

MP-2310TX

## L-Band RF Analog Fiber Optic Transmitter



### Designed to provide electrical-to-optical (E/O) conversion of broadband RF signals over a frequency range of 800 MHz to 2250 MHz

The MP-2310TX is a RF/Fiber Optic Transmitter that is designed to provide electrical-to-optical (E/O) conversion of broadband RF signals over a frequency range of 800 MHz to 2250 MHz.

The utilization of the MP-2310TX, 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, GPS, 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-2330TX Long Haul L-Band RF/Fiber Optic Transmitter. The unit provides the user with status monitoring through the use of an on-board 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. In addition, an optional built in Bias-T for Low Noise Block (LNB) powering may be specified.

**Information:** Call us toll-free at 888-868-8967 or email [info@b2bphotonics.com](mailto:info@b2bphotonics.com)

#### Applications

- Wideband RF Transmission
- Antenna Remoting
- L - Band SATCOM
- GPS
- Wireless / PCS

#### Features

- WDM Compatible
- Wide Bandwidth, 800 MHz to 2250 MHz
- High Dynamic Range
- Low Noise RF Front-end
- RS-232 or RS-485 Data Port (opt)
- 1 Year Full, 2 Year Limited Warranty

Microwave Photonic Systems, Inc.

1155 Phoenixville Pike, Unit 106, West Chester, PA 19380, Toll-Free: 888-868-8967

Phone: 610-344-7676, Fax: 610-344-7110, E-mail: [info@b2bphotonics.com](mailto:info@b2bphotonics.com), Internet: [b2bphotonics.com](http://b2bphotonics.com)

100204 CAGE 1A9M1

MP-2310TX

# L-Band RF Analog Fiber Optic Transmitter

## Specifications

|   |   |
|---|---|
| <p><b>Optical</b></p> <p>Operating Wavelength: 1310 nm ± 2 nm or 1550 nm ± 2 nm</p> <p>Laser Diode: Class 3A</p> <p>Output Power: +3 dBm ± 0.5 dBm</p> <p>Allowed Backreflection (max): 36 dB @ full specs</p> <p>E/O Diff. Eff. (min): 0.06 W/A</p>  | <p><b>General</b></p> <p>Power Supply: +8.0 to +24 Vdc, 350 mA max</p> <p>Optical Input Receptacle: Pigtail, FC/APC, SC/APC or AVIM APC</p> <p>RF Output Connector: SMA(f), 50 ohm or F(f), 75 ohm</p> <p>DC Connector: DB-15</p> <p>Operating Temperature: -40° C to +70° C</p> <p>Storage Temperature: -55° C to +85° C</p> <p>Local Alarm: LED - Optical Power Failure (Plug-in only)</p> <p>Optical Power Monitor: 1 V/m W ± 10%</p> <p>Remote Alarms: Open Collector and RS-232 or RS-485 Interface</p> <p>Standard Conformity: CE</p> |
| <p><b>RF Channel</b></p> <p>Modulation Bandwidth: 800 MHz to 2250 MHz</p> <p>Flatness (max): ± 2.0 dB</p> <p>VSWR (max): 2.0:1</p> <p>1 dB Comp. Level (min): -15.0 dBm*</p> <p>Input IP-3 Min @ 2x+3 dBm: 0.0 dBm*</p> <p>Input Damage Level: +5.0 dBm*</p> <p>RF Link Gain (typ): +15.0 dB @ 1.0 dB Optical Loss*</p> <p>Noise Figure (max): 25 dB @ 1.0 dB Optical Loss*</p> | <p>* Note: Overall link performance as measured from RF Input/Output when linked with the MP-2320RX.</p>  |

## Part Number Generator

