

GNSSoF

Transmitter, L1, L2, DIN Rail, 1 RF IN, 1 FO OUT

D-GNSSoF1-1T-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



General data	
Suitable Products	GNSS ANT L1+L2 3.3V 85160014 O-GNSS-L15-02 85243244 D-GNSSoF1-1R-L12 85135573
Product family	GNSSoF Transmitter
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
RF input power damage limit	19 dBm
Max. input at 1dB compression	-20 dBm
Antenna supply voltage for active antennas	3 V ... 3.6 V
Antenna supply current for active antennas max	80 mA
Power in	12 V DC
Power connector	2-pole industry connector
Supply voltage range	11 V DC ... 14 V DC
Supply voltage typical	12 V DC
Supply current typical	100 mA
Mechanical data	
Weight	0.27 kg
Dimensions (LxWxH)	90mm x 95mm x 23mm

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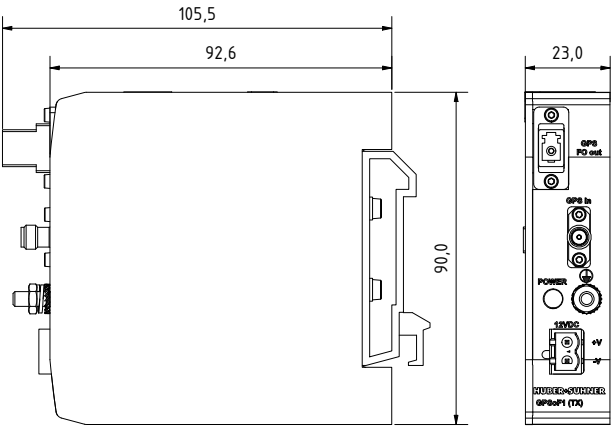
Environmental data	
Storage temperature	-40 °C ... 85 °C
Operation case temperature	-5 °C ... 55 °C

Optical data	
Time delay	15 ns
Optical power - signal typical	5 mW
Side mode suppression ratio typical	40 dB

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

Output 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	No optical output power	
Green	Normal operation	

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	

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Ordering Information Table

Item number	Item description
85135572	D-GNSSoF1-1T-L12

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 receiver D-GNSSoF1-1R-L12 85135573 and optical cable length < 1 m

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

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DOCUMENT PIM-P44203 / Date of publication: 21.08.2025 / uncontrolled copy