



FIBT-1550

1550 nm Fiber Optic Transmitter

The **FIBT-1550 (Fiber Optic Transmitter)** is built with a directly modulated DFB laser, providing low-noise and high-linearity performance. The RF AGC and pre-distortion circuit insures the optimum laser drive level for the best overall CNR, CSO, and CTB operation.

Laser output power, unit temperature, and RF input level are accurately monitored by a built-in microprocessor and shown on the front panel LCD display, in addition to unit function messages. Remote status monitoring is provided through SNMP network management.



Features

- 47 to 1218 MHz RF bandwidth for DOCSIS 3.1 compatibility with GaAs technology
- 1550nm, +10 dBm DFB laser
- RF AGC for optimum laser performance
- LCD front panel status display with built-in microprocessor.
- SNMP network management for remote monitoring
- ETL certified

PRELIMINARY
Pre-Production Specifications
Subject to Change

Ordering Information

| Model | Stock # | Description |
|-----------|---------|--|
| FIBT-1550 | 7605 | Fiber Transmitter, 10 dBm / 1550 nm; DFB Laser; SNMP |

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Optical

| | |
|------------------------------|---|
| Operating Wavelength: | 1550 nm ± 10 nm |
| Optical Power Output: | 10 dBm |
| Laser Type: | Cooled DFB (directly modulated) |
| Connector: | SC/APC (For applications requiring a FC/APC connector an adapter (ordered separately) is required (Model: FC Adapter; Description: SC/APC-Male to FC/APC-Female; Stock # 7607). |

RF

| | |
|-------------------------|-------------|
| Connector: | F Female |
| Frequency Range: | 47-1218 MHz |
| Input Level: | 15-25 dBmV |
| Flatness: | ±1.0 dB |
| Impedance: | 75 Ω |
| Return Loss: | ≥16 dB |
| AGC Range: | 0 - 15 dB |
| MGC Range: | 0 - 15 dB |

General

| | |
|-------------------------------------|--|
| Dimensions (W x H x D): | 19" x 1.75" x 12.75" (483 mm x 44 mm x 325 mm) |
| Weight: | 7.0 lbs (3.18 kg) |
| Power | |
| Power Supply: | 100-240 VAC 50/60 Hz |
| Power Consumption: | 15 W |
| Operating Temperature Range: | 0 to 45 °C |
| Relative Humidity: | 95% max non-condensing |
| Indicators/Controls | |
| Status: | LED Red/Green |
| Front Panel Display: | LCD |
| Navigation: | Buttons: Up, Down, Enter for LCD |
| SNMP: | RJ45 Connector @ 10 Mbps |

Link Performance*

| | |
|-------------|----------|
| CNR: | ≥ 51 dBc |
| CSO: | <-59 dBc |
| CTB: | <-65 dBc |

* 77 analog channels (50~550 MHz) and digital channels (550 MHz~1218 MHz, RF level 10 dB lower) at -1 dBm optical input into a Blonder Tongue FTTB receiver.

Block Diagram

