



Power Amplifier

Model: PA-1G8-4G-16

1.8-4GHz 16W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 1.8-4GHz
- High output power at saturation, 16W Typ.
- High gain, 45 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-1G8-4G-20 is a power amplifier with a minimum gain of 45 dB and a nominal Psat of 16W across the frequency range of 1.8 to 4GHz. The DC power requirement for the amplifier is +28 VDC/0.5 A. The input and output port configuration offers coax adapter structure with SMA female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	1.8		4	GHz
Gain	45	47		dB
Gain Flatness		±2	±3	dB
Output P1dB	37	38		dBm
Output Psat	41	42		dBm
Harmonic			-10	dBc
Input VSWR		1.5	2.0	:1
DC Voltage	+26	+28	+30	V DC
DC Supply Current		0.5	2.5	A
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +50°C	
Non-operating Temperature*	-50°C to +60°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	Solder pin	
Altitude	30,000	feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	140*80*15	mm
Weight	250	g

*Note: For a wider temperature range, please consult the manufacturer.

Absolute Maximum Ratings:

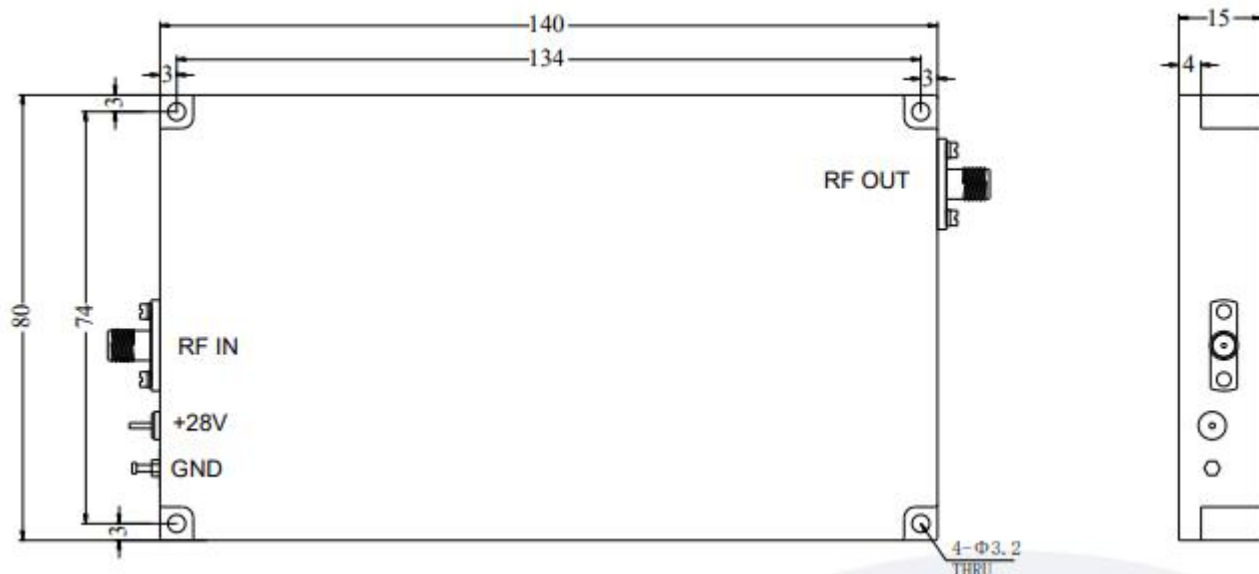
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+3 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-1G8-4G-16



Ordering Information:

Base Number	Description	Optional
PA-1G8-4G-16	Power Amplifier, 1.8-4GHz, Gain:45dB,Psat:16W,+28V DC	Without Heatsink
PA-1G8-4G-16-HS	Power Amplifier, 1.8-4GHz, Gain:45dB,Psat:16W,+28V DC	With Heatsink