



FOGPSAL

Fiber Optic GPS Antenna Link 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				
	Min	Typ	Max	Unit
Gain	20	25	30	dB
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/APC Fiber S/M 9/125
RF Connectors	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.