

FIBT / MIBT

Fiber Optic 1310 nm Transmitter



FIBT



MIBT

The FIBT-S3A and MIBT-S3A Series of transmitters provides a robust system for transferring broadband CATV signals over single mode optical fibers. Both series have a frequency bandwidth of 45- 860 MHz that accommodates a variety of different modulation formats such as AM/VSB, 8VSB, QAM, QPSK, etc. FIBT/MIBT-S3A series transmitters use high-power, low noise 1310 nm distributed feedback (DFB) laser diodes. An optical isolator protects the laser from optical reflections in the transmission path. This ensures high CNR, excellent linearity and consistent link performance. The FIBT transmitters are EIA 19" wide rack mountable with a height of 1.75". The MIBT transmitters utilize the MIRC-12V rack chassis and MIPS-12C power supply for mounting. Each MIBT-S3A occupies 2 slots within the MIRC chassis, therefore up to six (6) MIBT-S3A transmitters can be installed in 2 RU's. Both the FIBT and the MIBT's use efficient switching power supplies that accept utility power from 90 to 260 VAC and 50 to 60 Hz.

○ Features & Benefits

- 45-860 MHz Bandwidth
- 1310 nm, Single Mode With FC/APC Connector Standard, (SC/APC Optional)
- Available in 5 Optical Output Powers (6,8,10,12 & 14 dBm) To Handle A Variety of Applications
- LED's for Quick Assessment of RF Input, Laser and Cooler Status
- Status/Alarm Jack on Rear Panel for Monitoring 5 Key Parameters

○ Specifications

Operating Wavelength: 1310 nm
 Required Fiber Bandwidth: 1,000 Min. MHz
 Input Return Loss: ≥ 16 dB @ 75 Ω
 Back Reflection: -50 min. dB
 Optical Output Power
 +6 dBm
 +8 dBm
 +10 dBm
 +12 dBm
 +14 dBm
 Bandwidth: 45 to 860 MHz
 RF Input Level (110 Ch. Load): + 18 dBmV/Ch
 CNR (-1 dBm Input, 77 Ch. Load + QAM 550-860 MHz @ -6 dB Ref. Analog): ≥ 52 dB
 Composite Triple Beat - CTB: ≥ 63 dB
 Composite Second Order - CSO: ≥ -60 dB
 Side Mode Suppression Ratio (SMSR): 30 dB

Mechanical

Weight:
 FIBT: 6 lbs., 2.72 kg
 MIBT: 1.21 lbs, 0.54 kg
 Physical Dimensions (W x H x D):
 FIBT: 19 x 1.75. x 8.25 in.
 482.6 x 44.5 x 209.55 mm
 MIBT: 2.19 x 3.5 x 8.25 in.
 55.6 x 88.9 x 209.55 mm
 Operating Temperature Range: 0 to +45 °C

Power

Power Supply Voltage: 110/220 VAC
 Power Supply Frequency: 50/60 Hz
 Power Dissipation: 25 W
 MIBT: Requires MIPS-12C Power Supply

Connectors

RF Input: "F" Female
 Optical Output: FC/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

Notes: Link Gain Specifications Valid When Used with FRDA Receiver Module.

Please refer to the Product Instruction Manual for more specifications.

○ Ordering Information

Model	Stock No.	Description
FIBT-S3A-816A	7403B 6	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +6 dBm Output, FC/APC Connector
FIBT-S3A-818A	7403B 8	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +8 dBm Output, FC/APC Connector
FIBT-S3A-810A	7404B10	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +10 dBm Output, FC/APC Connector
FIBT-S3A-812A	7404B12	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +12 dBm Output, FC/APC Connector
FIBT-S3A-814A	7404B14	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +14 dBm Output, FC/APC Connector
MIBT-S3A-816	7410A 6	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +6 dBm Output, FC/APC Connector
MIBT-S3A-818	7410A 8	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +8 dBm Output, FC/APC Connector
MIBT-S3A-810	7410A 10	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +10 dBm Output, FC/APC Connector
MIBT-S3A-812	7410A 12	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +12 dBm Output, FC/APC Connector
MIBT-S3A-814	7410A 14	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +14 dBm Output, FC/APC Connector