

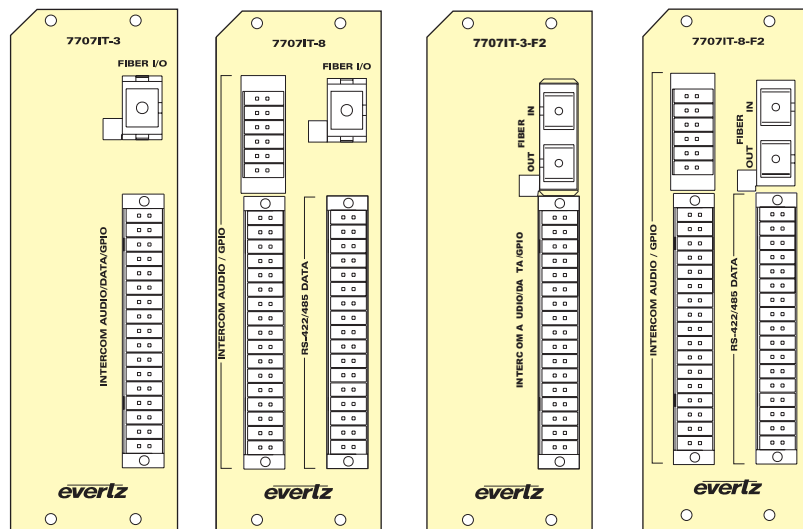
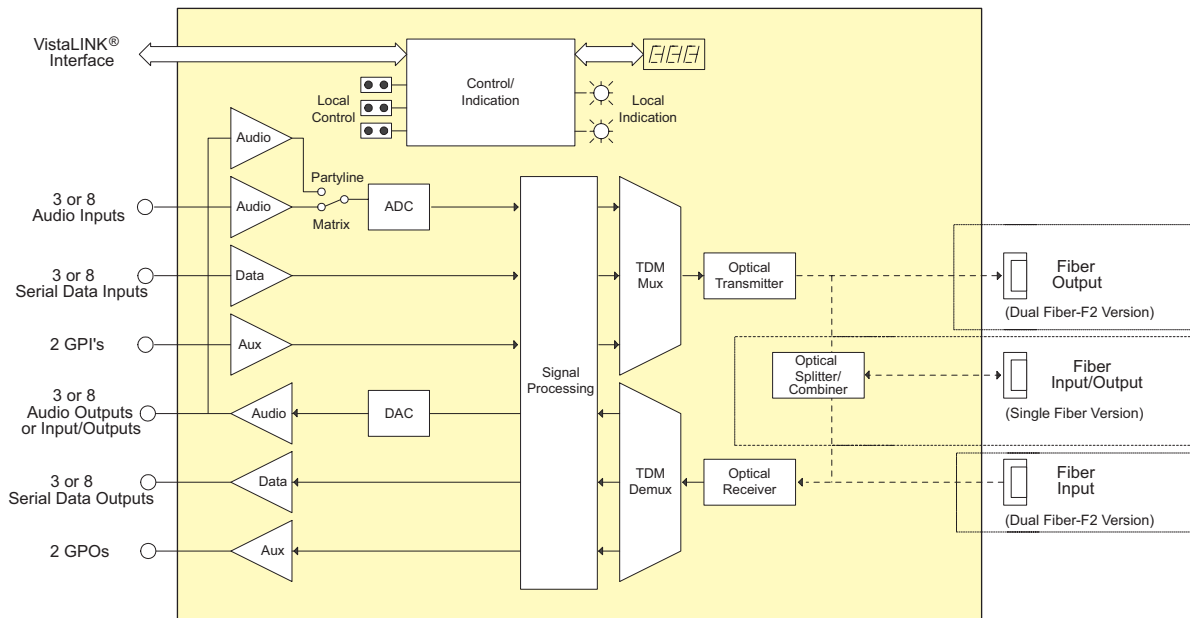
7707IT-3, 7707IT-8

