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RFoF: RF over Fiber Converter

Analog GPS-over-fiber modules (RFoF) convert high-frequency RF signals into optical signals and back again. An optical RF converter unit has an optical transmitter that converts the RF signal into optical signals, and a second receiver unit converts the signal from optical signals back into RF signals.

The optical transmitter is connected to the optical receiver via a single-mode fiber optic cable. Fiber optic cables are not included in the scope of delivery.

The system is suitable for expanding Meinberg GNS systems. The following GNSS receivers are suitable for use with an RFoF fiber optic signal converter:

- * GNS receiver (GNS181 / GNS182 / GNS183)
- * GNM receiver (GNM181)
- * GXL receiver (GXL183)
- * GNS/D(A)HS (GNS183/D(A)HS / GNS181/D(A)HS)
- * GNS/PEX PCIe Computer Clocks (GNS183PEX / GNS181PEX)

Key Features

- Large antenna cable distances over several kilometers using a continuous connection with a fiber type of category OS2 (0.4dB/km)
- Internal microcontroller allows RF and Optical control, enabled by software
- Supports 0.03 GHz to 2.5 GHz for GNSS
- No destructive overvoltage via the antenna cable
- No unintentional monitoring possible via optical fiber
- Excellent gain control and phase noise

Characteristics

Optical Outputs	<p>SC/APC connector for connecting an E9/125µm SMF</p> <p>* wave length: 1310 nm</p> <p>* Optical output power: 2.3 ±0.5 mw (Laser Class 1)</p> <p>* Supported L-Bands: L1, L2 and L5</p> <p>* GPS-Antenna Feed: 5 V / 200 mA max.</p>
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Electrical Connectors

- * SC/APC connector (FO Link)
- * SMA female (GNSS antenna / GNSS receiver)
- * Power Supply via 3.5*1.3*9 mm connector (5 - 12 V DC)

Physical Dimensions	RFoF (Tx + Rx): 70 mm x 70 mm x 35 mm (width x depth x height)
Supported Temperature	-20 ... 70° C
Supported Humidity	Max. 85 % (non-condensing) at 40 °C
Warranty	Three-year warranty
RoHS Status of Product	This product is fully RoHS-compliant.
WEEE Status of Product	This product is handled as a B2B (Business to Business) category product. To ensure that the product is disposed of in a WEEE-compliant fashion, it can be returned to the manufacturer. Any transportation expenses for returning this product (at end-of-life) must be covered by the end user, while Meinberg will bear the costs for the waste disposal itself.

Manual

There is no online manual available for this product.: [1][Contact us](#)

Links:

[1] <mailto:info@meinberg.de>