

MP-2330TX

## L-Band RF Analog Fiber Optic Transmitter



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

The MP-2330TX is a comprehensive family of RF/Fiber Optic Transmitters that are designed to provide electrical-to-optical (E/O) conversion of L-Band RF signals over a frequency range of 800 MHz to 2250 MHz. The transmitter family is comprised of four model variants that each operate over a unique frequency range as indicated in the part number generator tool on page two.

The utilization of the MP-2330TX, in conjunction with the appropriate MP-2330RX 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 Distributed Feedback (DFB) laser with integrated temperature stability control. The transmitter operates over link distances up to 50 km. An optional long-haul Distributed Feedback (DFB) laser can be specified that extends the link range to 80 km. 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. In addition, an optional built in Bias-T for 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

- CWDM 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)

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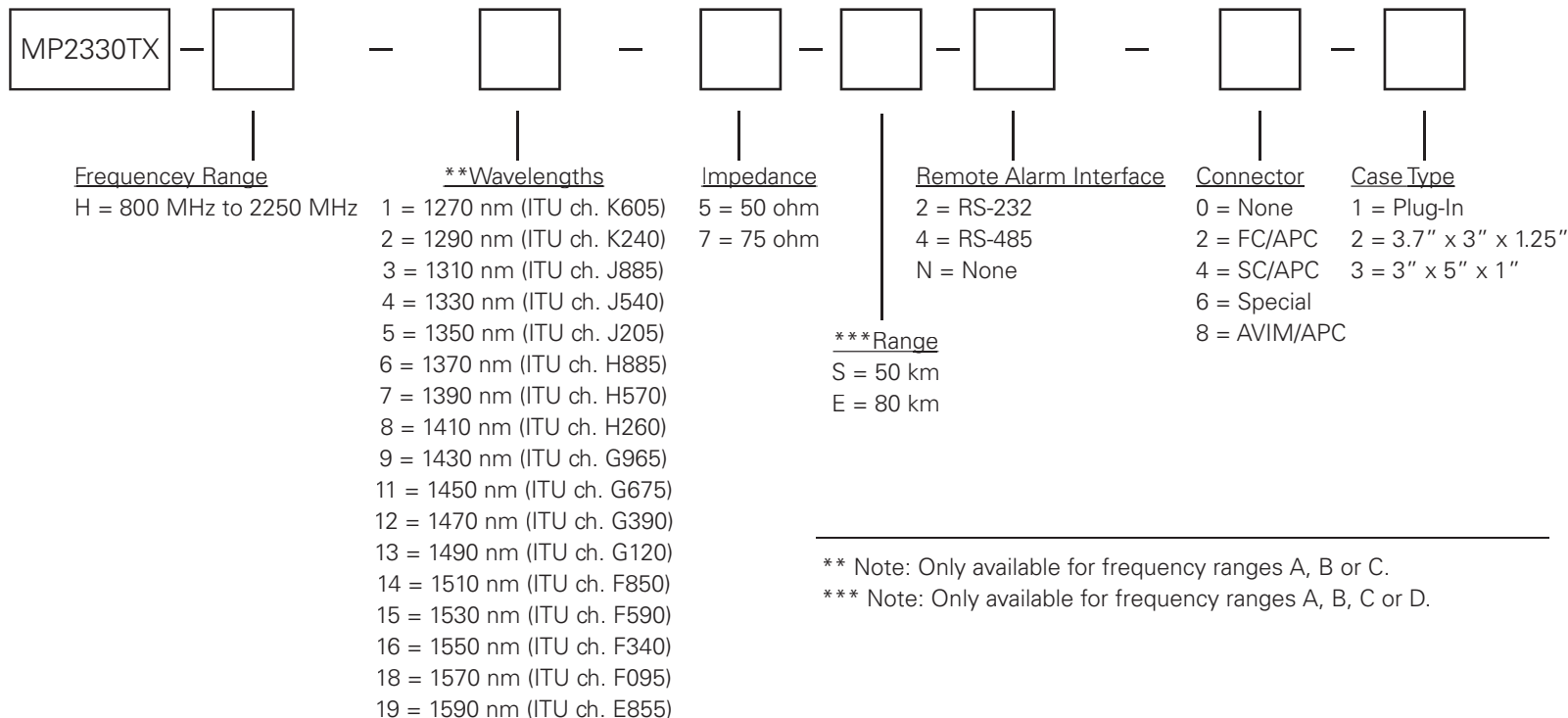
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## Specifications

|   |  |  |  |
|---|--|--|--|
| <b>Optical</b><br>Operating Wavelength: 1310 nm ± 2 nm or CWDM Bands or 1550 nm ± 2 nm<br>Laser Diode: Class 3A<br>Output Power: +3 dBm ± 0.5 dBm<br>Allowed Backreflection (max): 36 dB @ full specs<br>E/O Diff. Eff. (min): 0.06 W/A   |  | <b>General</b><br>Power Supply: +8.0 to +24 Vdc, 350 mA max<br>Optical Input Receptacle: Pigtail, FC/APC, SC/APC or AVIM APC<br>RF Output Connector: SMA(f), 50 ohm of F(f), 75 ohm<br>DC Connector: DB-15<br>Operating Temperature: -40° C to +70° C<br>Storage Temperature: -55° C to +85° C<br>Local Alarm: LED - Optical Power Failure (Plug-in only)<br>Optical Power Monitor: 1 V/m W ± 10%<br>Remote Alarms: Open Collector and RS-232 or RS-485 Interface<br>Standard Conformity: CE |  |
| <b>RF Channel</b><br>Modulation Bandwidth: 800 MHz to 2250 GHz<br>Flatness (max): ± 2.0 dB<br>VSWR (max): 2.0:1<br>1 dB Comp. Level (min): -15.0 dBm*<br>Input IP-3 (min): 0.0 dBm*<br>Input Damage Level: +5.0 dBm*<br>RF Link Gain (typ): +15 dB @ 1.0 dB Optical Loss*<br>Noise Figure (max): 20 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



\*\* Note: Only available for frequency ranges A, B or C.  
 \*\*\* Note: Only available for frequency ranges A, B, C or D.

