

RFoF

Transmitter, 2 GHz, 1550nm, DIN Rail, 1 RF IN, 1 FO Out

RFoF1 - 2GHz LN 1550 (TX)

Properties

- Excellent stability
- Gain flatness (typ. 1 dB)
- High dynamic range
- Monitoring functions
- L-Band application
- SATCOM transmission
- Radar applications

**General data**

Suitable Products	RFoF1 - 2GHz LN (RX) 85157470
Product family	RFoF high linearity transmitter module
Module type	DIN Rail module

Electrical data

Frequency range	950 MHz ... 2000 MHz
Link gain range	4 dB ... 7.5 dB
Frequency response flatness	+/- 1 dB
Link noise figure	24 dB (max)
VSWR	1.9
Link spurious free dynamic range SFDR2	90 dBHz ½
Link spurious free dynamic range SFDR3 min	112 dBHz ⅓
Link spurious free dynamic range SFDR3 typical	113 dBHz ⅓
Input 2nd order intercept point typical	30 dBm
Input 3rd order intercept point typical	19 dBm
Link input at 1dB compression point typical	6 dBm
RF input power damage limit	20 dBm
Power connector	D-Sub 9
Power supply	12 V DC
Supply voltage range	11 V DC ... 16 V DC
Supply voltage typical	12 V DC
Crosswalk between two modules max	-120 dB

Mechanical data

Weight	0.27 kg
Dimensions (LxWxH)	90mm x 100mm x 23mm

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Environmental data	
Storage temperature	-40 °C ... 85 °C
Operation case temperature	-40 °C ... 75 °C

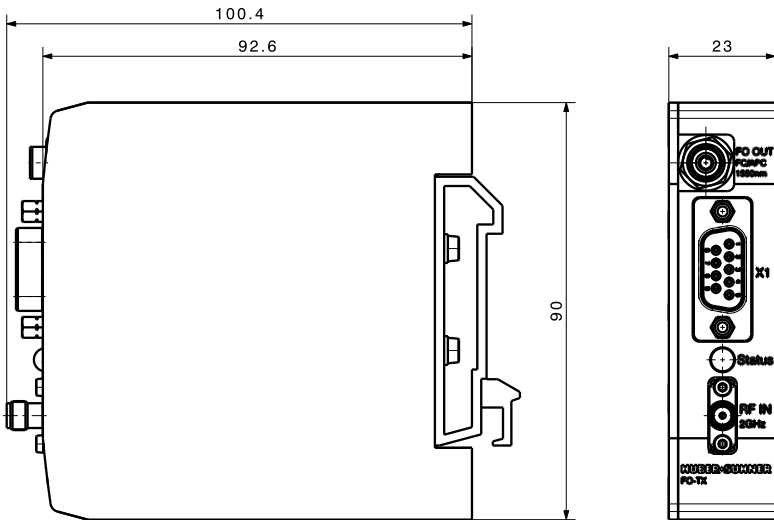
Optical data	
Time delay	22 ns
Optical power - signal min	4 mW
Optical power - signal max	7 mW
Side mode suppression ratio typical	40 dB
Transmitter wavelength typical	1550 nm

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	FC/APC
Amount of FO Connectors	1 pcs
Fiber type	Singlemode

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Technical drawing



Connector Pinout				
Pin Number	Signal Description	Signal Direction	Voltage Range	Current
1	Ground	-	-	-
2	+12V DC supply	Input	11V to 16V	< 250 mA
3	Ground	-	-	-
4	Optical power monitor	Output	Vmon= 0.1 ... 0.2 V/mWopt	Max. 2 mA
5	Ground	-	-	-
6	TX optical power alarm	Output	TTL (0: no alarm, 1: alarm)	+/- Max. 25 mA
7	Ground	-	-	-
8	PCB temperature	Output	10mV/°C, 750mV@25°C, range: -40 ...+ 125°C	< 50 µA (load)
9	Ground	-	-	-

Ordering Information Table	
Item number	Item description
85161319	RFoF1 - 2GHz LN 1550 (TX)

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