



Power Amplifier

Model: PA-0G4-6G-32-WATERPROOF

0.4-6GHz 32W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 0.4-6GHz
- High output power at saturation, 32W Min.
- High gain, 45 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-0G4-6G-32-WATERPROOF is a power amplifier with a minimum power gain of 45 dB and a minimum P_{sat} of 32W across the frequency range of 0.4 to 6GHz. The DC power requirement for the amplifier is +36 VDC/5 A. The input and output port configuration offers coax adapter structure with SMA female. And it has built-in protection functions included over DC voltage, over current, load VSWR and over TEM protection.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	0.4		6	GHz
Linear Gain		55		dB
Linear Gain flatness@full band		±3		dB
Power Gain	45			dB
Output Psat	45			dBm
Output Psat flatness			±1.5	dB
Gain stability@24h			±0.25	dB
Spurious@Pout=45dBm			-60	dBc
Harmonics@Pout=45dBm		-10		dBc
Input VSWR		1.5	2	:1
Load VSWR			3	:1
DC Voltage		36	38	V DC
DC Current		5		A
Power Consumption		180		W
Ingress Protection Grade		IP-65		
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-20°C to +50°C	
Non-operating Temperature*	-50°C to +70°C	
Relative humidity	95%	
RF Input/Output Connector	SMA Female/SMA Female	
DC Bias	DSUB-2W2	
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*164*90	mm
Weight	≤5	Kg

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



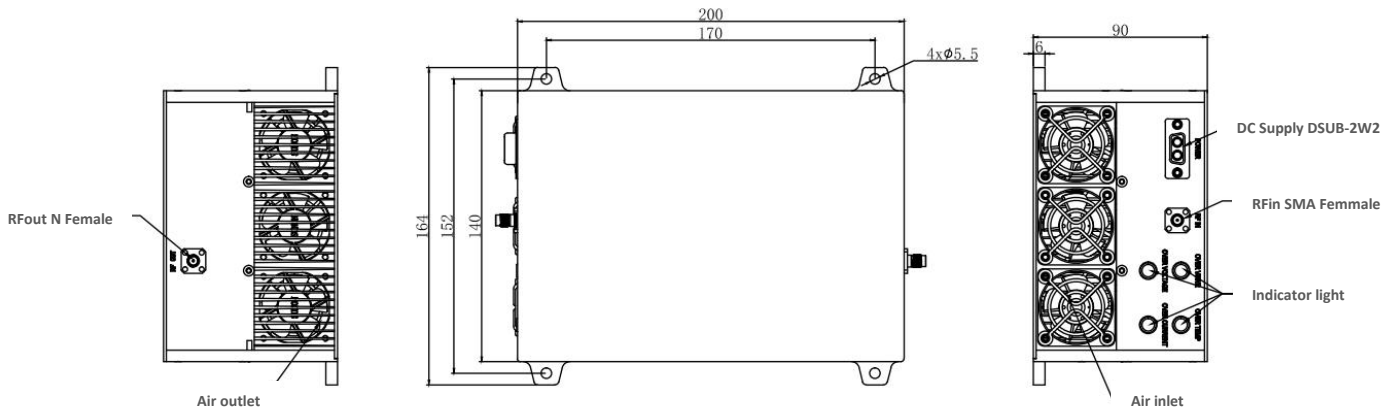
Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm

PA-0G4-6G-32-WATERPROOF-HS



Key Features:

Parameter	Advantages
Protection functions	1,Over TEM: $\geq+55^{\circ}\text{C}$ shutdown 2,Over DC voltage: $\geq 38\text{V}$ shutdown 3,Over current: $\leq 20\text{A}$ shutdown 4,Load VSWR protection:The unit disables RF when reverse power exceeds the safe level of 3:1 VSWR or reduces power by 6dB
Cooling system	Built in Cooling system,forced air cooling

Ordering Information:

Base Number	Description	Optional
PA-0G4-6G-32-WATERPROOF	Power Amplifier, 0.4-6GHz, Gain:45dB,Psat:32W,+36V DC	With Heatsink