RF Over Fiber 0.1-8GHz / 0.1-15GHz

RRFOF-0.1-15GHz-Generic-z17

RoHS COMPLIANT

(Models shown are 2 way)

Applications:

•Telecommunication – Antenna remoting, long RF links via fiber

•Radar systems

Options:

•Various RF Gains

•Input/output impendence: 50/75 Ohm

•Connectors: SMA, N type F type

•Electrical interface and Dimensions can be tailored per customer request

Key features:

• Best Cost Performance

• Frequency Range: 0.1-15 GHz

Our Analog RFOF modules convert RF signals to optical signals and back. One unit has an optical transmitter converts RF to Optical signal, and second receiver unit converts Optical to RF signal. The two units are connected by an optical fiber of the customer.

Our RF Over Fiber modules (RFOF) are suitable for telecommunications and radar applications.

- Satellite, Point-to-Point antennas can be connected from several meters to many kilometers away from the control room.
- Base stations can be connected through fiber to remote sector antennas.
- Broadcasters can easily distribute their full RF streams over fiber to remote locations, therefore eliminating the need for complex equipment to be installed in far and hard to reach locations.
- With our wide-band units, cable operators can centrally locate their broadcasting equipment, and connect the RF through fiber to the remote location, thus reducing significantly the CAPEX and OPEX of their networks. Radar system houses can easily connect remote antenna elements using economical fiber. Phased array antennas can also use fiber to connect to their RF systems

Order Examples: RRFOF-7.8-8.4-Sf-M1-z17

Description: (RF Over Fiber, 7.8-8.4GHz, SMA female, Included -30dB Preamp Gain M1 Model)

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com

RF Over Fiber-0.1-15GHz

RRF0F-0.1-15-o12

Frequencies 0.1-8GHz and 0.1 to 15GHz

Parameter	Unit	0.1- 8	0.1- 15	7.8-8.4	
Frequency Range [1]	GHz	**0.1- 8**	**0.1- 15**	**M1**	**M2**
RF Gain	dB	+15	+15	>0 with Pre Amp 30dB	-30dB without Pre Amp[2]
Gain Flatness within entire bandwidth (8GHz) [1]	dB	+/-2	+/-2	±2	±2
1dB compression point		20	20	>-15	>-15
Maximum RF input level	dBm	23	23	>-10	>-10
VSWR [3]	:1	2:1	2:1	2.0:1	2.0:1
Noise Figure	dB	<25	<25	<20	<40
Spurious free dynamic range	dB	< -60	< -60	>100[4]	>100[4]
Phase Noise	(dBc/Hz)	100	100	100	100
Echoes	dB	100	100	-	-
Input and output impedance	Ohm	50	50	50	50
Optical and Electrical					
Laser diode operating wavelength	nm	1550	1550	1550	1550
Laser diode operating output Power	mW	20	20	1-20	1-20
Receiver Photodiode operating wavelength	nm	1200-1650	1200-1650	1200-1650	1200-1650
Power Supply voltage	V	15	15	110/220VAC	110/220VAC
Mechanical and Environmental					
1U 19” rack mounting		-	-	1U	1U[5]
RF input and output connectors		SMA	SMA	SMA	SMA
Optical connectors		FC/APC	FC/APC	FC/APC	FC/APC
Operating temperature range	ºC	-20 to +70	-20 to +70	0 to +50	0 to +50
Storage Temperature range	ºC	-40 to +85	-40 to +85	-40 to +85	-40 to +85
LED status indicators		2Leds	2Leds	2Leds[6]	2Leds[6]

[1] Better gain flatness can be guaranteed for 5.8-6.7 GHz or 7.2-7.6 GHz frequency band.
[2] RFOF without Pre Amplifier M2- Gain about -30dB,NF-40dB,p1dB-15dBm [2] Excluding the customer’s single mode fiber loss.
[3] VSWR <1.7:1 can be guaranteed for 5.8-6.7 GHz or 7.2-7.6 GHz frequency bands.
[4] Excluding in-band harmonics.
[5] Either TX and RX units both integrated in 19” Rack for bi-directional applications, or separated Tx and Rx units. Can be provided as stand alone for the uni directional version. Min size upon request Tx- 150*250*30 mm Rx-80*55*22 mm
[6] LED green light indicates: (I) Tr. operation; (II) data received.

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
Tel: (408) 266-7404 FAX: (408) 266-4483
WEB: www.raditek.com E-mail: sales@raditek.com