

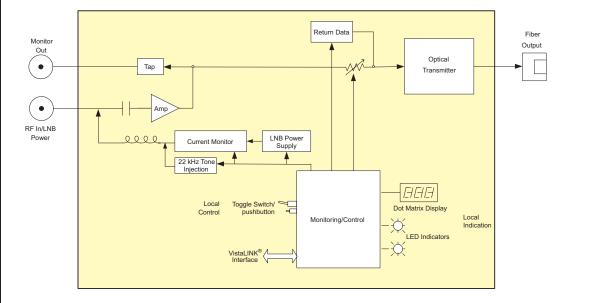
The 7708LT is a fiber optic transmitter for RF signals in the extended L-Band or wider frequency range. It accepts a single RF input on coaxial cable and provides a single output for optical transmission. An RF monitor output provides a convenient means of obtaining peak satellite signal strength, or additional signal distribution.

Gain may be adjusted manually or managed automatically via AGC. With SmartMON™, incoming RF signal strength, LNB current and other data are relayed over the fiber output for monitoring through SNMP/VistaLINK® (requires SmartMON™ capable companion fiber receiver) 13/18V DC adjustable LNB power with 22kHz tone is also provided.

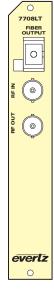
Features & Benefits

- Extended frequency response for extended L-Band, off-air DTV, and other signals
- Protocol independent design transports all modulation formats LNB power with 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
- RF monitor output for signal peaking and signal distribution
- Manual gain and AGC modes
- Wide range adjustable gain in 0.5dB steps for fine tuning signal levels and optimizing CNR
- Available with 1310nm, CWDM (ITU-T G.694.2) and +11dBm high power DWDM (ITU-T G.694.1) laser options

- SmartMON™ capability provides remote status monitoring via SNMP without a separate data connection
- VistaLINK® capability is available for monitoring and control when modules are used in a 3RU 350FR, 7800FR frame and a 7700FC VistaLINK® frame controller is installed in Slot 1 of the frame
- Fiber link provides electrical isolation between antenna and facility, mitigating ground loop and lightning issues
- The 7708LT occupies one card slot and can be housed in a 1RU frame that will hold up to 3x modules, a 3RU frame that will hold up to 15x modules, a 350FR which will hold up to 7x modules or a standalone enclosure, which holds one module



Frequency Range



Specifications

RF Input: Number of Inputs: Connector:

Input Impedance: Frequency Range: Return Loss: 120MHz-2.3GHz 2.3-3GHz: Input Power Range:

Gain Range: IMD: Input IP3: LNB Power:

Voltage: Current: Protection: LO Control:

Connector:

Return Loss:

RF Monitor Output: Number of Outputs:

BNC per IEC 61169-8 Annex A (F-Type and SMA Optional) Output Impedance: 75Ω (50 Ω Optional) > 15dB

BNC per IEC 61169-8 Annex A

(F–Type and SMA Optional) 75Ω (50Ω Optional)

0 to +30dBm in 0.5dB steps

< -55dBc at -15dBm input

13V DC, 18V DC, off (selectable)

Short Circuit, current limited

22kHz on/off (selectable)

50-3000MHz

and 0dB gain

+10dBm

400mA

–10dBm to –60dBm

> 14dB

> 12dB

| Output Level: | Within –2.0dB of input signal | |
|----------------------|--------------------------------|--|
| Optical Output: | | |
| Number of Outputs: | 1 | |
| 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 | |

50_3000MHz

RF System Performance 7708LT+7708LRA pair: Frequency Response:

- 950-2150MHz: ± 1.5dB ± 2dB 120MHz-3GHz:
- ±0.25dB on 36MHz BW to 2.3GHz

RF System Performance 7708LT+7708LR-H pair:

Frequency Response: 950–2150MHz: ± 1.5dB 120MHz-2.3GHz: ± 2dB ±0.25dB on 36MHz BW

10MHz Performance 7708T13-10MHz+7708R-10MHz pair: Manual Gain Range: -5 to +10dB Input Power Range: +10 to -40dBm OIP3: +29dB Harmonic Rejection: +60dB Electrical: +12V DC Voltage: 6W max excluding LNB Power Power Physical (Number of Slots): 350FR: 7700FR-C 7800FR Compliance: Laser safety

EMI/RFI:

Class 1 laser product Complies with 24 CFR 1040.10 and 1040.11, IEC 60825-1 Complies with FCC Part 15, Class A EU EMC directive



Ordering Information

| 7708LT13 | Wideband RF fiber transmitter, 1310nm DFB laser, SmartMON™, VistaLINK® | Enclosures: 7800FR | 3RU multiframe, holds up to 15x single–slot modules |
|---|---|---|--|
| 7708LTxx | Wideband RF fiber transmitter, CWDM DFB laser, SmartMON™, VistaLINK® | 7801FR Connector and Imp | 1RU multiframe, holds up to 4x single-slot modules |
| 7708LTDxxx | Wideband RF fiber transmitter, DWDM DFB laser, BNC connectors, SmartMON™, VistaLINK® | Note: standard RF connectors are 75Ω BNC | |
| 7708T13-10MHz | 10MHz RF fiber transmitter, 1310nm DFP laser | RF Connectors: | |
| 7708Txx-10MHz | 10MHz RF fiber transmitter, CWDM DFP laser | +F75 -B50 | 75Ω F–Type connector 50 Ω BNC connector |
| For companion receiver, see the 7708LRA/7708LR-H catalogue page | | -\$50 | 50Ω SMA connector |
| Ordering Options: | rear plate and fiber connector must be specified at time of order (eg. model +3RU +SC) | Fiber Connectors: +SC +AP+SC | SC/UPC SC/APC (angle polished) |
| Rear Plate Suffix: +3RU | 3RU rear plate for use with 7800FR or 7801FR multiframe | +FC +AP+FC | FC/UPC FC/APC (angle polished) |

