

MP-2300TX

2.5 GHz RF Analog Fiber Optic Transmitter



Designed to provide electrical-to-optical (E/O) conversion of broadband RF signals over a frequency range of 2 MHz to 2500 MHz

The MP-2300TX is a comprehensive family of RF/Fiber Optic Transmitters that are designed to provide electrical-to-optical (E/O) conversion of broadband RF signals over a frequency range of 2 MHz to 2500 MHz. The transmitter family is comprised of three model variants that each operate over a unique frequency range. Refer to the part number generator tool on page two for details.

The utilization of the MP-2300TX, in conjunction with the appropriate MP-2320RX RF/Fiber Optic Receiver, forms a broadband link capable of supporting the transmission of RF signals over singlemode optical fiber for use in a wide array of communication applications. The link applications include antenna remoting, time and frequency reference distribution, RF delay lines, telemetry tracking, and point-to-point RF transmission.

The transmitter utilizes a low noise, high dynamic range Fabry-Perot (FP) laser with integrated temperature stability control. The transmitter operates over link distances up to 40 km. For distances up to 80 km, refer to the MP-2320TX transmitter series. The unit provides the user with status monitoring through the use of an onboard processor that communicates to a host computer over an RS-232 I/O interface. The I/O parameters include laser bias current, temperature and alarm status.

Information: Call us toll-free at 888-868-8967 or email info@b2bphotonics.com

Applications

- Wideband RF Transmission
- Antenna Remoting
- Satellite Radio: XM, Sirius
- L - Band SATCOM
- GPS
- Wireless / PCS

Features

- WDM Compatible
- Wide Bandwidth, 2 MHz to 2500 MHz
- High Dynamic Range
- Low Noise Laser Diode
- RS-232 or RS-485 Data Port (opt)
- 1 Year Full, 2 Year Limited Warranty

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Specifications

Optical Operating Wavelength: 1310 nm ± 2 nm or 1550 nm ± 2 nm Laser Diode: Class 3A Output Power: +3 dBm ± 0.5 dBm Allowed Backreflection (max): 36 dB @ full specs E/O Diff. Eff. (min): 0.06 W/A		General Power Supply: +8.0 to +24 Vdc, 350 mA max Optical Input Receptacle: Pigtail, FC/APC, SC/APC or AVIM APC RF Output Connector: SMA(f), 50 ohm or F(f), 75 ohm DC Connector: DB-15 Operating Temperature: -40° C to +70° C Storage Temperature: -40° C to +85° C Local Alarm: LED - Optical Power Failure (Plug-in only) Optical Power Monitor: 1 V/m W ± 10% Remote Alarms: Open Collector and RS-232 or RS-485 Interface Standard Conformity: CE	
RF Channel Modulation Bandwidth: 1.0 MHz to 2.2 GHz Flatness (max): ± 2.0 dB VSWR (max): 2.0:1 1 dB Comp. Level (min): 20.0 dBm* Input IP-3 Min @ 2x+3 dBm: 27.0 dBm* Input Damage Level: +20.0 dBm* RF Link Gain (typ): +0.0 dB @ 1.0 dB Optical Loss* Noise Figure (max): 45 dB @ 1.0 dB Optical Loss*		* Note: Overall link performance as measured from RF Input/Output when linked with the MP-2320RX.	

Part Number Generator

