



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!