The 7706LT 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.

**Features & Benefits**

- Extended frequency response for L-Band signals
- Protocol independent design - transports all modulation formats
- LNB power with selectable 13/17V DC
- LNB current limit & short circuit protection
- 22kHz tone on/off for LNB local oscillator control
- RF monitor output for signal peaking and signal distribution
- Manual gain and AGC modes for tuning optimal CNR performance

Gain may be adjusted manually or managed automatically via AGC. 13/17V DC adjustable LNB power with 22kHz tone is also provided.

**Specifications**

<table>
<thead>
<tr>
<th>RF Input:</th>
<th>Number of Inputs: 1</th>
<th>Connector: BNC per IEC 61169-8 Annex A (F-Type and SMA Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impedance: 75Ω (50Ω Optional)</td>
<td>Return Loss: &gt; 15dB (&gt;10dB for 50Ω)</td>
<td></td>
</tr>
<tr>
<td>Frequency Range: 850MHz-2250MHz</td>
<td>Input Power Range: -10dBm to +30dB</td>
<td></td>
</tr>
<tr>
<td>AGC Gain Range: -10 to +30dB</td>
<td>LNB Power: +10dBm</td>
<td></td>
</tr>
<tr>
<td>Voltage: 13V DC, 17V DC, off (selectable)</td>
<td>Current: 450mA</td>
<td></td>
</tr>
<tr>
<td>LO Control: 22kHz on/off (selectable)</td>
<td>Protection: Short Circuit, current limited</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RF Monitor Output:</th>
<th>Number of Outputs: 1</th>
<th>Connector: BNC per IEC 61169-8 Annex A (F-Type and SMA Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impedance: 75Ω (50Ω Optional)</td>
<td>Return Loss: &gt; 15dB (&gt;10dB for 50Ω)</td>
<td></td>
</tr>
<tr>
<td>Frequency Range: 850MHz-2250MHz</td>
<td>Output Level: within -2.0dB of input signal</td>
<td></td>
</tr>
<tr>
<td>Optical Output: 75Ω, Female FC/UPC, ST/UPC, FC/UPC, SC/APC, FC/APC Operating Wavelength: 1310nm DFB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RF System Performance 7706LT13+7706LRA pair:**

- Frequency Range: 850MHz-2250MHz
- Flatness: ±1.5dB

**Electrical:**

- Voltage: +12V DC
- Power: 6W max excluding LNB Power

**Physical (number of slots):**

- 350FR: 1
- 7700FR-C: 1
- 7800FR: 1

**Compliance:**

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

**Ordering Information**

<table>
<thead>
<tr>
<th>7706LT13</th>
<th>Extended L-Band RF Fiber Transmitter, 1310nm DFB laser 50Ω BNC Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>7706LT13-B50</td>
<td>Extended L-Band RF Fiber Transmitter, 1310nm DFB laser, 50Ω SMA Connectors</td>
</tr>
<tr>
<td>7706LT13-S50</td>
<td>Extended L-Band RF Fiber Transmitter, 1310nm DFB laser, 50Ω SMA Connectors</td>
</tr>
</tbody>
</table>

**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

**Enclosures:**

- 350FR 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 Standalone Enclosure

**Note:** 75Ω BNC Connectors are standard

For companion receiver see the 7706LR catalog page