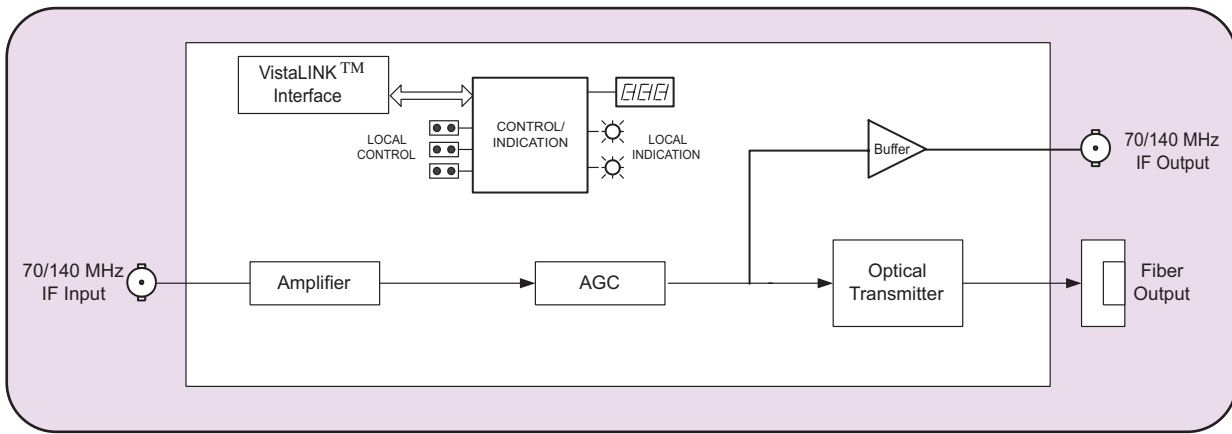
- 10-200 MHz bandwidth
- Protocol transparent - transmits all video, audio and data modulation formats
- Automatic gain control on IF input
- Additional IF BNC output
- Comprehensive signal and status monitoring via four digit card edge display or remotely through SNMP and VistaLINK™ capability
- Optical output wavelengths of 1310nm, 1550nm and up to sixteen WDM wavelengths (ITU-T G.694.2 compliant)
- Supports multi-mode and single-mode fiber
- Available in SC/PC, ST/PC, FC/PC connector options
- Fully hot swappable from front of frame

Application Guide

APPLICATION	OPTICAL/LINK BUDGET	FREQUENCY	PRODUCT	DESCRIPTION
Medium Haul	13dB / 25km	10-200MHz	7707IFT13M	1310nm FP, 0dBm
Long Haul @ 1310nm	16dB / 40km	10-200MHz	7707IFT13L	1310nm DFB, +1dBm
Long Haul @ 1550nm	16dB / 55km	10-200MHz	7707IFT15	1550nm DFB, +1dBm
Long Haul (Multi-carrier CWDM)*	13dB / 45km*	10-200MHz	7707IFTxx	CWDM DFB, +1dBm*
Fiber Loss: 0.4/0.3dB per km @1310nm/1550nm			* Assumes 8 Ch CWDM @ 3.5db Loss for Mux+Demux	

70/140MHz IF Fiber Transmitter

7707IFT Block Diagram



Specifications

IF Input:

Connector: 1 BNC
 I/O Impedance: 75 or 50Ω (See Ordering Information)
 Return Loss: 15dB
 Input Signal Range: -20 to -5dBm

IF Output:

Connector: 1 BNC
 I/O Impedance: 75 or 50Ω (See Ordering Information)
 Return Loss: 15dB
 Output Level: -25dBm

Optical Output:

Number of outputs: 1
 Connector: Female SC/PC, ST/PC, FC/PC
 Operating Wavelength:
 Standard: 1310nm, 1550nm (nominal)
 CWDM: 1270nm to 1610nm (See Ordering Information)

Optical Power:

1310nm FP: 0dBm ±1dBm
 1310nm, 1550nm & CWDM DFB: +1dBm ±1dBm

Electrical:

Voltage: +12VDC
 Power: 5 Watts
 EMI/RFI: Complies with FCC Part 15 Class A
 EU EMC Directive

Physical:

