



MP-2310TX

L-Band RF Analog Fiber Optic Transmitter

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

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 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. In addition, an optional built in Bias-T for Low Noise Block (LNB) powering may be specified.

Specifications

Optical		General	
Operating Wavelength	1310 nm \pm 2 nm or 1550 nm \pm 2 nm	Power Supply	+8.0 to +24 Vdc, 350 mA max.
Laser Diode	Class 3A	Optical Input Receptacle	Pigtail, FC/APC, SC/APC or AVIM APC
Output Power	+3 dBm \pm 0.5 dBm	RF Output Connector	SMA(f), 50 ohm or F(f), 75 ohm
Allowed Backreflection (max)	36 dB @ full specs	DC Connector	DB-15
E/O Diff. Eff. (min)	0.06 W/A	Operating Temperature	-40°C to +70°C
		Storage Temperature	-55°C to +85°C
		Local Alarm	LED- Optical Power Failure (Plug-In Only)
RF Channel		Optical Power Monitor	1 V/mW \pm 10%
Modulation Bandwidth	800 MHz to 2250 MHz	Remote Alarms	Open Collector & RS-232 or RS-485 Interface
Flatness (max)	\pm 2.0 dB	Standard Conformity	CE
VSWR (max)	2.0:1		
1 dB Comp. Level (min)	-15.0 dBm ⁽¹⁾		
Input IP-3 Min @ 2x+3 dBm	0.0 dBm ⁽¹⁾		
Input Damage Level	+5.0 dBm ⁽¹⁾		
RF Link Gain (typ)	+15.0 dB @ 1.0 dB Optical Loss ⁽¹⁾		
Noise Figure (max)	25 dB @ 1.0 dB Optical Loss ⁽¹⁾		

Note (1): Overall link performance as measured from RF Input/Output when linked with the MP-2320RX



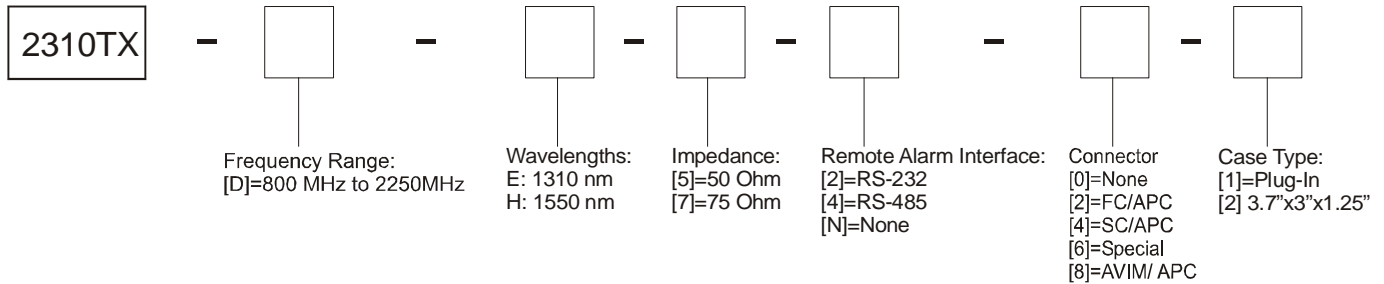
Microwave Photonic Systems, Inc. 888-868-8967



MP-2310TX

L-Band RF Analog Fiber Optic Transmitter

Part Number Generator



Please consult your sales person for other packaging configurations. This information is accurate as of this printing. However, to provide the best products available at the best prices, MPS reserves the right to make changes and improvements to the specifications without notice

