

FIBT-10-1550

Fiber Optic 1550 nm Transmitter



○ Features & Benefits

- 48-870 MHz Bandwidth
- 1550 nm, Single Mode With SC/APC Connector
- 10 dBm Optical Output Power
- LED's for Quick Assessment of RF Input, Laser and Cooler Status
- Status/Alarm Jack on Rear Panel for Monitoring 5 Key Parameters

The Blonder Tongue FIBT-10-1550 transmitter used in conjunction with other LightHouse Series FTTH products provides a robust system for transporting broadband CATV signals in a PON (passive optical network) system architecture. The transmitter has a frequency bandwidth of 48-870 MHz that accommodates a variety of different modulation formats such as AM/VSB, 8VSB, QAM, QPSK, etc. The FIBT transmitter utilizes a direct modulated high-power, low noise 1550nm distributed feedback (DFB) laser diode. An optical isolator protects the laser from optical reflections in the transmission path. This ensures high Carrier Noise Ratio (CNR), excellent linearity and consistent link performance for fiber distances up to 20 Km. The FIBT-10-1550 transmitter is EIA 19" rack mountable and has a height of 1.75" (1RU).

○ Specifications

Optical:

Operating Wavelength: 1550 nm
 Optical Output Power: +10 dBm
 SBS Threshold: 10 dBm
 Back Reflection: -50 min. dB

RF:

Bandwidth: 48 to 870 MHz
 Input Return Loss: ≥ 16 dB @ 75 Ω
 RF Input Level (110 Ch. Load): + 18 dBmV/Ch
 Carrier Noise Ratio (-1 dBm Rx Input, 77 Ch. Load + QAM 550-870 MHz @ -6 dB Ref.Analog): ≥ 51 dB
 Composite Triple Beat (CTB): ≥ 63 dB
 Composite Second Order (CSO): ≥ -53 dB (0-10 km of Fiber)

Electrical:

Power Input: 110/220 VAC, 50/60 Hz
 Power Consumption: 25 W

Mechanical:

Dimensions (W x H x D):
 19 x 1.75 x 8.25 in.
 482.6 x 44.5 x 209.55 mm
 Weight: 6 lbs., 2.72 kg
 Operating Temperature Range: 0 to +45 °C

Connectors:

RF Input: "F" Female
 Optical Output: SC/APC

Indicators:

Power: LED, Green
 Cooler Status: LED, Bi-colored Green/Red
 RF Input Level: LED, Tri-colored Green/Yellow/Red
 Laser Status: LED, Bi-colored Green/Red

Please refer to the Product Instruction Manual for more specifications.

○ Ordering Information

Model	Stock No.	Description
FIBT-10-1550	7465 A	Fiber Transmitter 1550 nm, +10 dBm , 48-870 MHz