Multi-Channel Intercom Fiber Transceivers



Features & Benefits

- Extends up to 3 or 8 independent channels of intercom communication over a single fiber optic link
- Configurable interface to:
 - RTS-Telex Matrix: 4-Wire Audio, RS-485 Data, GPIO
 - ClearCom Matrix: 4-Wire Audio, RS-422 Data, GPIO
 - RTS-Telex Party-Line: 2-Wire Audio, GPIO
 - ClearCom Party-line: 2-Wire Audio, GPIO
- Note: Does not perform conversion between 2-Wire and 4-Wire systems*
- Independent channels can simultaneously accommodate different intercom types
- User-friendly selection of intercom interfaces via programmed profiles
- All configurations and adjustments are controllable through the card-edge user interface or remotely via SNMP and VistaLINK® -capable capability
- Selectable termination, and failsafe bias settings for RS-422/485 data inputs
- Provides 2 general-purpose inputs (GPIs), and 2 general purpose outputs (GPOs)
- 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 frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame
- Optical output wavelengths of 1310nm, 1550nm, and up to sixteen CWDM wavelengths (ITU-T G.694.2 compliant)
- DWDM wavelengths (ITU-T G.694.1 compliant) also available
- Compatible with single-mode and multi-mode fiber optic cable (dual fiber version)
- Fully hot-swappable from front of frame
- Occupies two card slots and is housed in a 1RU frame which will hold up to 3 modules, a 3RU frame which will hold up to 7 modules, 3RU portable frame that holds up to 3 modules or a standalone frame which will hold 1 module





► Specifications

Analog Audio:

Balanced/Matrix Type Audio
 Number of Signals:
 7707IT-3: 3 inputs, 3 outputs
 7707IT-8: 8 inputs, 8 outputs
 Type: Analog Audio, Balanced
 Industry Standards: ClearCom, RTS-Telex
 Connector: Multi-pin removable terminal block
 Input Impedance: > 10kΩ
 Output Impedance: 66Ω
 Signal Resolution: 24-bit
 Sampling Rate: 52.7kHz
 Frequency Response:
 20Hz to 20kHz
 Gain Flatness: ±2dB
 Input Level (max): +20dBu
 Output Level (max):
 Into 10kW +20dBu
 Into 600W +19dBu
 Signal/Noise Ratio: > 90dB
 THD: < 0.01%
 Crosstalk: < -80dB
 Controllable Gain: -10dB to +10dB

Unbalanced/Party-Line Type Audio:

Number of Signals:
 7707IT-3: 3
 7707IT-8: 8
 Type: Analog Audio, Full-duplex, Unbalanced
 Industry Standards: ClearCom, RTS-Telex
 Connector: Multi-pin removable terminal block
 Signal Coupling: AC coupled (accommodates 30V 'wet' inputs)
 Bridging Impedance: > 10kΩ
 Signal Resolution: 24-bit
 Sampling Rate: 52.7kHz
 Sidetone Null: > 25dB
 Sidetone Null Range:
 100Ω to 300Ω load
 Frequency Response:
 120Hz to 20kHz
 Gain Flatness: ±2dB
 Input Level(max): +5dBu
 Output Level(max): +5dBu (into 200W load)
 Signal/Noise Ratio: > 75dB
 THD: < 0.1%
 Crosstalk: < -60dB
 Controllable Gain: -5dB to +5dB (into 200W load)
 Receive Signaling: 4V DC min (ClearCom), 20kHz
 ±500Hz (RTS)
 Send Signaling: 11V DC min (ClearCom), 20kHz
 ±100Hz (RTS)

Serial Data:

RS-422 /RS-485 Type Data
 Number of Signals:
 7707IT-3: 3
 7707IT-8: 8
 Connector: Multi-pin removable terminal block
 Signal Type: RS-485 or RS-422 (selectable)
 Input Termination: 120Ω or Open (selectable)
 Input Failsafe Bias: 200mV (3.3mA into 60Ω) or none (selectable)
 Bit Rate:
 RS485: Compatible with all Telex RS485 rates
 RS-422: 460kb/s