Number of slots: 1

Distributed by: **Mega Hertz**
 800-883-8839
 sales@megahz.com
 www.megahz.com

Ordering Information: 70/140MHz IF Fiber Transmitter

7707IFT13M 1310nm, FP Laser, Medium Haul (<25km)
 7707IFT13L 1310nm, DFB Laser, Long Haul (40Km)
 7707IFT15 1550nm, DFB Laser, Long Haul (55Km)

For CWDM Applications:

7707IFT27 1270nm, CWDM DFB Laser
 7707IFT29 1290nm, CWDM DFB Laser
 7707IFT31 1310nm, CWDM DFB Laser
 7707IFT33 1330nm, CWDM DFB Laser
 7707IFT35 1350nm, CWDM DFB Laser
 7707IFT37 1370nm, CWDM DFB Laser
 7707IFT43 1430nm, CWDM DFB Laser
 7707IFT45 1450nm, CWDM DFB Laser
 7707IFT47 1470nm, CWDM DFB Laser
 7707IFT49 1490nm, CWDM DFB Laser
 7707IFT51 1510nm, CWDM DFB Laser
 7707IFT53 1530nm, CWDM DFB Laser
 7707IFT55 1550nm, CWDM DFB Laser
 7707IFT57 1570nm, CWDM DFB Laser
 7707IFT59 1590nm, CWDM DFB Laser
 7707IFT61 1610nm, CWDM DFB Laser

Note: 75Ω I/O impedance ships standard

Ordering Options:

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

Rear Plate Suffix

+3RU 3RU Rear Plate for use with 7700FR-C
 Multiframe
 +1RU 1RU Rear Plate for use with 7701FR Multiframe
 +SA Standalone Enclosure Rear Plate

Impedance Suffix

+50 50Ω I/O Impedance

Connector Suffix

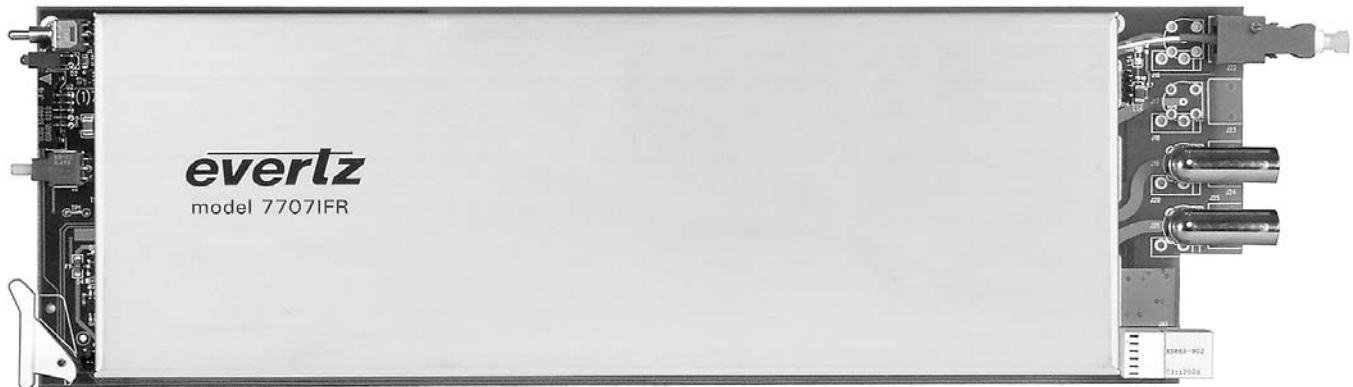
+SC SC/PC
 +ST ST/PC
 +FC FC/PC

Enclosures:

7700FR-C 3RU Multiframe, which holds 15 modules
 7701FR 1RU Multiframe, which holds 3modules
 S7701FR Standalone enclosure

