



Power Amplifier

Model: PA-1G-8G-20

1-8GHz 20W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 1-8GHz
- High output power at saturation, 20W Min.
- High gain, 43 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-1G-8G-20 is a power amplifier with a minimum power gain of 43 dB and a minimum Psat of 20W across the frequency range of 1 to 8GHz. The DC power requirement for the amplifier is +28 VDC/8A. 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	GHz
Power Gain	43			dB
Power Gain Flatness		±3		dB
Output Psat	43			dBm
Spurious@Pout=43dBm			-50	dBc
Harmonic@Pout=43dBm			-10	dBc
Input VSWR			2	:1
DC Voltage		+28	+29	V DC
DC Supply Current		8		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	DSUB-7W2	Pin1~5: NC A1: +28V A2; GND
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	200*100*23(Without heatsink) 200*100*69.5(With heatsink)	mm
Weight	≤1	Kg

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

Absolute Maximum Ratings:

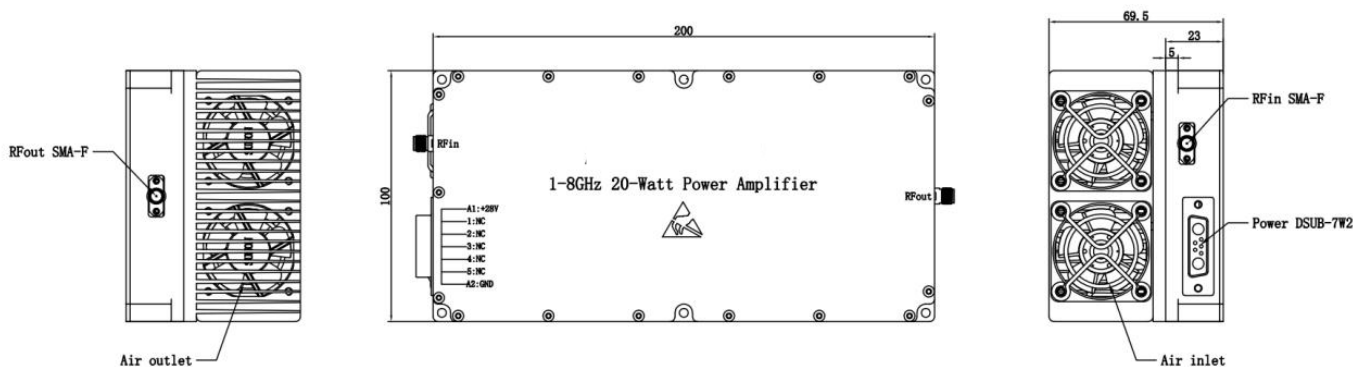
Parameter	Value
Supply Bias Voltage	+8 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-1G-8G-20-HS



Ordering Information:

Base Number	Description	Optional
PA-1G-8G-20	Power Amplifier, 1-8GHz, Gain:43dB,Psat:20W,+28V DC	With Heatsink