



Power Amplifier

Model: PA-1G-2G-250

1-2GHz 250W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 1-2GHz
- High output power at saturation, 250W Typ.
- High gain, 54 dB Typ.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-1G-2G-250 is a power amplifier with a typical small signal gain of 54 dB and a nominal Psat of 250 W across the frequency range of 1 to 2 GHz. The DC power requirement for the amplifier is +36 VDC/30 A. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	1		2	GHz
Small Signal Gain	53	54		dB
Small Signal Gain Flatness		±2	±3	dB
Output P1dB	52	53		dBm
Output Psat	53	54		dBm
Input VSWR		1.5	2	:1
DC Voltage	34	36	38	V DC
Static Current		3		A
Saturation Current		30	35	A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-20°C to +50°C	
Non-operating Temperature*	-30°C to +60°C	
Relative humidity	95	%
RF Input/Output Connector	SMA Female/N Female	
DC Power Supply Connector	Hybrid,D-Sub,7W2, Male	
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	270*160*27(Without heatsink)	mm
Weight	2	Kg

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

Absolute Maximum Ratings:

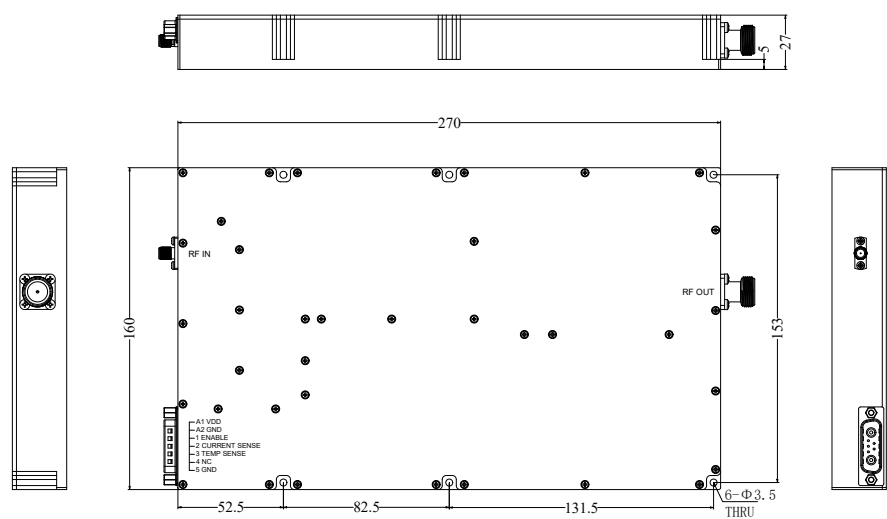
Parameter	Value
Supply Bias Voltage	+38 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



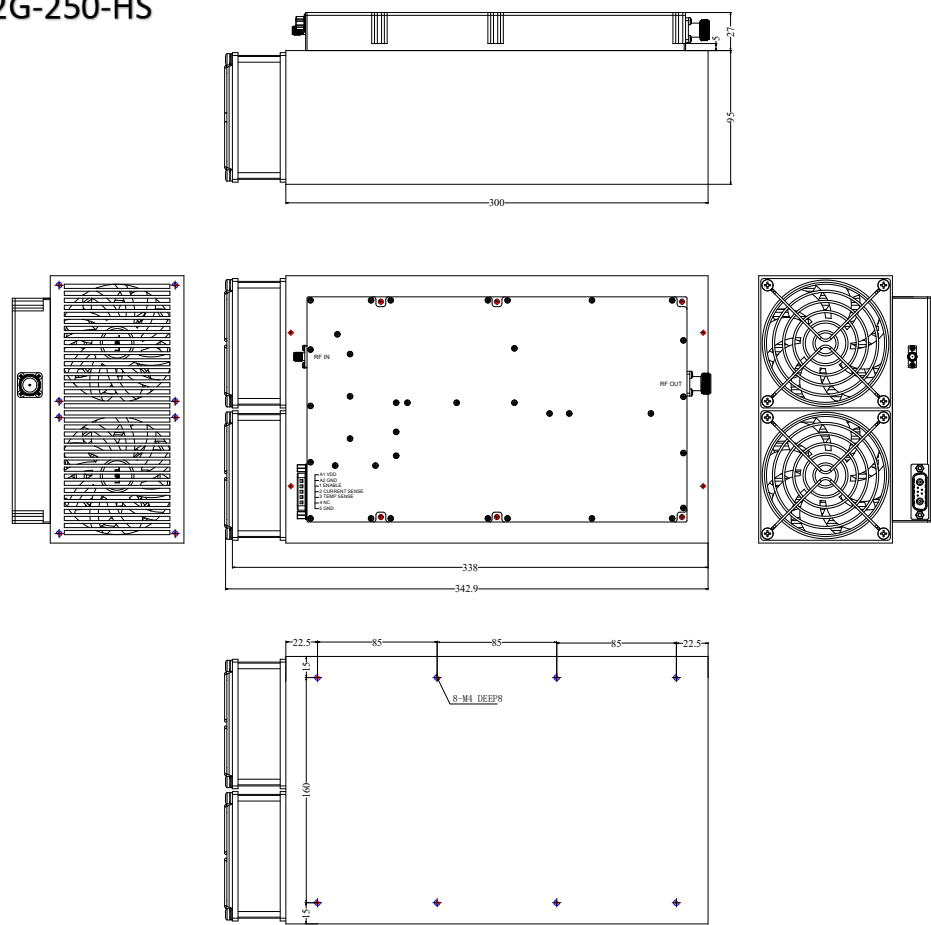
Outline Drawing:

Unit:mm

PA-1G-2G-250



PA-1G-2G-250-HS





DC Supply Connector(DSUB-7W2 Male):

Pin	Name	Function
A1	VDD	Power supply positive,+34.0-38.0VDC
A2	GND	Ground
1	EN	Amplifier Enable: TTL Logic High (3.3V-5V) (Internally Pulled-Low)
2	Current sense	Analog voltage relative to IDD @ 100mV per Ampere
3	TEM sense	Analog voltage relative to Module's Temperature @ 0.5V+10 mV/°C
4	NC	Not connected
5	GND	Ground

Ordering Information:

Base Number	Description	Optional
PA-1G-2G-250	Power Amplifier,1-2GHz, Gain:54dB,Psat:250W,+36V DC	Without Heatsink
PA-1G-2G-250-HS	Power Amplifier,1-2GHz, Gain:54dB,Psat:250W,+36V DC	With Heatsink