70/140 Mhz IF Fiber Receiver

Model 7707IFR



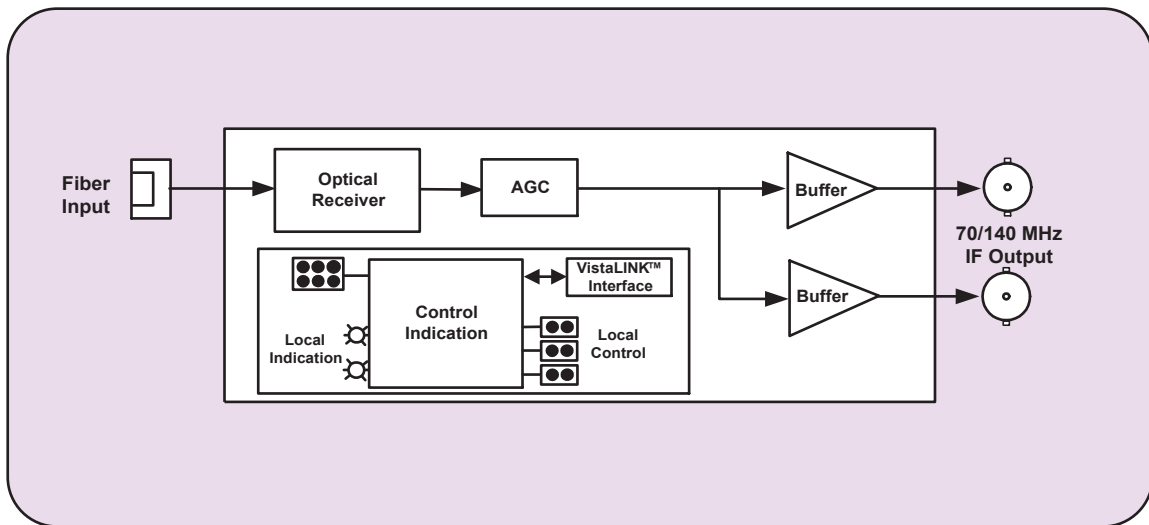
The 7707IFR is a VistaLINK™ -enabled fiber optic receiver for 70/140 MHz IF signals. The 7707IFR accepts a fiber optic input from the companion 7707IFT and provides two 70/140 Mhz IF output signals via BNC's. Monitoring and control of card status and parameters is provided locally at the card edge and remotely via VistaLINK™ capability.

The 7707IFR 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 or a standalone enclosure which will hold 1 module.

Features

- 10-200 MHz bandwidth
- Protocol transparent - receives all video, audio and data modulation formats
- Two IF outputs for extra signal distribution or monitoring functions
- User selectable IF output power
- IF output power independent of optical loss (within AGC range)
- Comprehensive signal and status monitoring via four digit card edge display or remotely through SNMP and VistaLINK™ capability
- Supports multi-mode and single-mode fiber
- Wide input range optical input (1270nm to 1610nm)
- Fully hot swappable from front of frame

7707IFR Block Diagram



Specifications

RF Output:

Connector:	1 BNC
I/O Impedance:	75 or 50Ω (See Ordering Information)
Return Loss:	15dB (min)
Carrier to Noise:	-40dB @ 1 MHz
Flatness:	± 1.5dB 10-200MHz ± 0.25dB @ any 36MHz
Output Signal Range:	-15dBm to 0dBm
Intermodulation Products:	-40dBc (max)

Optical Input:

Number of Inputs:	1
Connector:	Female SC/PC, ST/PC, FC/PC
Operating Wavelength:	1270nm - 1610nm
Maximum Input Power:	0dBm
Maximum Optical Link Attenuation:	20dB

Electrical:

Voltage:	+12VDC
Power:	5 Watts
EMI/RFI:	Complies with FCC Part 15 Class A EU EMC Directive

Physical:

Number of slots:	1
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Ordering Information:

7707IFR	70/140MHz IF Fiber Receiver, VistaLINK™ Monitoring
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Note: 75Ω I/O impedance ships standard

Ordering Options:

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

Rear Plate Suffix:

+3RU	3RU Rear Plate for use with 7700FR-C Multiframe
+1RU	1RU Rear Plate for use with 7701FR Multiframe
+SA	Standalone Enclosure Rear Plate

Impedance Suffix:

+50	50Ω I/O impedance
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Connector Suffix:

+SC	SC/PC
+ST	ST/PC
+FC	FC/PC

Enclosures:

7700FR-C	3RU Multiframe, which holds 15 modules
7701FR	1RU Multiframe, which holds 3modules
S7701FR	Standalone enclosure