

RFoF

Transmitter, 2 GHz, 1310nm, DIN Rail, 1 RF IN, 1 FO Out

RFoF1 - 2GHz LN 1310 (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	4.5 dB ... 8 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

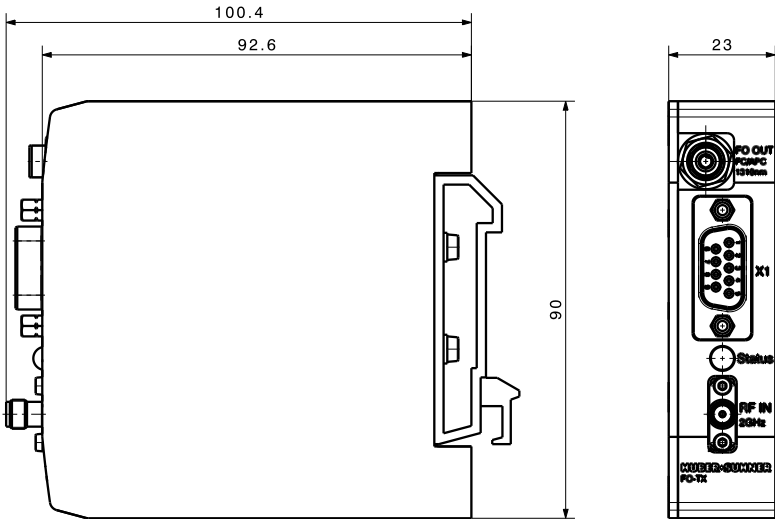
Optical data	
Time delay	22 ns
Optical power - signal min	4 mW
Optical power - signal max	7 mW
Side mode suppression ratio typical	40 dB
Transmitter wavelength typical	1310 nm

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
85160189	RFoF1 - 2GHz LN 1310 (TX)

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