



# Power Amplifier

## Model: PA-1G-6G-125

1-6GHz 125W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 1-6GHz
- High output power at saturation, 125W Min.
- High gain, 51 dB Min.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-1G-6G-125 is a power amplifier with a minimum small signal gain of 51 dB and a minimum  $P_{sat}$  of 125W across the frequency range of 1 to 6 GHz. The DC power requirement for the amplifier is +28 VDC/15 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		6	GHz
Small Signal Gain	51	54		dB
Gain Flatness		±2	±4	dB
Output P1dB	49	50		dBm
Output Psat	51	52		dBm
Harmonic		-13		dBc
Spurious		-60		dBc
Input VSWR		1.5	2.5	:1
Input Max Power(no damage)			5	dBm
DC Voltage	+28		+30	V DC
DC Supply Current		15	20	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/SMA Female	
DC Bias	Solder Pin	
Material	Aluminium	
Package Sealing	With air cooling	
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	240*220*185	mm
Weight	4	Kg

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



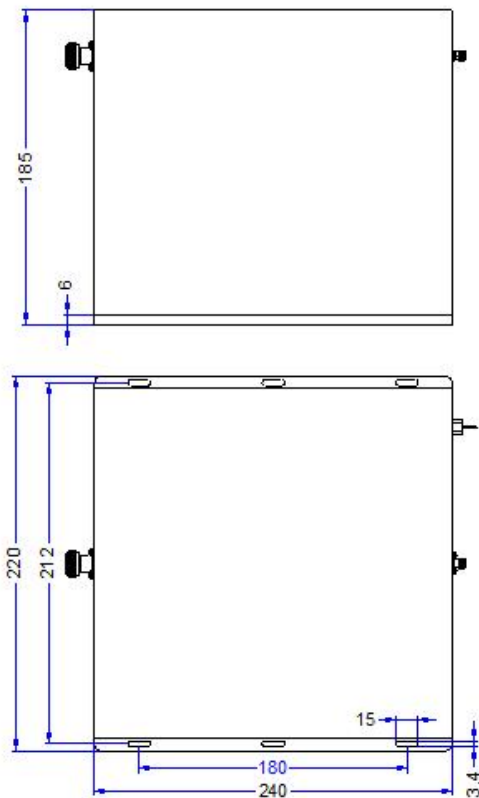
## Absolute Maximum Ratings:

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

## Outline Drawing:

Unit:mm

PA-1G-6G-125



## Ordering Information:

Base Number	Description	Optional
PA-1G-6G-125	Power Amplifier, 1-6GHz, Gain:51dB,Psat:125W,+28V DC	Without Heatsink
PA-1G-6G-125-HS	Power Amplifier, 1-6GHz, Gain:51dB,Psat:125W,+28V DC	With Heatsink