

# Microwave Photonic Systems, Inc. 888-868-8967



## OFW-1328 GPS Distribution System

### Features

- GPS Satellite Simulator Distribution
- GPS Base Station Antenna-Remoting/Distribution
- GPS Shipboard Antenna-Remoting/Distribution
- GPS L1/L2 Dual Frequency Capability
- Low Cost 1310nm DFB Laser
- Simultaneous Multiple GPS RF Outputs
- Exterior EMI/Environmental Enclosures Available

### Specifications

Frequency Range	(L1) 1575.4 Mhz +/- 10.23 Mhz (L2) 1227.6 Mhz +/- 10.23 Mhz
Small Signal Gain	0.0 dB +/- 1.0 dB, or User Defined
Output Third Order Intercept	-35.0 dBm (min.)
Input/Output VSWR	2:1 (max.)
In-Band Burnout Protection	1.0 W, CW

#### Optical Parameters

Wavelength	1310 nm +/- 30 nm
DC Modulation Gain	0.1 to 0.2 mW/mA
Laser Output Power	3.0 dBm (min.) per output port
Power Stability vs. Temperature	+/- 15%
Spectral Width (FWHM-no RF)	< 10.0 Mhz (typ.)
Photodiode Power	3 dBm (max.)

#### Physical/Electrical

AC Power	120V, 5A, 60 Hz
Dimensions/Weight	Antenna Module: 12"x14"x6" / 25 lbs. Transmitter Module: 18"x19"x5.25" / 20 lbs. Receiver Module: 18"x19"x3.5" / 20 lbs.

The OFW-1328 "L-Band" Fiber Optic Distribution System consists of four subassemblies consisting of a GPS Antenna, a Transmitter Module, and Receiver Module and a fiber optic interconnection cable. The OFW-1328 "L-Band" Fiber Optic Distribution System is designed to receive low level GPS satellite signals from various GPS Antennas or simulators. The system detects and converts the optical carriers to an RF signal capable of driving the front end of multiple GPS receivers. The OFW-1328 "L-Band" Fiber Optic Distribution System transmitter can generate three Amplitude Modulated (AM) optical carriers, handle Simultaneous Multiple GPS RF outputs, and feed multiple GPS receivers within the system architecture. The receiver transmitter is powered by Low Cost 1310nm DFB laser and distributes all signals via a multi-fiber single mode optical cable. The OFW-1328 "L-Band" Fiber Optic Distribution System receiver is capable of handling GPS L1/L2 Dual Frequencies and can be separated from the GPS signal source by as much as ten kilometers. The OFW-1328 "L-Band" Fiber Optic Distribution System can be delivered in a Exterior EMI/Environmental Enclosures to meet strictest survivability demands. The OFW-1328 "L-Band" Fiber Optic Distribution System can be customized in numerous distribution applications such as a GPS Satellite Simulator Distribution, GPS Base Station Antenna-Remoting/Distribution, or a GPS Shipboard Antenna-Remoting/Distribution. Contact MPS directly for specific design applications and technical specifications.



[www.b2bphotonics.com](http://www.b2bphotonics.com)

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