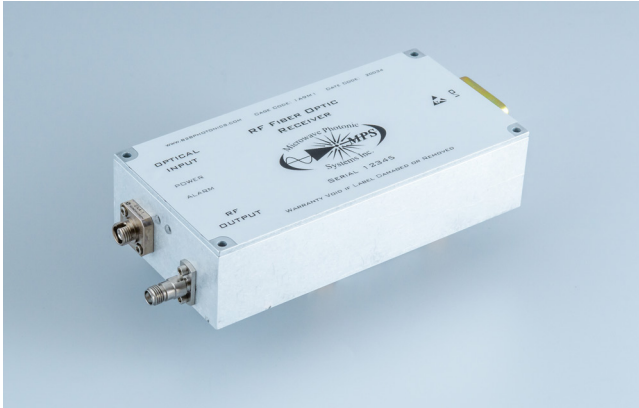


MP-8000-RX Series Microwave Fiber Optic Receiver

## Broadband Microwave Fiber Optic Receivers



### Broadband Microwave Analog Fiber Optic Receiver Modules Provides >100km Transport Capability.

The MP-8000-RX RF/Fiber Optic Receiver modules are designed to provide optical-to-Electric (O/E) conversion of broadband RF signals over a frequency range of 10 MHz to 60 GHz.

The utilization of the MP-8000-RX, in conjunction with the appropriate MP-8000-TX RF/Fiber Optic Transmitter, forms a broadband link capable of supporting the transmission of RF signals over singlemode optical fiber for use in a wide array of scientific and communication applications. The link applications include antenna remoting, SATCOM, RF delay lines, telemetry tracking, and point-to-point RF transmission.

The Receivers utilizes high efficiency InGaAs PIN Photodiodes, coupled with optional an input Variable Optical Attenuator, low noise RF post-amplifiers, and a variable RF attenuator. These high responsivity, linear receivers incorporate advanced photodiode biasing and control circuits that provide reliable high performance operation over wide optical bandwidths. These features, coupled with the MP-8000-TX's companion high efficiency Mach-Zehnder Lithium Niobate (LiNbO3) electro optic modulator and high power Distributed Feedback (DFB) laser diode assures low noise and high dynamic range link performance over varying frequency, temperature, and optical loss budgets.

The MP-8000-RX series Receiver application modules have advanced Built-In-Test (BIT) diagnostic capabilities which provides remote status and monitoring of critical parameters such as Received optical power, system power, photo-detector bias, temperature, amplifier current, attenuator setting and a summary alarm status.

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

### Applications:

- SATCOM Interfacility Links
- Microwave Antenna Remoting
- Electronic Counter Measure Systems
- Test and Measurement Applications
- Wideband Delay Line Applications
- Phased array Antenna Systems
- Secure Communication Systems

### Features:

- 10 MHz to 60 GHz Bandwidth
- Linear, High Power PIN photodiode
- Extended Operating Temperature
- High Optical Input Power
- Advanced Bias Control
- Small Form Factor Flange Mount
- Hot Swappable, Plug-In Module
- Compatible with MPS-1911 and MPS-1914 Rack Chassis Systems



1911 Plug-In Style Module



1914 Plug-In Style Module

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

MP-8000-RX Series Microwave Fiber Optic Receiver

## Microwave Fiber Optic Receiver MP-8000-RX

### Specifications

#### Optical:

Operational Wavelength	1280 -1580 nm
Optical Input Power (max)	15 dBm
Optical Photodiode Responsivity	0.7 A/W (typ) @ 1550nm
Input VOA range	0 to -20 dB (optional)
Optical Output Fiber Type	Single Mode SMF-28
Optical Connector Type	FC/APC (or customer specified)
Optical Back Reflections (typ)	-45 dB

#### RF:

Frequency Response	10 MHz to 60 GHz (model specific)
RF Output Impedance (nom)	50 Ohms
RF VSWR Output (typ)	2:1
RF Input Connector Type	2.92 mm (K) female
Bandwidth Response	-3.0 dB (model specific)
RF Post-amplifier Gain	0, 10, 15 or 30 dB (model specific)

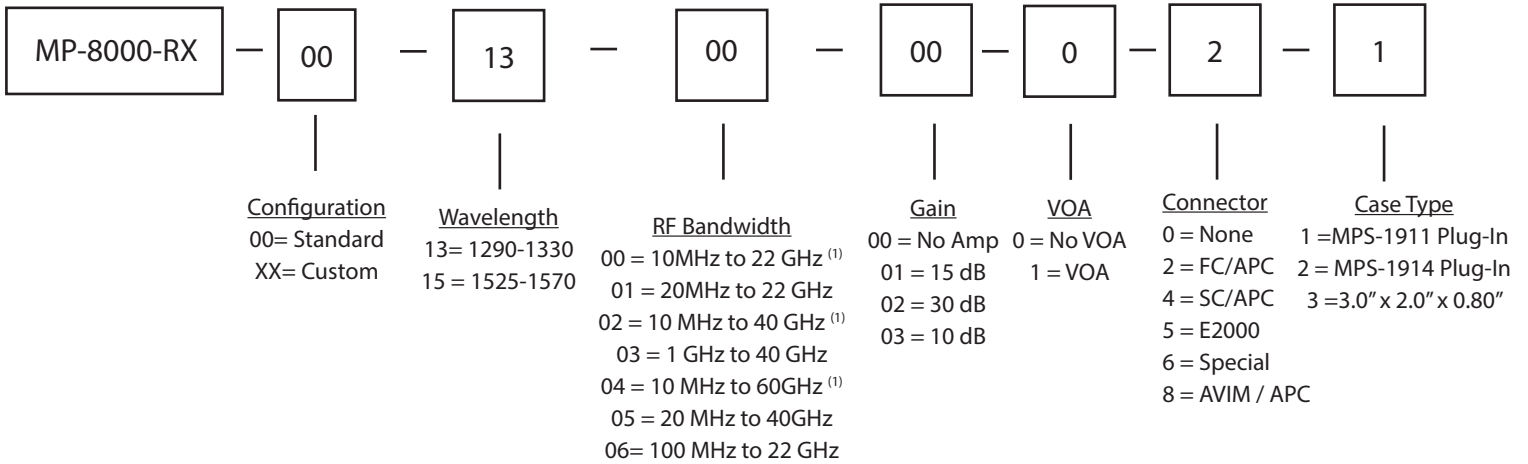
#### General

Power Supply	+8.0 to + 24 VDC, 2 Watts max
Operating Temperature (std)	-20°C to +50°C
Operating Temperature (extended)	-40°C to +70°C
Storage Temperature	-45°C to +85°C
Operating Humidity	95% Non-condensing
Storage Altitude	50,000 ft
Local Alarm	LED: Bit Fault & Optical Power Failure (Plug-In Version Only)
Remote Alarms	Open Collector and Serial Interface
Dimensions:	
Flange Mount TX	5.00" x 2.5" x 1.25"
Chassis Mount	MPS-1911 or MPS-1914 Compatible

MP-8000-RX Series Microwave Fiber Optic Receiver

## Microwave Fiber Optic Receiver MP-8000-RX

### Transmitter Part Number Generator



Note (1) : No Gain Versions Only