

FOGPSAL

Technical Product Data

Description

The Fiber Optic GPS Antenna Link is a complete system that allows you to convert the GPS Carrier from RF to Light, transmit it up to 10 Kilometers if need be then reconvert it back to RF to be received by the GPS receiver.

Components

- Roof Antenna
- Transmitter Power Supply
- Transmitter Preamp
- Fiber Optic Transmitter
- Fiber Optic Receiver
- Receiver Power Supply

Fiber Optic Transmitter

Electro Optic Characteristics	
Optical Pout	1mW min.
Wavelength	1310+/-30
RF Characteristics	
Modulation Bandwidth	1000-1700 MHz
Amplitude Flatness	1.5dB typical
Input VSWR (50 Ohms)	2.0:1 max
MW/ma@1200Mhz	0.1mW/ma min
1dB Compression	-25 dBm
Power	110/220 or 28-36 VDC
Physical Characteristics	
Dimensions-Indoor Rack Mount	Height 1.75" Width 8.0" Length 17.0"
Dimensions-Sealed Outdoor Waterproof Box	Height 4.17" Width 7.72" Depth 12.0"

Fiber Optic Receiver

Electro Optic Characteristics	
Optical Pout	1mW min.
Wavelength	1310+/-30
Responsiveness	0.85 @ 1300 typical
RF Characteristics	
Available Bandwidth	1000-1700 MHz
Amplitude Flatness	1.5dB typical
Output VSWR (50 Ohms)	2.0:1 max
Power	110/220 or 28-36 VDC
Physical Characteristics	
Dimensions-Indoor Rack Mount Fiber Optic Receiver	Height 1.75" Width 8.0 " Length 17.0"

Link Characteristics	
Available Bandwidth	1000-1700 MHz
Link Loss	15 dB typical
Carrier/Noise (30khz BW)	15 dB min with input drive level at 70 dBm
3 rd Order Intercept	22dBm
Environmental Conditions	
Operating Temperature	-25 to +70 (deg C)
Storage Temperature	-30 to +75 (deg C)
Mechanical	
Optical Connectors	FC/PC Fiber S/M 9/125
RF Connectors	SMA & N-Type

Applications

- GPS base stations with long antenna cable runs
- Run the GPS carrier to multiple GPS timing boards throughout a company
- Run GPS throughout an aircraft
- Satisfies the requirement of supplying multiple GPS receivers with a carrier, spread over a great distance
- For R&D facilities, supplies a GPS carrier to a multitude of engineers and technicians with only one antenna on the roof.