

# FIBT/MIBT-S3A

## FIBER OPTIC VSB/ AM TRANSMITTER TRAILBLAZER SERIES



FIBT



MIBT



### ○ 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

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.

Operating Wavelength: 1310 nm  
 Required Fiber Bandwidth: 1,000 Min. MHz  
 Input Return Loss:  $\geq 16$  dB @ 75 Ohm  
 Back Reflection:  $\leq 50$  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  
 Physical Dimensions:  
 FIBT: 19 W. x 1.75 H. x 8.25 D. in  
 482.6 x 44.5 x 209.55 mm  
 MIBT: 2.19 W. x 3.5 H. x 8.25 D. in  
 55.6 x 88.9 x 209.55 mm  
 Operating Temperature Range: 0 to +45 °C  
 CNR (-1 dBm Input, 77 Ch. Load + QAM 550-860 MHz @ -6dB Ref. Analog):  $\geq 52$  dB  
 CTB:  $\geq 69$  dB  
 CSO:  $\geq -63$  dB  
 Side Mode Suppression Ratio (SMSR): 30 dB

### Mechanical

Weight:  
 FIBT: 6 lbs, 2.72 kg  
 MIBT: 1.21 lbs, 0.54 kg

### 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"  
 Optical Output: FC/APC

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

### ○ Ordering Information

Model	Stock No.	Description
FIBT-S3A-816A	7403A 6	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +6 dBm Output, FC/APC Connector
FIBT-S3A-818A	7403A 8	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +8 dBm Output, FC/APC Connector
FIBT-S3A-810A	7404A10	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +10 dBm Output, FC/APC Connector
FIBT-S3A-812A	7404A12	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +12 dBm Output, FC/APC Connector
FIBT-S3A-814A	7404A14	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +14 dBm Output, FC/APC Connector
MIBT-S3A-816	7410 6	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +6 dBm Output, FC/APC Connector
MIBT-S3A-818	7410 8	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +8 dBm Output, FC/APC Connector
MIBT-S3A-810	7410 10	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +10 dBm Output, FC/APC Connector
MIBT-S3A-812	7410 12	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +12 dBm Output, FC/APC Connector
MIBT-S3A-814	7410 14	Fiber Optic Transmitter, Single-mode, DFB laser 110 Ch., 45-860 MHz, 1310 nm, +14 dBm Output, FC/APC Connector