Optical Input/Output:

Number: 1 (Standard and -W Single Fiber Version)
 2 (-F2 Dual Fiber Version)
 Connector at Frame: SC/PC, ST/PC, FC/PC female housing
 Input Wavelength: 1270nm to 1610nm
 Max. Input Power: 0dBm
 Output Wavelengths:
 Standard: 1310nm, 1550nm (nominal)
 1270nm to 1610nm (ITU-T G.694.2 compliant)
 CWDM: C-Band (ITU-T G.694.1 compliant)
 DWDM: C-Band (ITU-T G.694.1 compliant)
 Output Power:
 1310nm FP: -7dBm ±1dBm
 1310nm (-W): -1dBm ±1dBm
 1550nm, CDWM (DFB):
 0dBm ± 1dBm
 DWDM (DFB): +7dBm ± 1dBm
 Optical Sensitivity:
 WDM (-w version) -26dBm
 Standard: -28dBm

General Purpose Outputs (GPO):

Number of Signals: 2 Outputs
 Connector: Multi-pin removable terminal block
 Output Type: Dry contact relay closure, normally open
 Output Current (min): 100mA

General Purpose Inputs (GPI):

Number of Signals: 2 Inputs
 Connector: Multi-pin removable terminal block
 Type: Opto-isolated, Active low
 GPI Input Voltage:
 Safe Voltage Range:
 -20V to +10V
 On Condition (max): < +2.5V(active low)
 Off Condition (min): > +3.5V
 GPI Input Current (min): 1mA
 GPI Input Current (max): 10mA (internally limited)

Electrical:

Voltage(type): 12V DC (nominal frame voltage)
 Power(max): 7707IT-3 (Non DWDM) = 7W
 7707IT-3 (DWDM) = 9W
 7707IT-8 (Non DWDM) = 18W
 7707IT-8 (DWDM) = 20W

Physical (number of slots):

350FR: 2
 7700FR-C: 2
 7800FR: 2

Compliance:

Laser Safety: Class 1 laser product
 Complies with 24 CFR 1040.10 and 1040.11
 IEC 60825-1
 EMI/RFI: Complies with FCC Part 15, Class A
 EU EMC directive

► Ordering Information

7707IT13M-3-W	3 Channel Intercom Fiber Transceiver, single fiber, WDM, 1310nm FP TX, RX on 1550nm
7707IT15-3-W	3 Channel Intercom Fiber Transceiver, single fiber, WDM, 1550nm DFB TX, RX on 1310nm
7707IT13-3-F2	3 Channel Intercom Fiber Transceiver, dual fiber, 1310nm FP TX & RX
7707IT13M-8-W	8 Channel Intercom Fiber Transceiver, single fiber, WDM, 1310nm FP TX, RX on 1550nm
7707IT15-8-W	8 Channel Intercom Fiber Transceiver, single fiber, WDM, 1550nm DFB TX, RX on 1310nm
7707IT13-8-F2	8 Channel Intercom Fiber Transceiver, dual fiber, 1310nm FP TX & RX
<i>For CWDM, please refer to the end of the fiber section for ordering information</i>	
7707ITxx-3-F2	3 Channel Intercom Fiber Transceiver, dual fiber, CWDM TX, VistaLINK®
7707ITxx-8-F2	8 Channel Intercom Fiber Transceiver, dual fiber, CWDM TX, VistaLINK®
<i>For DWDM, please refer to the end of the fiber section for ordering information</i>	
7707ITDxxx-3-F2	3 Channel Intercom Fiber Transceiver, dual fiber, DWDM TX, VistaLINK®
7707ITDxxx-8-F2	8 Channel Intercom Fiber Transceiver, dual fiber, DWDM TX, VistaLINK®

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

Connector Suffix
+SC SC/PC
+ST ST/PC
+FC FC/PC

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