



# Power Amplifier

## Model: PA-13G7-14G5-158-HS-T

13.7-14.5GHz 158W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 13.7-14.5GHz
- High output power at saturation, 158W Min.
- High gain, 52 dB Min.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-13G7-14G5-158-HS-T is a power amplifier with a minimum gain of 52 dB and a minimum Psat of 158W across the frequency range of 13.7 to 14.5 GHz. The DC power requirement for the amplifier is +28 VDC/1000 W. The input port configuration offers coax adapter structure with SMA female and output port is WR62. And it has built-in protection functions included over TEM, over voltage, over current, and over VSWR protection.



## Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	13.7		14.5	GHz
Gain	52			dB
Gain Flatness@Full band		±2	±3	dB
Gain fluctuation @Full TEMP range		±3		dB
Output Psat	52			dBm
Spurious@Pout=52dBm			-60	dBc
Output IM3*			-25	dBc
Input VSWR			1.5	:1
Output VSWR			1.5	:1
DC Voltage		+28		V DC
Power Consumption			1000	W
Impedance		50		Ohms

\*Note: Two-tone interval is 5 MHz, The total power of the two-tone synthesis is 48 dBm.

## 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/WR62	
Communication Connector	J30J-15ZKP	
DC Supply	D-SUB5W5	A1-A2: +28V A3-A5: GND
Altitude	10,000	feet
Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth	
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions	
Dimensions W x H x D	350*239*90	mm
Weight	≤10	kg

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



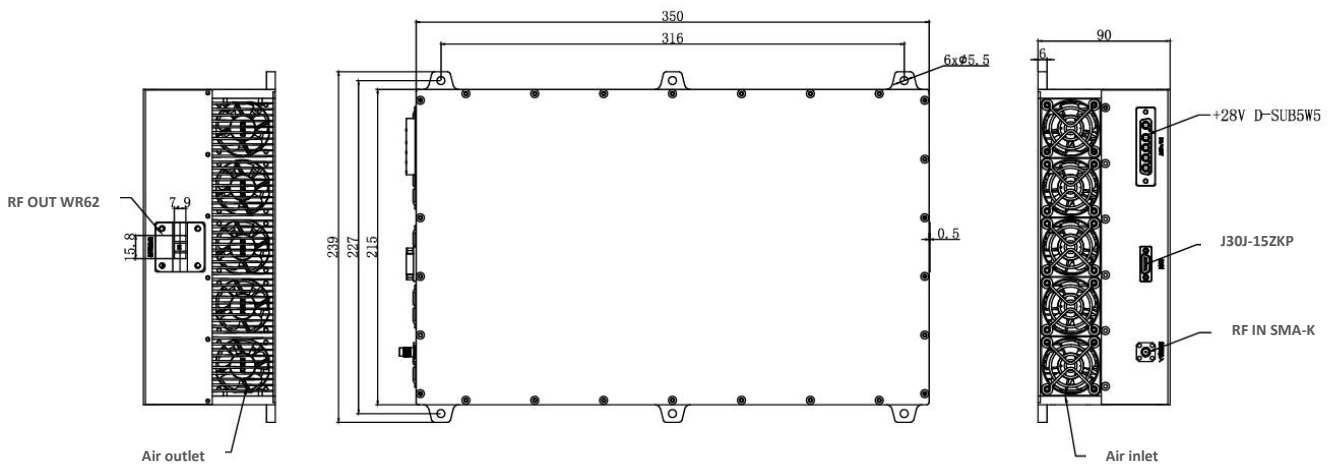
## Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

## Outline Drawing:

Unit:mm

PA-13G7-14G5-158-HS-T



## Key Features:

Parameter	Advantages
Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
Query parameters	1,TEM 2,Voltage 3,Current 4,Output power and reflect power
Remote control	RS422
Cooling system	Built in Cooling system,forced air cooling



## Ordering Information:

Base Number	Description	Optional
PA-13G7-14G5-158-HS-T	Power Amplifier, 13.7-14.5GHz, Gain:52dB,Psat:158W,+28V DC	Without Heatsink