Data Sheet: F-GPSF



THOR

The F-GPSF fiber link is a transmitter and receiver pair used to transmit the RF Carrier signal from a GPS antenna to a remote location up to 10 Km. There are many advantages to converting the GPS



Carrier to an optical signal. Fiber Optic cable is much less expensive than low loss coaxial cable used for RF signals. It is also much smaller and easier to work with. Optical signals are not affected by RF interference, therefore this system can be used to transport a GPS signal through a noisy RF environment. The F-GPSF can also be used to transport the signal from a single GPS antenna to a multitude of locations throughout a building, aircraft, or ship.

Typical F-GPSF Application









Up to 120 Km Singemode Fiber



GPS RF Out From Antenna

Technical Specifications

Optical Characteristics

Optical Output 1 – 10 mW (by request) Wavelength 1310 nm +/-30

RF Characteristics

Bandwidth 1000 – 1700 MHz
Amplitude Flatness 1.5 dBm typical
Input VSWR 50 Ohm
MW/ma @ 1200MHz
1 dB Compression -25 dBm

Link Characteristics

Link Loss 15 dB typical

Carrier / Noise 15 dB min with input drive@ 70dB

3rd Order Intercept 22 dBm

Physical Characteristics

Operating Temp: -25 - 70 (°C) Storage Temp: -30 - 75 (°C) Operating Humidity: 0 - 90 (%) Storage Humidity: 0 - 90 (%)

Power Requirements: 110/240V Auto Sense
Dimensions: 1.75x8.0x17.0 (in)
Optical Connector FC/PC Fiber SM
RF Connector SMA & N-Type