

RF-over-Fiber RFoF1 – 18 GHz LN

Description

The RF-over-Fiber Module (RFoF1 – 18 GHz LN) is a Low Noise Module that converts analog RF signals into Fiber signals; and also converts Fiber signals to RF signals. The module offers a wide frequency range up to 18 GHz. Ideal for high-tech applications requiring high frequency ranges and very low noise.

Features

- Extremely low noise figure
- Wide bandwidth from 500 MHz to 18 GHz
- Small form factor

Applications

- Defence applications
- Test environments



Order Information

Item Description	Item Number
RFoF1 – 18 GHz LN (TX)	85077808
RFoF1 – 18 GHz LN (RX)	85077809

Electrical Data

Parameters		Value			Remarks
		Min.	Typ.	Max.	
All specifications at 25°C case Temperature T _c , unless otherwise specified					
Frequency range	MHz	500		18000	
Gain	dB	8		15	
Gain flatness	dB / 1 GHz		2		
Noise figure	dB	5.5	7	11	5.5 @ 1 GHz
Spurious-free dynamic range	dB Hz ^{2/3}		90		
Max. input at 1dB compression	dBm		-25		
Max. input power for no damage	dBm		+20		
Input Return Loss	dB		>7		
OIP3	dBm		-20		
Supply voltage Transmitter	VDC	+11	+12	+15	700 mA
Supply voltage Receiver	VDC	+11	+12	+15	50 mA
Temperature range (OTR)	Operating °C	-20		+60	
	Storage °C	-55		+85	
RF input impedance	ohm	50			
RF connectors		SMA female			Alternative connectors possible.

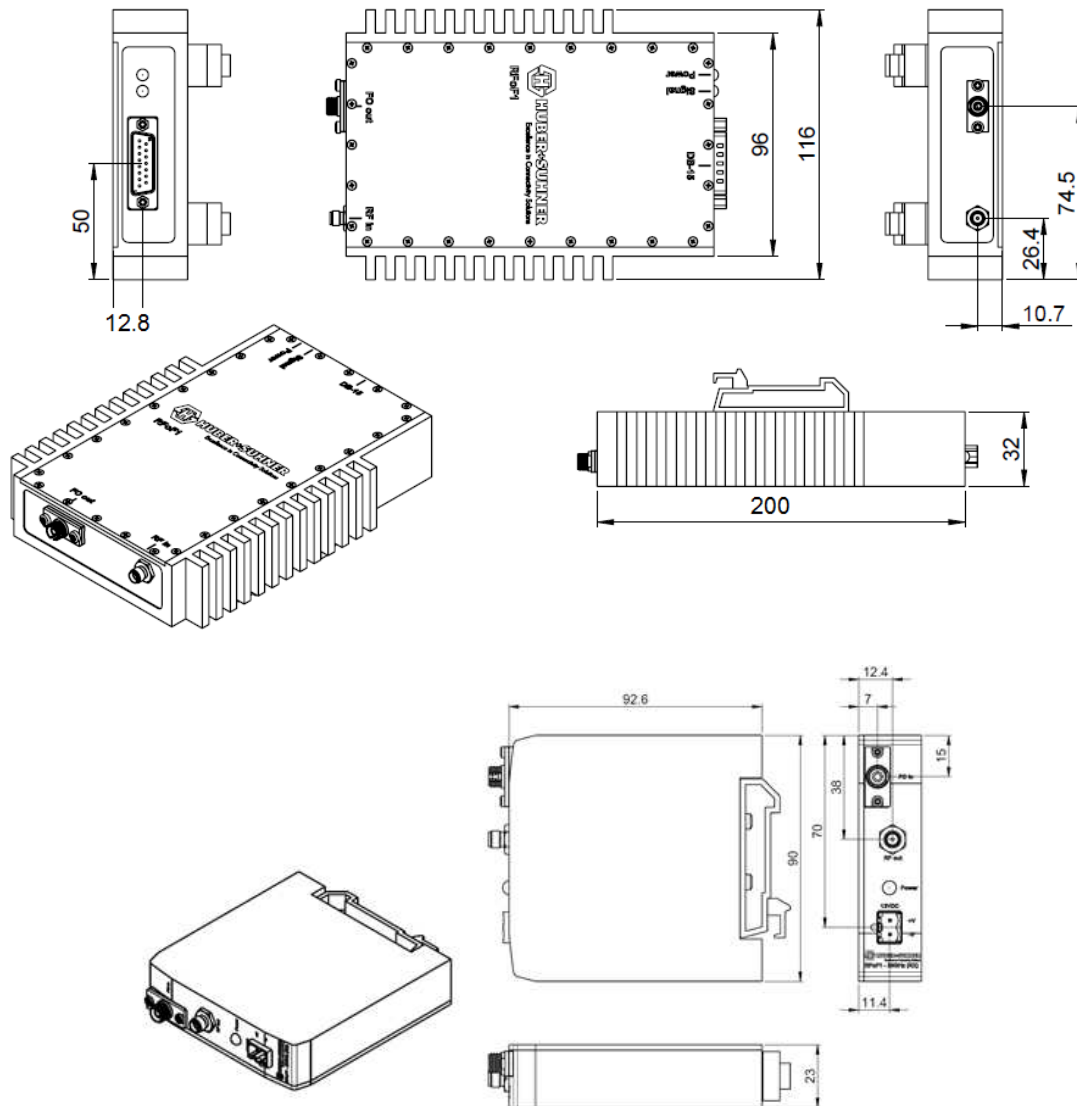
Optical Data

Parameters		Value			Remarks
		Min.	Typ.	Max.	
All specifications at 25°C case Temperature T _c , unless otherwise specified					
Fiber optic connectors		FC/APC			Alternative connectors possible.
Fiber		Single mode fiber 9/125 um			
Wavelength	nm		1310		
Optical power in fiber	mW	6	8	10	
Side mode suppression ratio	dB	30	40		

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Dimensions (mm)

Module mass	Kg	1.5 / 0.3	Transmitter / Receiver
Module dimensions	mm	200 x 120 x 22 / 90 x 95 x 23	Transmitter / Receiver



Additional Information

- All modules are RoHS Compliant
- All modules are EMC protected
- DIN 35 brackets are delivered with each module. Other brackets available upon request
- MIL and other certifications are possible upon request
- Various racks and enclosures available

Important catalogue links

RF Cables: <http://literature.hubersuhner.com/Technologies/Radiofrequency/RFCablesEN/>

RF Connectors: <http://literature.hubersuhner.com/Technologies/Radiofrequency/RFCConnectorsEN/>

FO Standard Assemblies: <http://literature.hubersuhner.com/Technologies/Fiberoptics/FOcableassembliesEN/>