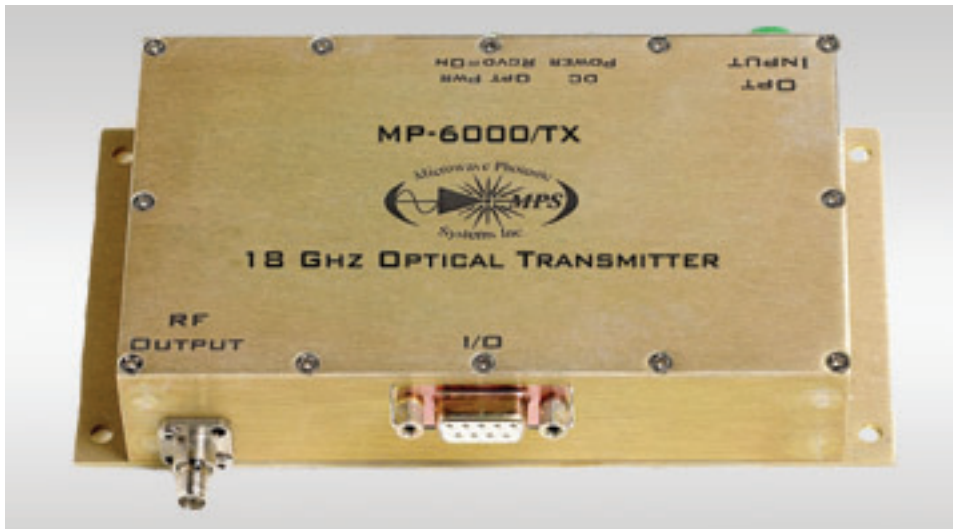


# microwave photonic systems

MP-6000TX

## 20 GHz RF/Fiber Optic Transmitter



### Designed for antenna remoting and broadband RF transmission applications using singlemode fiber optic cable

The MP-6000TX is a RF/ Fiber optic Transmitter designed for antenna remoting and broadband RF transmission applications using singlemode fiber optic cable.

The transmitter uses a high efficiency Distributed Feedback (DFB) laser diode with an operating wavelength of 1310 nm or 1550 nm that provides low noise and high dynamic range performance. The laser diode's temperature stability is microprocessor controlled using a high efficacy thermal electric cooler. The transmitter's microprocessor also provides embedded status monitoring of all critical parameters and communicates this information to a host computer using an RS-232 I/O interface. The I/O parameters include laser bias current, temperature and alarm status.

When the MP-6000TX RF/Fiber Optic Transmitter is linked with the MP-6000RX 20 GHz RF/ Fiber Optic Receiver, the combination provides an excellent choice for your ultrawideband RF to Fiber Optic conversion applications.

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

### Applications

- Ultra-Wideband RF Transmission
- Antenna Remoting
- Delay Lines
- C & X Band SATCOM
- RADAR, EW & ECM

### Features

- Ultra-Wide Bandwidth, 500 MHz to 20 GHz
- High Dynamic Range
- Low Noise
- Status Monitoring: RS-232 (opt)
- 1 Year Full, 2 Year Limited Warranty

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MP-6000TX

## 20 GHz RF/Fiber Optic Transmitter

### Specifications

<b>Optical</b> Operating Wavelength: 1310 or 1550 nm $\pm$ 5.0 nm Optical Output Level (min): +5.0 dBm E/O Diff. Eff. (min): 0.1 W/A Line Width (3 dB): 10 MHz Side Mode Supression (typ): 45.0 dB	<b>General</b> Power Supply: 12.0 VDC or +15.0 VDC, 1.5 mA max Unipolar PWR SUPP Optical Input Receptacle: Pigtail, FC/APC, SC/APC or AVIM APC RF Output Connector: SMA(f), 50 ohm DC Connector: DB-9 Operating Temperature: -40° C to +70° C Storage Temperature: -55° C to +85° C Local Alarm: LED - Optical Power Failure (Plug-in Only) Optical Power Monitor: 1 V/m W $\pm$ 10% Remote Alarms: Open Collector and RS-232 Interface Standard Conformity: CE Dimensions: 5(l)" x 3(w)" x 1(h)"
<b>RF Channel</b> Modulation Bandwidth 500 MHz to 20 GHz Flatness (max): $\pm$ 1.0 dB in any 500 MHz Bandwidth VSWR (max): 2.0:1 1 dB Comp. Level (min): 10.0 dBm* Input IP-3 (min): 15.0 dBm* Input Damage Level: 20.0 dBm* RF Link Gain (typ): -23.0 dB* @ 2 GHz/-25 dB @ 20 GHz Noise Figure (max): 36.0 dB* @ 2 GHz/48.0 dB @ 20 GHz	* Note: Overall link performance as measured from RF Input/Output when linked with the MP-6000RX (with 1 dB optic loss).

