

Low Noise Amplifier 1-8GHz

PRELIMINARY

Indoor wideband low noise amplifier intended for precision measurements of RF-signals up to 8GHz. Thanks to very low noise this product helps to receive weak signals in wide frequency band.

Features:

- High gain and low noise
- Wideband
- Flat response
- Compact and reliable
- Wide voltage range

Applications:

- Radio-monitoring
- Small signals receiving
- IF-systems
- Cable loss compensation

RF characteristics*

Frequency range	1000-8000									MHz
IN/OUT impedance	50/50									Ohm
Integrated by-pass relay	Active, when power supply is switched off. Input power: > 30dBm (1W) Life: >500000 cycles									
	1	2	3	4	5	6	7	8	9	GHz
Gain	25.0	25.0	24.0	24.0	24.0	23.0	22.0	20.0	17.0	dB
Noise fig.	2.3	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.1	dB
Return loss IN	>5	>5	>5	>5	>5	>5	>5	>7	>7	dB
Return loss OUT	>10	>10	>10	>7	>7	>7	>10	>10	>10	dB
Isolation	>45	>45	>45	>45	>40	>40	>35	>35	>35	dB
Out 1dB	19	19	19	19	19	19	19	19	18	dBm
Out IP3 ($\Delta f=1\text{MHz}$)	30	30	30	30	30	30	30	30	28	dBm

* Measured at temperature T=+25°C

DC and mechanical characteristics

Device current	145	mA
Device voltage (DC)	+16...+20	V
RF IN/OUT Connector	N female/ N female	
DC connector	Soldering terminals	
Enclosure type	Indoor**, aluminium	
Dimensions	122x58x50	mm

** In case of special need, outdoor type enclosure can be ordered also. Ask Us for more details.

Absolute maximum ratings

Device voltage	+21	V
CW RF input power in amplifier mode	0	dBm
CW RF input power in by-pass mode	33	dBm
Temperature	-20...+70	°C