

GNSSoF

Expansion module, Receiver, L1, L2, DIN Rail, 1 RF OUT, 1 FO IN

D-GNSSoF1-1R-L12

Properties

- Plug and Play: No external control required
 - Efficient analog signal to optical convert and back
 - For GPS, Galileo, Glonass, BeiDou, IRNSS, QZSS and other GNSS systems
 - NEBS Level 3 Carrier Grade



General data

| | |
|-------------------|---------------------------|
| Product family | GNSS Expansion |
| Suitable Products | D-GNSSoF1-1T-L12 85135572 |

Electrical data

| | |
|--|--|
| GNSS band | L1: 1545 - 1610 MHz L2: 1164 - 1254 MHz |
| Link gain range | 8 dB ... 12 dB |
| Link gain typical | 10 dB |
| Frequency response flatness | +/- 3 dB |
| Link noise figure typical | L1: 12 dB L2: 9 dB |
| VSWR | < 2 |
| Max. input at 1dB compression | -20 dBm |
| RF input impedance for antenna detection | 390 Ω |
| Power connector | 2-pole industry connector |
| Supply voltage range | 11 V DC ... 14 V DC |
| Supply voltage typical | 12 V DC |
| Supply current typical | 58 mA |

Mechanical data

| | |
|--------------------|--------------------|
| Weight | 0.27 kg |
| Dimensions (LxWxH) | 90mm x 95mm x 23mm |

Environmental data

| | |
|----------------------------|------------------|
| Storage temperature | -40 °C ... 85 °C |
| Operation case temperature | -5 °C ... 55 °C |

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Optical data

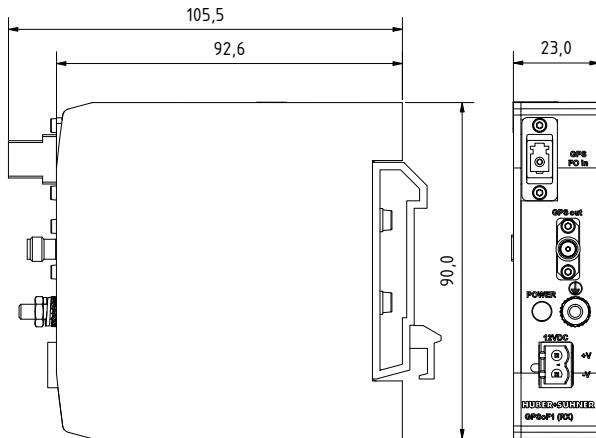
| | |
|-------------------------|--------|
| Time delay | 15 ns |
| Optical input power min | 0.2 mW |
| Optical input power max | 5 mW |

Output of RF connection

| | |
|-----------------------------|--------|
| Product family RF connector | SMA |
| Gender | Female |
| Amount of RF connectors | 1 pcs |
| RF input impedance | 50 Ω |

Input of FO connection

| | |
|-----------------------------|------------|
| Product family FO connector | LC UPC |
| Amount of FO Connectors | 1 pcs |
| Fiber type | Singlemode |

Technical drawing**LED Definition**

| LED State | Transmitter | Receiver |
|-----------|-------------|-------------------------------|
| Red | | Optical input power < -10 dBm |

Scope of delivery

| | |
|-------------------|---|
| Scope of delivery | An external plug (UK, US, SAA, EU) in power supply will be delivered for 100 - 240 VAC to 12 VDC conversion |
|-------------------|---|

Ordering Information Table

| Item number | Item description |
|-------------|------------------|
| 85135573 | D-GNSSoF1-1R-L12 |

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Additional Information

Total link time delay calculation: Total delay [ns] = time delay TX [ns] + time delay RX [ns] + time delay single mode fiber 1310nm [ns/m] * link length [m]

Example 100m link delay = 15 ns + 15 ns + 100m * 4.9 ns/m = 520 ns

Link values are specified with transmitter D-GNSSoF1-1T-L12 85135572 and optical cable length < 1 m

All specifications measured at 25°C case temperature unless otherwise stated

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