BLONDER TONGUE

toner cable equipment, inc.
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FIBT-1310

1310 nm Fiber Optic Transmitter

The **FIBT-1310 (Fiber Optic Transmitter)** is an ideal solution for transporting analog and digital CATV channels over single-mode optical fiber. The transmitter is available in power output levels ranging from +3 dBm (2 mW) to +15 dBm (31 mW) to satisfy various system topologies and supports an increased band-edge to 1218 MHz for DOCSIS 3.1 applications.

The **FIBT-1310** 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 shown on the front panel LCD display, in addition to the 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
- 1310nm DFB laser in 5 output powers (3, 6, 10, 12, 15 dBm)
- 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-1310	7603 03U	Fiber Optic Transmitter, 3 dBm / 1310 nm; Uncooled DFB Laser; SNMP
	7603 06U	Fiber Optic Transmitter, 6 dBm / 1310 nm; Uncooled DFB Laser; SNMP
	7603 06	Fiber Optic Transmitter, 6 dBm / 1310 nm; DFB Laser; SNMP
	7603 10U	Fiber Optic Transmitter, 10 dBm / 1310 nm; Uncooled DFB Laser; SNMP
	7603 10	Fiber Optic Transmitter, 10 dBm / 1310 nm; DFB Laser; SNMP
	7603 12	Fiber Optic Transmitter, 12 dBm / 1310 nm; DFB Laser; SNMP
	7603 15	Fiber Optic Transmitter, 15 dBm / 1310 nm; DFB Laser; SNMP

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Optical

Operating Wavelength:	1310 nm ± 20 nm
Optical Power Output:	3 dBm (2 mW), 6 dBm (4 mW), 10 dBm (10 mW), 12 dBm (16 mW) & 15 dBm (31 mW)
Laser Type:	DFB (directly modulated). The 3 dBm model is built with an uncooled laser. The 6 & 10 dBm models are available with either a cooled or uncooled laser. The 12 & 15 dBm models employ only cooled lasers.
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).

Link Performance*

CNR:	≥ 51 dB (see table below)
CSO:	<-62 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.

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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

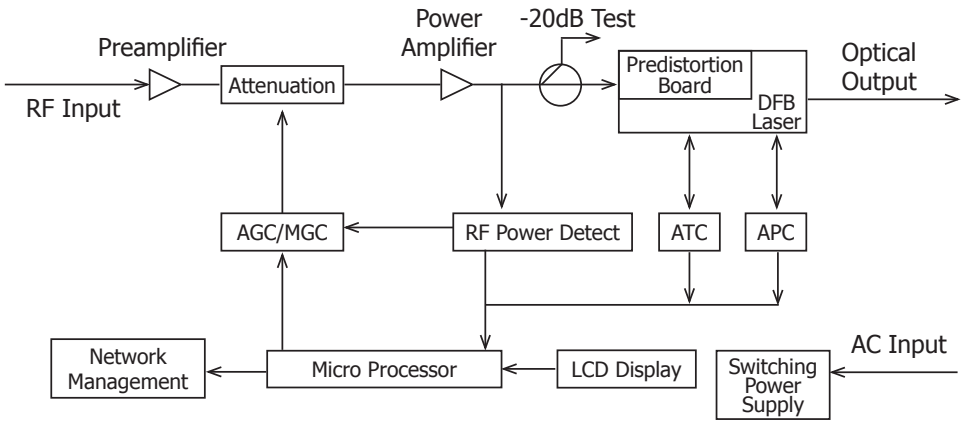
General

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 C/N Table

Optical Loss (dB)	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FIBT-1310-03	52.0	51.0	50.0	49.0	48.0										
FIBT-1310-06				52.0	51.0	50.1	49.1	48.1							
FIBT-1310-10								51.9	51.0	50.1	49.1	48.2			
FIBT-1310-12										51.9	51.0	50.1	49.1	48.0	
FIBT-1310-15													51.9	50.9	49.9

Block Diagram



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