

# 7707IFTA

## 70/140MHz IF Fiber Transmitter with VistaLINK® Monitoring



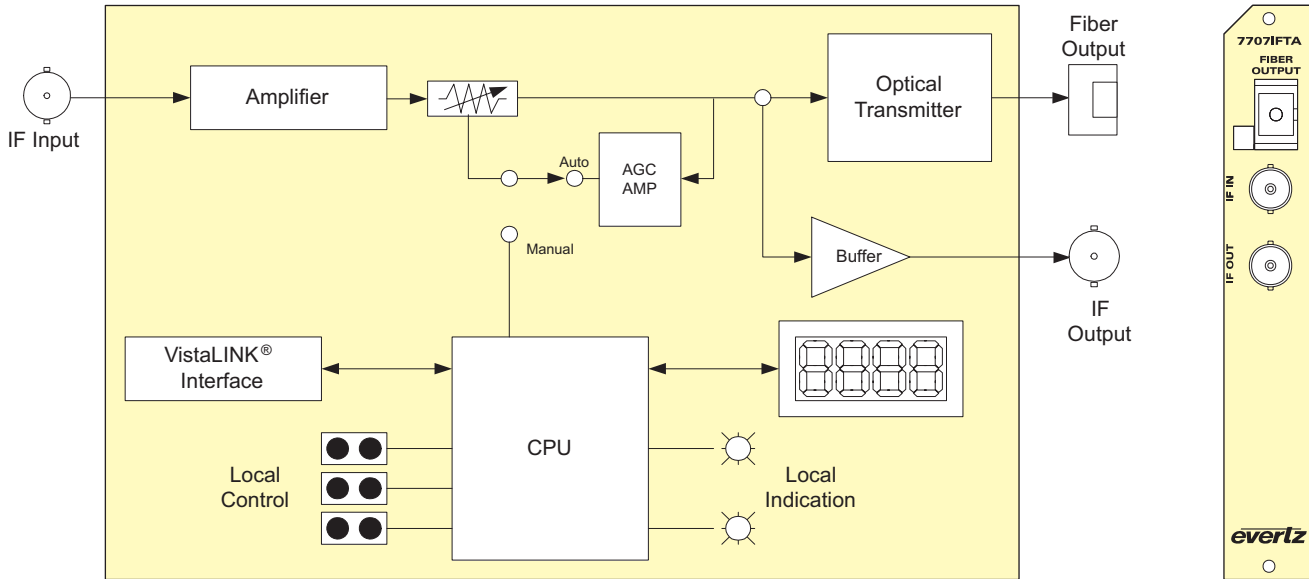
The 7707IFTA is a VistaLINK® -capable fiber optic transmitter for 70/140MHz IF signals. The 7707IFTA accepts one 70/140MHz coaxial input and provides a fiber optic output signal at 1310nm, 1550nm, CWDM or DWDM wavelengths. An IF BNC output is also provided for monitoring or further signal distribution.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

The 7707IFTA 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
- Wide dynamic range RF input (-5 to -65dBm)
- Protocol transparent - transmits all video, audio and data modulation formats
- Supports manual and automatic gain control on IF input
- Additional IF BNC output for monitoring or distribution
- Available with BNC or F-Type connector options
- Available with output wavelengths of 1310nm, 1550nm, CWDM (ITU-T G.694.2 compliant) and DWDM (ITU-T G.694.1 compliant)
- 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	7707IFRTA-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

<p><b>RF Input:</b> Connector: 1 BNC per IEC 61169-8 Annex A (F-type optional) I/O Impedance: 75Ω (50Ω optional) (See Ordering Information) Return Loss: 18dB (min) Frequency Range: 30MHz-200MHz Input Power Range: -5 to -65dBm AGC Hold Range: -10 to -35dBm</p> <p><b>IF Monitoring Output:</b> Connector: 1 BNC per IEC 61169-8 Annex A (F-type optional) I/O Impedance: 75Ω (50Ω optional) (See Ordering Information) Return Loss: 18dB (min) Frequency Range: 30MHz-200MHz Flatness: ±1dB @ 30MHz-200MHz ±.2dB @ 36MHz BW</p>	<p><b>Output Signal Level:</b> AGC mode: -20dBm constant (within AGC range) -10 to -35dBm total RF input power) Manual mode: (Input signal) + (manual Gain setting) Intermodulation Products: -50dBc (-10dBm RF in, AGC mode)</p> <p><b>Optical Output:</b> Number of outputs: 1 Connector: Female SC/PC, ST/PC, FC/PC, SC/APC, FC/APC Operating Wavelengths: Standard: 1310nm, 1550nm (nominal) CWDM: 1270nm to 1610nm DWDM: C-Band (ITU G.694.1 compliant)</p> <p><b>Output Power:</b> 1310nm FP: 0dBm ±1dBm 1310nm, 1550nm &amp; CWDM DFB: +2dBm ±1dBm DWDM DFB: +7dBm ±1dBm</p>	<p><b>Electrical:</b> Voltage: +12V DC Power: 6W 9W (DWDM) EMI/RFI: Complies with FCC Part 15, Class A EU EMC Directive</p> <p><b>Physical (number of slots):</b> 350FR: 1 7700FR-C: 1 7800FR: 1</p> <p><b>Compliance:</b> Laser Safety: Complies with 24 CFR 1040.10 and 1040.11 EMI/RFI: Complies with FCC regulations for Class A devices Complies with EU EMC directive</p>
--	---	---

► Ordering Information

(Replaces the 7707IFT and offers improved performance and wider operating range)

Note: 75Ω I/O impedance ships standard

**7707IFTA13** 70/140MHz IF Fiber Transmitter, with VistaLINK® 1310nm FP Laser  
**7707IFTA13L** 70/140MHz IF Fiber Transmitter, with VistaLINK® 1310nm DFB Laser  
**7707IFTA15** 70/140MHz IF Fiber Transmitter, with VistaLINK® 1550nm DFB Laser

For CWDM, please refer to the end of the fiber section for ordering information  
**7707IFTA27 to 61** 70/140 MHz IF Fiber Transmitter, CWDM wavelength, with VistaLINK®

For DWDM, please refer to the end of the fiber section for ordering information  
**7707IFTADxxx** 70/140 MHz IF Fiber Transmitter, DWDM wavelength, with VistaLINK®

<b>Impedance Suffix</b>	
<b>+50</b>	50Ω I/O Impedance
<b>Connector Suffix</b>	
<b>+SC</b>	SC/PC
<b>+AP+SC</b>	SC/APC (Angle polished available with 7707IFTA13 only)
<b>+ST</b>	ST/PC
<b>+FC</b>	FC/PC
<b>+AP+FC</b>	FC/APC (Angle polished available with 7707IFTA13 only)
<b>+F75</b>	75Ω, F-Type rear connector
<b>Enclosures</b>	
<b>350FR</b>	3RU Portable Multiframe which holds up to 7 single slot modules
<b>7700FR-C</b>	3RU Multiframe which holds up to 15 single slot modules
<b>7800FR</b>	3RU Multiframe which holds up to 15 single slot modules
<b>7801FR</b>	1RU Multiframe which holds up to 4 single or 2 dual slot modules
<b>7701FR</b>	1RU Multiframe which holds up to 3 single or dual slot modules
<b>S7701FR</b>	Standalone Enclosure

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