

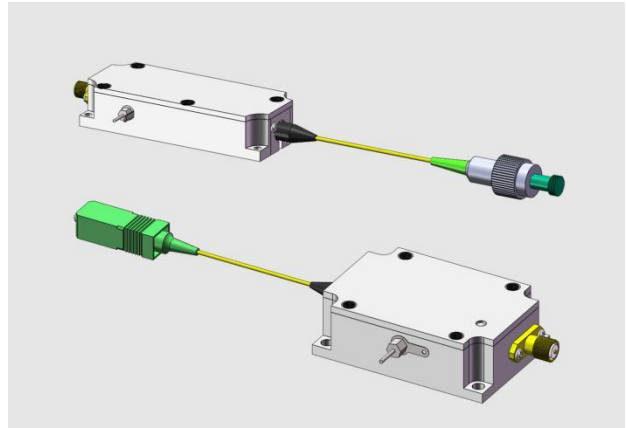
# RFoF-RX (30MHz & 5KHz~12GHz)

## Wideband RF over Fiber Receiver Module

### PRODUCT DESCRIPTION

The RFoF series delivers high-performance, cost-effective solutions for Wideband RF signal transmission over fiber. Designed to meet the demands of diverse application scenarios, these modules enable low-loss, high-linearity analog transport across extended distances. Leveraging expertise in microwave photonics, the company is committed to close collaboration with telecom operators, system integrators, and solution partners to jointly develop advanced RFoF products and customized solutions for evolving industry needs.

RFoF RX is a Wideband RF fiber optic receiver module with a maximum cutoff frequency of 12GHz. The product adopts a high linearity PIN light receiving tube. Due to avoiding the limitations of coaxial cables, the transmission quality and reliability of signals have been greatly improved. It can be widely used in satellite communication, Beidou/GPS signal transmission, remote antennas, and long-distance analog fiber optic communication.



### PRODUCT FEATURES

- ▶ High optical sensitivity with low noise figure
- ▶ Wide dynamic range with superior linearity
- ▶ Compact form factor and ultra-low power consumption
- ▶ Frequency support up to 12 GHz (optional 20 GHz extended version)
- ▶ Competitive cost-performance ratio

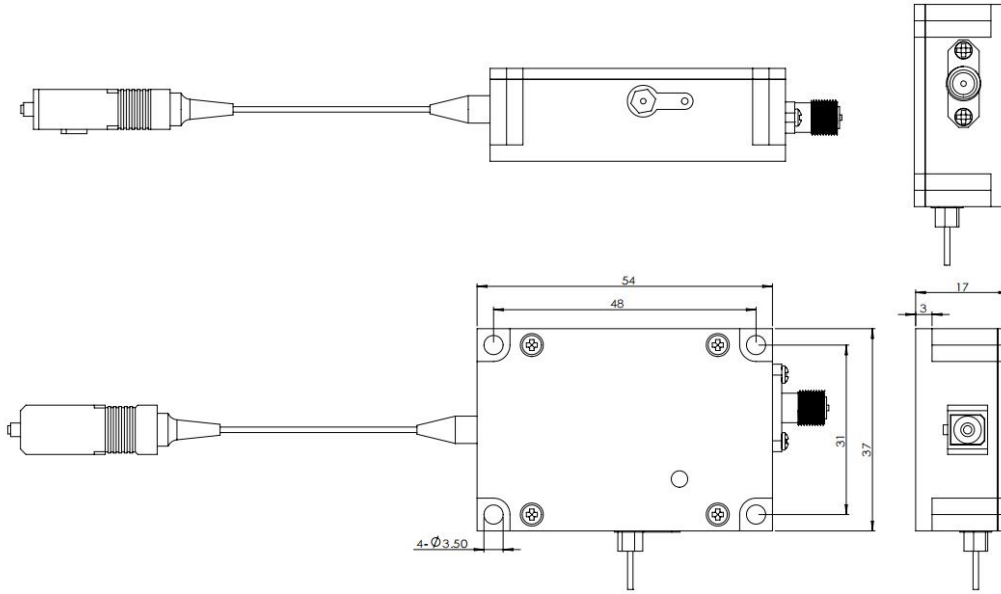
### MAIN APPLICATION

- ▶ Secure RF communication links
- ▶ GNSS (Beidou/GPS) signal distribution
- ▶ Microwave photonics and analog optical links
- ▶ Wideband RF signal interception and monitoring systems

