

Broadband RF Power Amplifier 20-300MHz



Driver for 1D Acousto optical beam deflector/scanner

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The RFPA Broadband RF Power Amplifier is designed to drive an acousto-optic beam deflector in a single direction. It features one RF input port and one RF output port. It requires a 24 V DC power supply to operate. The amplifier delivers up to 5 W (37 dBm) of RF output power across a 20 MHz to 300 MHz operating frequency range, providing stable, broadband performance for acousto-optic modulation and beam steering applications. It is designed to be driven by a function generator with 0-5V output.

Features

- 20-300 MHz
- Up to 5W
- 24V DC power
- Small Size Package

Applications

- Acousto optical beam deflection
- Instrument



Specifications

Parameter	Min	Typical	Max	Unit
Number of channels		1		ch
Frequency Range	20		300	MHz
Gain		32		dB
Max Output power		5		W
Input Impedance		50		Ω
Output Impedance		50		Ω
Power Supply		24VDC, 1A		
VSWR			1.8 / 1	
2nd Harmonic Distortion			-20	dBc
Max Input power			+5	dBm
Connection	Input	SMA-F		
	Output	SMA-F		
Operating Temperature	+10		+50	$^{\circ}$ C

Notes:

External heat dissipation is required during use

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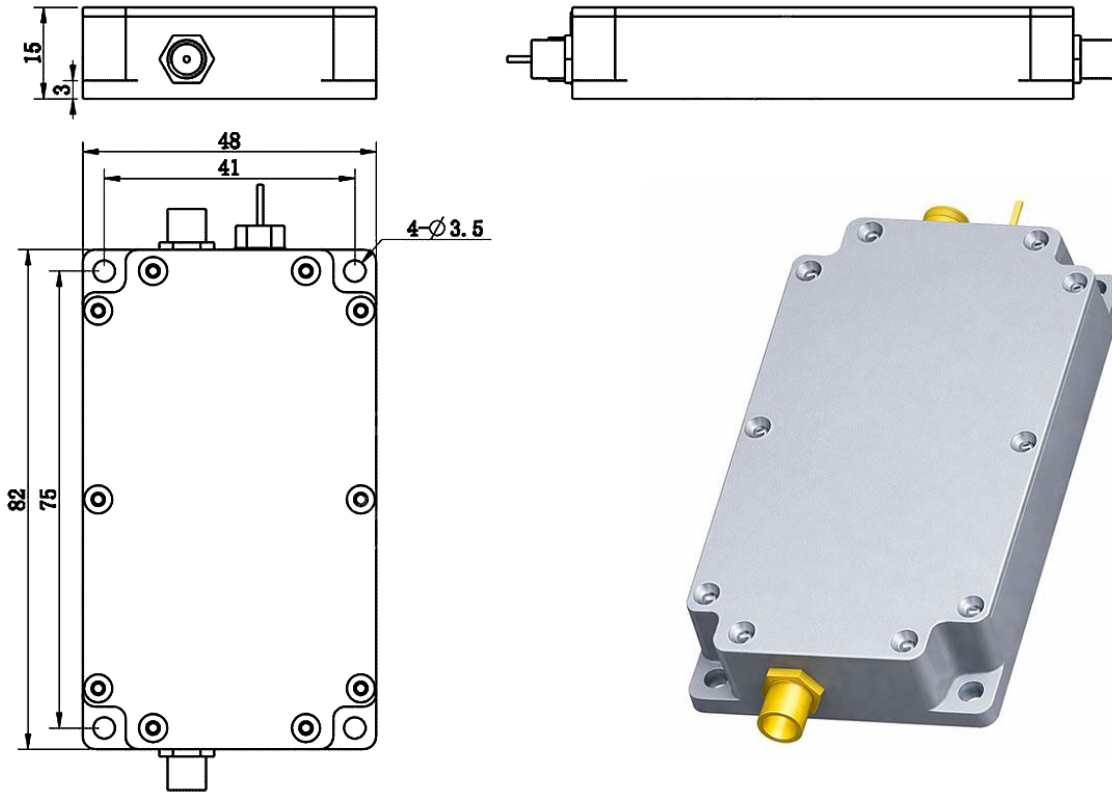
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Dimensions (mm)



*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Ordering Information (Part Number) *

	20	300	5	11	<input type="checkbox"/>
Prefix	Low Frequency	High Frequency	Output Power	Connector ^[1]	Package *
RFAF-	20MHz = 20	300MHz = 300	5W = 5	SMA = 11	Device = 1 Module = 2 Benchtop = 3

[1]. The connector cannot be installed directly onto bare fiber, as it is prone to damage during shipping. However, the connector can be assembled on bare fiber if a 3 cm protective loose tube is added for reinforcement. The customer can remove this protective tube after testing. The optical power handling of a standard connector is less than 0.5 W for SM28 fiber and decreases further with smaller core fibers.

* The module is a small metal box integrated with a power supply. Benchtop is a plug-play unit with metal cover