



# Power Amplifier

## Model: PA-18G-40G-50

18-40GHz 50W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 18-40GHz
- High output power at saturation, 50W Min.
- High gain, 47 dB Min.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-18G-40G-50 is a power amplifier with a minimum gain of 47 dB and a minimum Psat of 50W across the frequency range of 18 to 40 GHz. The DC power requirement for the amplifier is +19 VDC/110 A. The input port configuration offers coax adapter structure with 2.92mm female and output port is WRD180C24.



## Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	18		40	GHz
Gain	47			dB
Output Psat	47			dBm
Input Power	-3	0	10	dBm
Spurious@Pout=40dBm	50			dBc
Input VSWR		2.0	2.5	:1
DC Voltage		+18	+19	V DC
DC Supply Current			110	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	2.92mm Female WRD180C24	
DC Power Interface	SUB-8W8	
Control and Test interface	J30J-9ZKP	
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	254*254*198	mm
Weight	≤30	Kg

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

## Absolute Maximum Ratings:

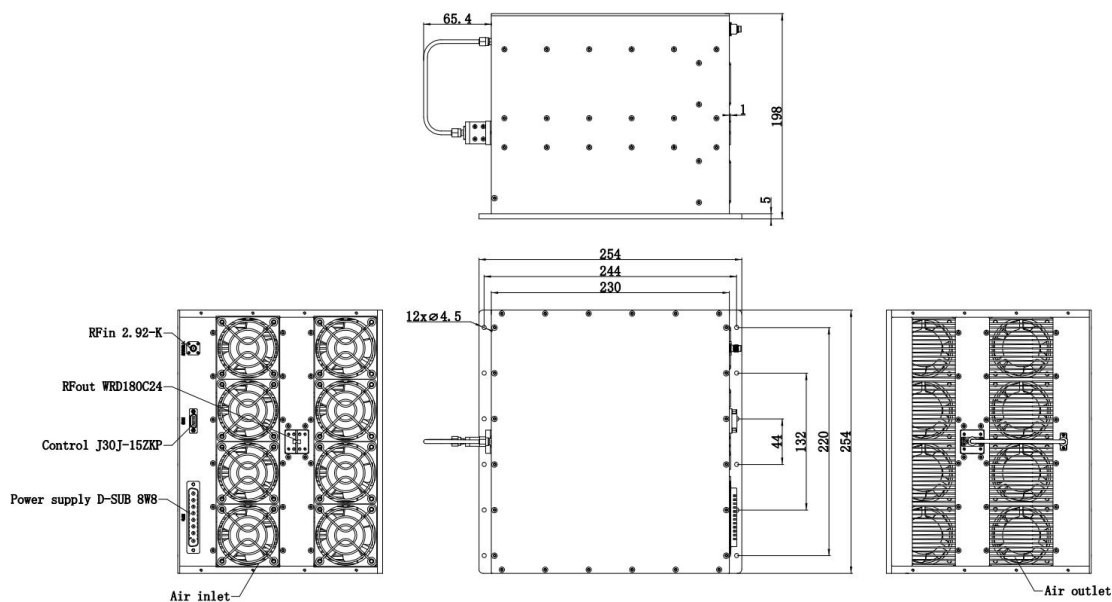
Parameter	Value
Supply Bias Voltage	+19 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



## Outline Drawing:

Unit:mm

PA-18G-40G-50



## SUB-8W8 Define:

Pin	Function
A1-A4	+18V
A5-A8	GND
PIN1	TTL( highforopen, low for close)
PIN2	Current Monitor
PIN3	Temperature Monitor

## Ordering Information:

Base Number	Description	Optional
PA-18G-40G-50	Power Amplifier, 18-40GHz, Gain:47dB,Psat:50W,+19V DC	With Heatsin