

## Low Noise Amplifier 20-3000MHz

AM-43001 is indoor wideband low noise amplifier intended for precision measurements of RF-signals up to 3GHz. Thanks to very low noise AM-43001 helps to receive weak signals in wide frequency band.

### Features:

- Low noise
- Wideband
- Flat gain
- Compact and reliable
- Wide voltage range

### Applications:

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



### RF characteristics\*

Frequency range	20-3000									MHz
IN/OUT impedance	50/50									Ohm
	20	100	250	500	1000	1500	2000	2500	3000	MHz
<b>Gain</b>	21.0	21.2	21.0	20.1	17.8	15.8	14.2	12.5	11.0	<b>dB</b>
<b>Noise figure</b>	1.2	0.8	0.7	0.7	0.8	0.8	0.9	1.0	1.1	<b>dB</b>
<b>Return loss IN</b>	>7	>10	>10	>12	>12	>12	>10	>7	>7	<b>dB</b>
<b>Return loss OUT</b>	>12	>17	>19	>19	>19	>19	>19	>19	>19	<b>dB</b>
<b>Isolation</b>	25.0	25.0	24.5	24.0	22.5	21.0	20.0	19.0	19.0	<b>dB</b>
<b>Output 1dB</b>	14.3	14.3	14.3	14.3	14.5	14.5	14.5	14.3	14.0	<b>dBm</b>
<b>Output IP3</b> ( $\Delta f=1\text{MHz}$ , +0dBm each)	24.0	24.5	25.0	25.5	26.0	26.5	27.0	27.0	26.5	<b>dBm</b>

\* Measured at temperature  $T=+25^{\circ}\text{C}$

### DC and mechanical characteristics

<b>Device current</b>	25	<b>mA</b>
<b>Device voltage (DC)</b>	+8...+15	<b>V</b>
<b>RF IN/OUT Connector</b>	SMA female/ SMA female	
<b>DC connector</b>	Soldering terminals	
<b>Enclosure type</b>	Indoor**, aluminium	
<b>Dimensions</b> (without connectors)	50x40x13	<b>mm</b>

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



Absolute maximum ratings

<b>Device current</b>	45	<b>mA</b>
<b>Device voltage</b>	+20	<b>V</b>
<b>CW RF input power</b>	+7	<b>dBm</b>
<b>Temperature</b>	-40...+85	<b>°C</b>

Example of AM-43001 transfer function curve

