

7808T/R-8RF Series

RF over Fiber N+1 Redundancy Series

The 7808T/R-8RF series is a card-based RF over Fiber N+1 redundancy system up to an 8+1 configuration; mountable inside Evertz 7800 series multi-frames. Integrated with Evertz' modular RF over Fiber system, the 7808 Series provides a redundant RF over Fiber path with automatic and/or manual switching in the case of a main path failure (damage of fiber optic cable, transmitter, receiver, LNB power, etc.).

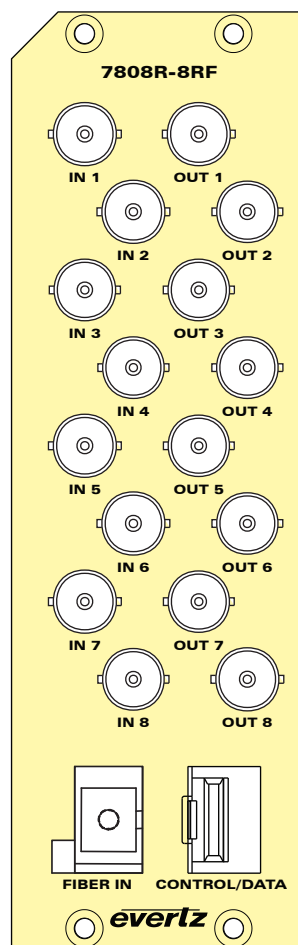
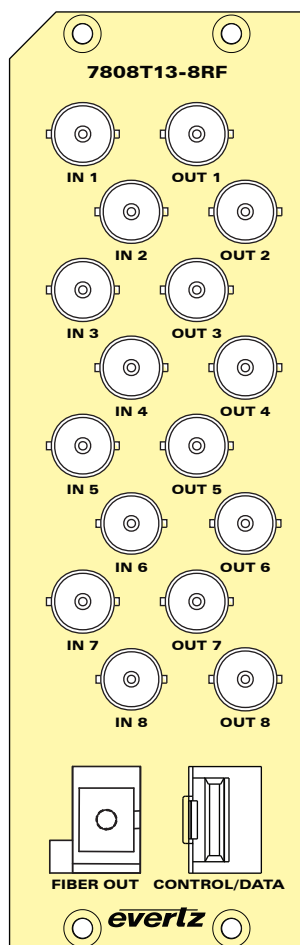
Monitoring and control of card status is provided locally at the card edge and remotely via VistaLINK® PRO NMS software. Advanced features include 13/18V LNB adjustable power and monitoring with 22KHz tone, wide range of manual/IGC/AGC gain, DC and RF passthrough and more.

► Features & Benefits

- Redundancy up to 8+1
 - Wideband 88MHz to 3GHz for IF, L-Band, extended L-Band applications
 - RF and DC passthrough using passive rear plate, providing true redundancy
 - Local Control/Data port
 - The 7808T acts as a redundant LNB powering system in case of main LNB path failure; standard selectable 13/18V DC
 - LNB current limit and short circuit protection
 - LNB current monitoring for advance warning of LNB failure
 - 22kHz tone on/off for LNB local oscillator control
 - DC passthrough for downstream LNB power, allowing backup LNB power
 - Fully hot-swappable from front of frame with all cabling at the rear
 - Extended frequency response for extended L-Band and off-air DTV signals
 - Protocol independent design — transports all modulation formats
- Supports manual, automatic (AGC) and intelligent (IGC) gain control modes
 - IGC mode provides simple automatic compensation for fiber loss while output level tracks input level at SmartMON™ capable fiber transmitter
 - Wide range adjustable gain in 0.5dB steps for fine tuning signal levels and optimizing CNR
 - SmartMON™ capability provides remote status monitoring via SNMP without a separate data connection
 - VistaLINK® capable for remote monitoring and control via SNMP (using VistaLINK® PRO) when installed in 7800FR frame with a 7800FC VistaLINK® frame controller
 - SmartMON™ capability for display of monitored parameters from redundant transmitter module

The 7808T13 is a dual-slot module which provides redundancy for Evertz' RF over Fiber transmitters. It has 8x RF inputs and a single optical output with a built-in switch and wideband transmitter. With Evertz' proprietary SmartMON™ monitoring software, incoming RF signal strength, LNB current and other data are relayed over the fiber output for monitoring through SNMP/VistaLINK® PRO.

The 7808R is a dual-slot module which provides redundancy for Evertz RF over Fiber receivers. It has a single optical input and 8x RF outputs with a built-in switch and wideband receiver.



► Specifications

<p>RF: Number of Inputs: 8 Number of Outputs: 8 Connector: BNC per IEC 61169–8 Annex A (F-Type and SMA optional) Input Impedance: 75Ω (50Ω optional) Frequency Range: 88–3000MHz Return Loss: 88MHz–2.3GHz: >15dB 2.3–3GHz: >12dB Input Power Range: –10dBm to –60dBm Gain Range: 7808T: 0 to +30dBm in 0.5dB steps 7808R: –10 to +20dBm in 0.5dB steps IMD: 7808T: < –55dBc @ –15dBm input and 0dB gain 7808R: < –55dBc @ –3dBm output and 25dB gain Input IP3: +10dBm Output IP3: +28dBm LNB Power: Voltage: 13VDC, 18VDC, off (selectable) Current: 400mA Protection: Short circuit, current limited LO Control: 22kHz on/off (selectable)</p>	<p>Optical: Number of Inputs: 1 (7808R) Number of Outputs: 1 (7808T) Connector: Female SC/UPC, ST/UPC, FC/UPC, SC/APC, FC/APC Operating Wavelength: Standard: 1310nm DFB CWDM: 1270–1610nm DWDM: C-Band (ITU G.694.1 compliant) Output Power: Standard 1310nm: +2dBm CWDM: +2dBm DWDM: +11dBm Max. Input Power: +3dBm Optical Sensitivity: 7808R: –14dBm @ 35dB S/N on a 36MHz carrier</p> <p>RF System Performance: Frequency Range: 950–2150MHz: ±1.5dB 88MHz–3GHz: ±2dB ±0.25dB on 36MHz BW to 3GHz</p>	<p>Electrical: Voltage: +18VDC Power: 12W max excluding LNB Power</p> <p>Physical (Number of Slots): 350FR: 2 7800FR: 2 7801FR: 2</p> <p>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</p> <p>Control: Number of Ports: 1 Connector: RJ–45, SNMP over Ethernet via frame controller, web browser</p>
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► Ordering Information

7808T13–8RF	Wideband RF fiber transmitter for N+1 redundant system configuration for up to 8x RF inputs, one fiber output, 1310nm DFB laser, SmartMON, VistaLINK® PRO
7808R–8RF	Wideband RF fiber receiver for N+1 redundant system with one fiber input, standard sensitivity and up to 8x RF outputs, SmartMON, VistaLINK® PRO

Connector Suffix:

+SC	SC/UPC
+AP+SC	SC/APC (Angle polished)
+FC	FC/UPC
+AP+FC	FC/APC (Angle polished)
+F75	75Ω F-Type rear connectors
+B50	50Ω BNC rear connectors
+S50	50Ω SMA rear connectors

*CWDM/DWDM versions also available upon request.
 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 or 7800FR Multiframe
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Enclosures:

7801FR	1RU Multiframe, holds up to 4x single-slot modules
7800FR	3RU Multiframe, holds up to 15x single-slot modules