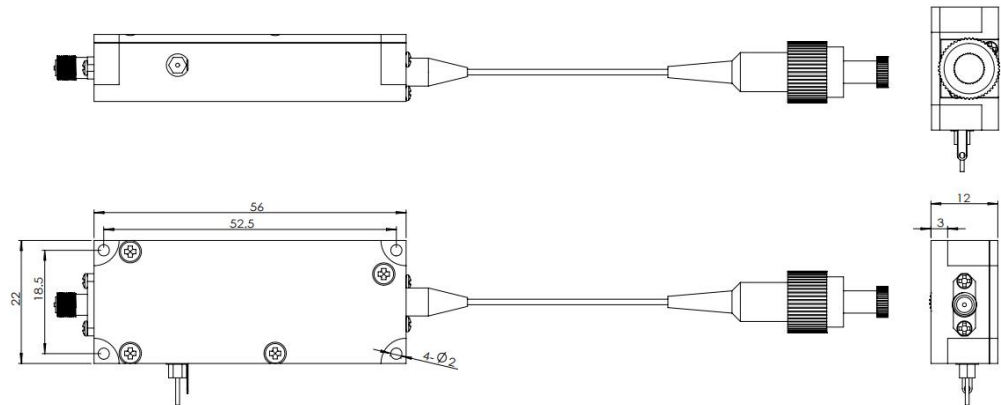
## TECHNICAL INDEX

Performance			Index			Supplement	
			Min.	Typ.	Max.		
Optical Feature	Receiving wavelength range	(nm)	1270		1610		
	Receive specific wavelengths	(nm)		xxxx		Built-in CWDM	
	Input optical power range (Analog link input range, typical)	(dBm)	-10		+3	Analog Signal	
	Responsiveness	(A/W)	0.85				
	Light Reflection Loss	(dB)	55			APC	
	Fiber Connector		LC/APC, FC/APC, SC/APC			Optional	
RF Feature	-3dB Minimum Cutoff Frequency	(MHz)	30			General	
		(KHz)		5		Customized	
	-3dB Maximum Cut-Off Frequency	(GHz)			1.0		RX01
					3.0		RX03
					6.0		RX06
					10.0		RX10
					12.0		RX12
	In-Band Flatness(FL)	(dB)			±0.5	±0.75	RX01
					±1.0	±1.5	RX03
					±1.5	±2.2	RX06
					±2.2	±2.8	RX10~12
	RF Return Loss	(dB)			-16	-12	RX01
					-12	-10	RX03
					-10	-7	RX06
					-10	-5	RX10~12
SFDR			110@6GH				
RF Output Power (TX)	(dBm)		5				
RF Working Impedance	(Ω)		50				
RF Connector		SMA-F					
General Feature	Supply Voltage (DC)	(V)		+12			
	Working Current	(mA)		200			
	Operation Temperature	(°C)	-20		+75		
	Storage Temperature	(°C)	-40		+85		
	Relative Humidity	(%)	5		95		
	Dimensions (WxDxH)	(mm)	37x54x17			Type-A	
22x56x12			Type-B				

**DIMENSION**



Type-A



Type-B

**MODEL EXPLANATION**

RFoF - RX □□ / □ - □□□□ - □□ - □

Product Series	Product Type	Maximum Frequency	Maximum Frequency	Receiving Wavelength	Fiber Connector	Module Appearance
RF Fiber Optic Link Products	RX	Optical Receiver	01 1GH	G 30MHz	1216 1270~1610nm	LA LC/APC A Type-A
	TX	Optical Transmitter	03 3GH	M 1MHz	XXXX CWDM	SA SC/APC B Type-B
	TR	Integrated receiver and transmitter	06 6GH	L 5kHz		FA FC/APC
	RT	Optical amplifier and wavelength conversion	10 10GH			
		12 12GH				