



GNSS Fiber Optic – Kit in 19” Rack form

Art.-Nr. 3070010

The GNSS Fiber Optic Kit was designed to transmit GNSS signals via a laser optical link. This enables a signal distribution over long distances while reducing time delays to a minimum.

This kit contains a Fiber Optic Transmitter and a Fiber Optic Receiver in two 19” rack mounts.

The Fiber Optic Transmitter converts the GNSS RF-signal (e.g. from outdoor antenna, GNSS simulator) to an optical laser signal for transmission, while the Fiber Optic Receiver reconverts the signal for use with a coaxial cable.

In default configuration the Input / Output signal level is 1:1. Customized specification is available on request.



INTERFACES

- | | |
|-------------------------------------|----------------|
| > Fiber Optic Transmitter | |
| RF IN | TNC-f |
| Optic OUT | SC/ APC female |
| > Fiber Optic Receiver | |
| RF OUT | TNC-f |
| Optic IN | SC/ APC female |

PHYSICAL SPECIFICATIONS

- | | |
|-------------------------|-------------------------|
| > Operating Temperature | -20 to 70°C |
| > Housing | 19”Rack – 1HE (Height) |
| > Weight | each 1.9 kg |
| > Housing | coated aluminum |
| >Size | T: 210 mm /230 mm (N-f) |

CABLE

- > Single Mode fiber optic 9/125 um (up to 5 km)

TECHNICAL SPECIFICATIONS

- | | |
|------------------------------|--|
| > GNSS systems | GPS, Glonass, Galileo, Beidou, QZSS, IRNSS |
| > Input/ Output Impedance RF | 50 Ω |
| > Frequency | 1200 – 1700 MHz |
| > Wavelength laser | 1310 nm |
| > Signal Input / Output | 1:1 |
| > Power Supply | 230V to 12 V DC |
| > RF Input Minimum | - 75 dBm |
| > RF Input Maximum | - 45 dBm |
| > Energy consumption | RX: 180 mA / TX: 90 mA |

To operate the system, at least 30 dB gain active antenna is needed. The RG58 coaxial cable should be not more than 10 m length.

OPTIONS

Custom specifications regarding Connectors, Signal Strength Input/output, integrated (High Rejection) filter, for different GNSS Frequencies are available on request!