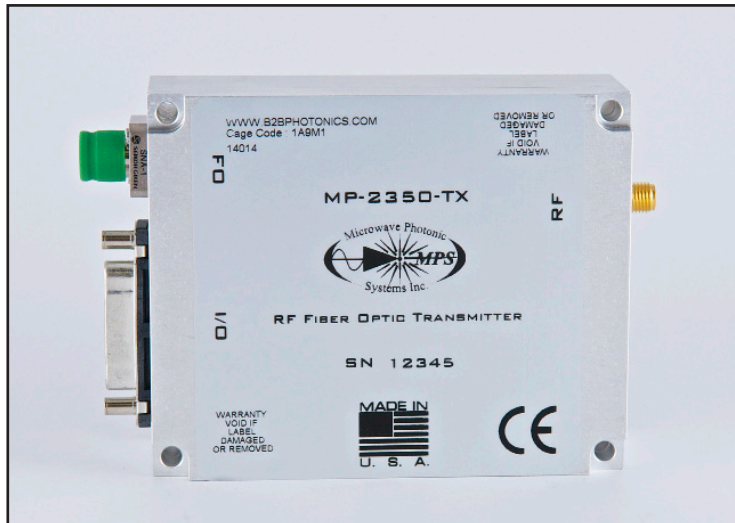


# microwave photonic systems

MP-2350TX

## 3.5 GHz Linear Photonics Transmitter



### Designed for antenna remoting and RF transmission applications using single mode fiber optic cable

The MP-2350TX 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 1.0 MHz to 3500 MHz. The MP 2350TX has an internal low noise, variable gain Pre-Amp that facilitates the adjustment of the overall link system RF Noise Figure. This feature permits the optimization of system dynamic range relative to the optical loss budget. The MP 2350TX can be specified to operate over four a unique frequency range as indicated by the part number generator.

The utilization of the MP 2350TX in conjunction with the MP-2350RX, RF/Fiber Optic Receiver, forms a broadband linear photonics link capable of supporting the transmission of RF signals over singlemode optical fiber for use in a wide array of communication applications. Applications include GPS Antenna Remoting, Time & Frequency Reference Distribution, RF Delay Lines, LTE / PCS Wireless, Telemetry Tracking, and Point-to-Point RF transmission.

The MP 2350TX utilizes an ultra linear, low noise Distributed Feedback (DFB) laser with intergrated stability control. The transmitter operates over link distances up to 80 km. The transmitter provides status monitoring & control through an embedded processor that communicates to the User's M&C computer via a serial interface. Available parameters include Laser Pre-Amp Gain Control, Bias Current, Temperature and Alarm Status.

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

#### Applications

- GPS Signal Distribution
- Antenna Remoting
- Satellite Radio, XM, Sirius
- L Band SATCOM
- Wireless / PCS

#### Features

- Widebandwidth 1.0 MHz to 3500 MHz
- Integrated Bias-T
- Integrated LNA
- WDM & CWDM Compatible
- High Dynamic Range
- 1RU, 3RU and Flange Mount Configurable
- Status Monitoring: RS-232 or RS-485
- 1 Year Full, 2 Year Limited Warranty

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## 3.5 GHz Linear Photonics Transmitter

### Specifications

<b>Optical</b> Operating Wavelength: 1310 or 1550 nm ± 2.0 nm , CWDM Optical Output Level (min): +3.0 dBm ± 0.5 dBm E/O Diff. Eff. (min): 0.8 W/A Allowed Backrefelction (max): 35 dB @ full specification Laser Diode Classification: Class 3A	<b>General</b> Power Supply: 8.0 to +24.0 VDC, 350 mA max Optical Output: Pigtail, FC/APC, SC/APC or AVIM APC RF Input: SMA(f), 50 ohm DC Connector: DB-15 Operating Temperature: -40° C to +85° C Storage Temperature: -55° 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 Standard Conformity: CE Dimensions: Flange Mount / Plug-In (see p/n generator)
<b>RF Channel</b> Modulation Bandwidth 1.0 MHz to 3.5 GHz (see p/n generator) Flatness (max): ± 1.0 dB (over each frequency window) VSWR (max): 2.0:1 1 dB Comp. Level (min): +1.0 dBm* Input IP-3 (min): +13.0 dBm* Input Damage Level: +15.0 dBm* RF Link Gain (typ): 0.0 dB @ 2.0 dB optical loss Noise Figure (max): 20 to 40 dB (adjustable) @ 2.0 dB optic loss	* Note: Overall link performance as measured from RF Input/Output when linked with the MP-2350RX * Note: Overall link performance when MP-2350TX internal Pre-Amp set for a link NF = 22 dB

### Part Number Generator

