

Redundant Programmable 2.5GHz RF over Fiber Link

Redundant Programmable 2.5GHz RF over Fiber link specifications

Electrical	Unit	Specification	Specification
		LNA "OFF"	LNA "ON"
Frequency Range	MHz	10 - 2500	10 - 2500
Adjustable Link Gain (nominal value) ^[1]	dB	7	37
Attenuator 31 dB (Tx, Rx) ^[2]	dB	0.5	0.5
Gain Flatness	dB	±1.4	±1.4
Input P1 dB ^[3]	dBm	0	-30
Noise Figure ^[3]	dB	29	9
SFDR ^[3]	dB/Hz ^{2/3}	101	97
Gain Flatness any 36 MHz	dB	±0.25	±0.25
Maximum Input No damage	dBm	20	20
Spurious	dBm	-100	-80
VSWR Input / Output	dBm	1.7:1	1.7:1
Input / Output impedance	Ohm	50	50
Optical and Electrical			
Laser diode wavelength	µm	1.31 or 1.55	1.31 or 1.55
Optical Power in the fiber	mw	2.3 ±0.5	2.3 ±0.5
Mechanical and Environmental Parameters			
Operating temperature	°C	-20 to +70	-20 to +70
Storage temperature	°C	-40 to +85	-40 to +85
EMC and Safety	-	CE & FCC	CE & FCC

[1] LNA 'ON' or 'OFF' is selected by RFOptic manufacturing or by using the RFOF user software.

[2] 'No Attenuation' is the default for Tx and Rx units. Attenuation values can be selected by the user software.

[3] Noise Figure, Input P1 dB, Input IP3, and SFDR measured at 1.5GHz, can be selected by 'LNA Off/ON' and Tx Attenuator.

Simplified Block Diagram of a Redundant Programmable RFOF link

