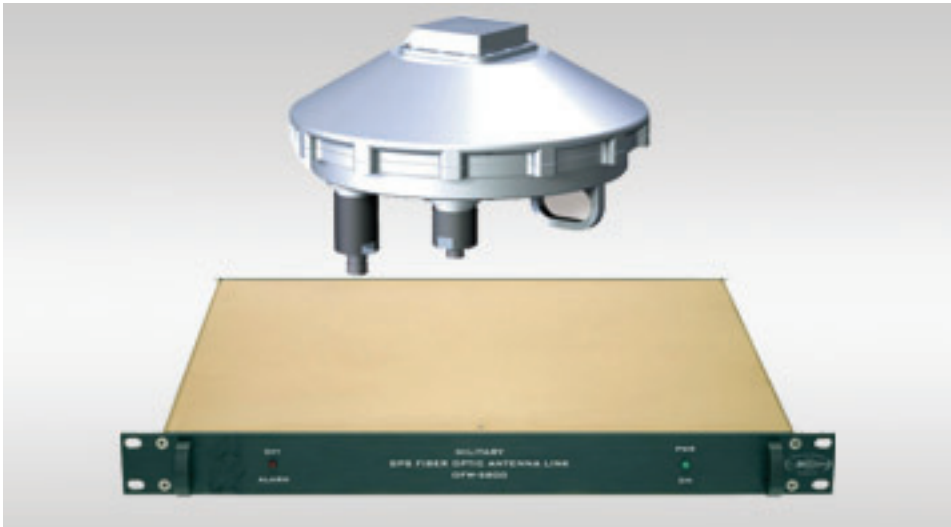


OFW-5800

Fiber Optic Antenna Link (FOAL)



Configured to receive L1 and L2 GPS RF signals, generate a RF intensity modulated optical carrier and transmit the optical carrier to the receiver module via a shipboard fiber optic cable

The OFW-5800L Fiber Optic Antenna Link (FOAL) consists of an antenna module, located on the topside mast structure, and a receiver module, located in the below deck navigation space (IC/GYRO Room). OFW-5800L Fiber Optic Antenna Link (FOAL) is configured to receive L1 and L2 GPS RF signals, generate a RF intensity modulated optical carrier and transmit the optical carrier to the receiver module via a shipboard fiber optic cable. OFW-5800L Fiber Optic Antenna Link (FOAL) detects and converts the optical carrier to the GPS RF signals and distributes the GPS signals to the GVRC. When configured as a Dual FOAL Subsystem, the OFW-5800L Fiber Optic Antenna Link (FOAL) consists of two independent FOALs each interconnected through a corresponding NAVSSI/GVRC RTS. In this configuration the OFW-5800L Fiber Optic Antenna link (FOAL) is capable of meeting the antenna subsystem requirements of the NAVSSI/GVRC DUAL RTS architecture.

Information: Call us toll-free at 888-868-8967 or email info@b2bphotonics.com

Features

- Utilizes Commercial-Off-the-Shelf (COTS) Hardware
- Preserves Dual FOAL Subsystem Performance Specs
- Eliminates Topside FO & AC Power IC Box
- Retains Existing Military FRPA-GP Enclosure
- Integrates Mil. Multi-Channel Opt. Connector into FRPA-GP
- Supports Various FO Cable Interconnection Architectures
- Compatible with Existing FOAL Receiver Drawer ICD

OFW-5800

Fiber Optic Antenna Link (FOAL)

Specifications

Optical Performance		RF Performance*	
Wavelength:	1310 nm \pm 15 nm	Gain:	21.0 dB (min), 35.0 dB (max)
Linewidth:	\pm 2 nm	Center Freqs.:	L1, 1575.42 MHz and L2, 1227.6 MHz
Output Power:	3.0 dBm/CH (typ)	Out of Band Rej.	-3.0 dB BW - 40 MHz (max)
E/O EFF:	0.03 W/A		-40.0 dB BW - 140 MHz (max)
Responsivity:	>0.85 AW		-70.0 dB BW - 245 MHz (max)
Operating Temperature		Noise Figure:	4.0 dB (max)
Antenna Unit:	-28° C to +65° C	Input/Output VSWR:	2.0:1 (max)
Receiver Unit:	0° C to +50° C	Spur Free Dynamic Range:	95.0 dB Hz 2/3 (typ)
Storage Temperature:		Input Protection:	<2.0 GHz, 350 W Peak, 10 micro sec PW, 0.1% DC
Antenna Unit:	-40° C to +71° C		<2.0 GHz, 400 W Peak, 10 micro sec PW, 0.1% DC
Receiver Unit:	-40° C to +71° C	Max. RF Input:	30 dBm, CW
Vibration:	Mil-STD-167		
Shock:	Mil-S-901D		

* Note: Values measured from RF Input to RF Output.

