

GNSSoF

Transmitter, L1, L2, Outdoor box IP66, 1 RF IN, 1 FO OUT, DC

GPSoF1 (TX) [LC/PC] IP66 DC

Properties

- No external control circuits required
- Efficient analog signal to optical convert and back
- For GPS, Galileo, Glonass, BeiDou, IRNSS, QZSS and other GNSS systems



General data	
Suitable Products	GPSoF IP66 Mastmount Kit 85154592 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
RF input impedance for antenna detection	390 Ω
Antenna supply voltage for active antennas	3 V ... 3.6 V
Antenna supply current for active antennas max	80 mA
Supply voltage range	18 V DC ... 75 V DC
Supply voltage typical	48 V DC
Mechanical data	
Weight	0.99 kg
Dimensions (LxWxH)	238.9mm x 188.1mm x 113.8mm

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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

Ordering Information Table	
Item number	Item description
85145804	GPSoF1 (TX) [LC/PC] IP66 DC

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 = 5.4 ns + 5.4 ns + 100m * 4.9 ns/m = 500.8 ns

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