

1310 DFB LASER TRANSMITTER

FSX-TXD
 DTX-TXD



IPITEK's 1310 DFB Laser Transmitter Module is a full-feature direct modulation transmitter for a variety of architectures, including narrowcast and broadband applications. This versatile and compact state-of-the-art transmitter, with its global 860 MHz bandwidth and 80 channel NTSC rating, is one of the highest performance lasers on the market. IPITEK's chassis system houses as many as ten of these laser modules, along with the DC Power Supply and Fan Bay.

Additional features include two options for dual RF inputs, switchable automatic gain control (AGC) circuitry and field adjustment of the optical modulation index (OMI). This last feature permits the operator to optimize the transmitter based upon actual channel loading. Dual RF input allows the insertion of targeted services, in addition to standard service, without any disruption. Custom configuration to meet your specifications and ease of instal-

FEATURES & BENEFITS

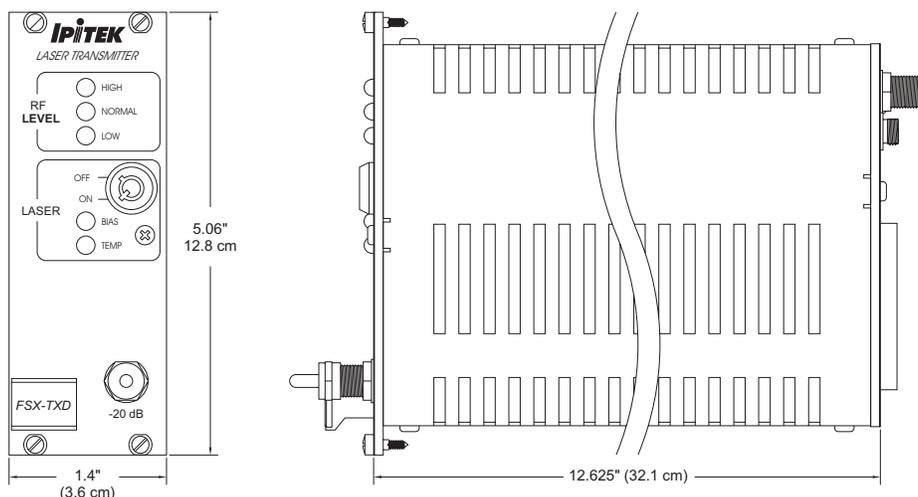
- Output Specified as a Link Budget in 1dB Increments
- Compact DFB Laser Transmitter
- Dual RF Input Options with High or Low Isolation to Match Customer Requirements
- +20 dBmV Input Level for Single or Low Isolation Dual RF Input
- 860 MHz, 80 Channel NTSC Rated
- Versatile Plug and Play Flexibility
- Modular Design

lation are also prominent trademarks of IPITEK's 1310 DFB Laser Transmitter Modules.

The modular design of this product is the first in a family of such products that make up IPITEK's 1310 DFB Laser Transmitter System. The system offers maximum value with dimensional and element flexibility, as well as front panel RF test points, status LEDs and AGC adjustments. Additional compact modular components of the FSX/DTX Systems, including the return receiver, power supply, fan bay and multiple transmitters, allow this product line to minimize your spatial requirements.

High channel capacity, a wide range of output power and flexible design, coupled with IPITEK's ISO 9001 certified commitment to quality, make the 1310 DFB Laser Transmitter System the ideal solution for your communications needs.

MECHANICAL



SPECIFICATIONS

Performance

Bandwidth:	45 - 860 MHz ± 1 dB
Channel Loading:	45 - 550 MHz (80 ch. NTSC), 550 - 750 MHz (Digital)
Optical Budget:	3 - 14 dB (1 dB increments)
CNR:	See chart
CTB:	≤ -68 dBc
CSO:	≤ -64 dBc
XMOD:	≤ -65 dBc

Optical Interface:

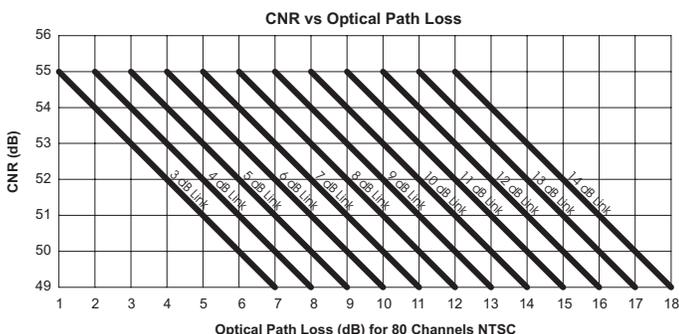
Optical Connector:	FC, SC or E-2000
Optical Output Power:	≥ 2 mW (3 dBm)
Optical Wavelength:	1310 nm ± 30 nm
Optical Return Loss:	≥ 55.0 dB
Flatness:	± 0.5 dB

Electrical Interface

RF Input Ports:	Single	Dual In	DualLow In
RF Isolation:	N/A	>40 dB	>30 dB
RF Input Level:	+20dBmV/ch.	+30dBmV/ch.	+20dBmV/ch.
Input Return Loss:	16.0dB	16 dB	15
RF Test Point:	-30dB	-30dB	-30 dB
		(From RF Input Level)	
RF Test Point Location:	(After Internal Combiner)		
Input Impedance:	75 Ω	75 Ω	75 Ω
RF Connector:	F-Type 75 Ω	F-Type 75 Ω	F-Type 75 Ω

Other

Operating Temperature:	0°C to +40°C
Storage Temperature:	-40° to +70°C
Humidity:	5% to 85% non-condensing
Power:	20 watts @ 24 VDC
Weight:	3.5 lbs



ORDERING INFORMATION

FSX-TXD-860 - N13 - XX - X - XXX - X - X - FT - XX - X

12-SLOT FSX Compatible Downstream Transmitter	Bandwidth	Wavelength	Channels	RF Inputs	Link Budget	Pilot Tone	Gain Control	RF Connector	Optical Connector	Polish
	860 = 45-860 MHz	N13 = 1310 nm	1N = 110 NTSC	D = Dual	L03 = 3 dB	1 = 10.7 MHz	A = AGC	FT = F-Type	A = APC	
			8N = 80 NTSC	S = Single	L04 = 4 dB	N = None	N = Manual	FC = FC	P = UPC	
			4N = 40 NTSC	L = Low in	L05 = 5 dB			SC = SC		
			6P = 60 PAL	Dual	L06 - L14 (1 dB increments)			E2 = E-2000		
		4C = 40 CENELEC								

DTX-TXD-860 - N13 - XX - X - XXX - X - X - FT - XX - X

10-SLOT DTX Compatible Downstream Transmitter	Bandwidth	Wavelength	Channels	RF Inputs	Link Budget	Pilot Tone	Gain Control	RF Connector	Optical Connector	Polish
	860 = 45-860 MHz	N13 = 1310 nm	1N = 110 NTSC	D = Dual	L03 = 3 dB	1 = 10.7 MHz	A = AGC	FT = F-Type	A = APC	
			8N = 80 NTSC	S = Single	L04 = 4 dB	N = None	N = Manual	FC = FC	P = UPC	
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IPITEK reserves the right to modify product specifications without prior notification.