



Power Amplifier

Model: PA-13G75-14G5-200-HS

13.75-14.5GHz 200W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 13.75-14.5GHz
- High output power at saturation, 200W Min.
- High gain, 53 dB Min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-13G75-14G5-200-HS is a power amplifier with a minimum power gain of 53 dB and a minimum Psat of 200 W across the frequency range of 13.75 to 14.5 GHz. The DC power requirement for the amplifier is +28 VDC/1200 W. The input port configuration offers coax adapter structure with SMA female and output port is WR-62 waveguide. 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	13.75		14.5	GHz
Power Gain	53			dB
Gain flatness@full band		±3		dB
Gain flatness@40MHz		±0.5		dB
Output Psat	53			dBm
Gain adjust Range		31.5		dB
Gain adjust Step		0.5		dB
Spurious@Pout=53dBm			-60	dBc
Harmonic@Pout=53dBm			-20	dBc
Output IM3*			-25	dBc
Input VSWR		1.5		:1
Output VSWR		1.5	1.8	:1
VSWR Warning		3		:1
DC Voltage		28	29	V DC
Power Consumption			1200	W
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/WR62	
DC Supply Connector	DSUB-5W5	Pin1~2: +28V Pin3~5: GND
Forward/Reverse Coupling	SMA Female/SMA Female	50±0.5dB
Communication Connector	J30J-15ZKP	
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	318*328*128	mm
Weight	≤10	Kg

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



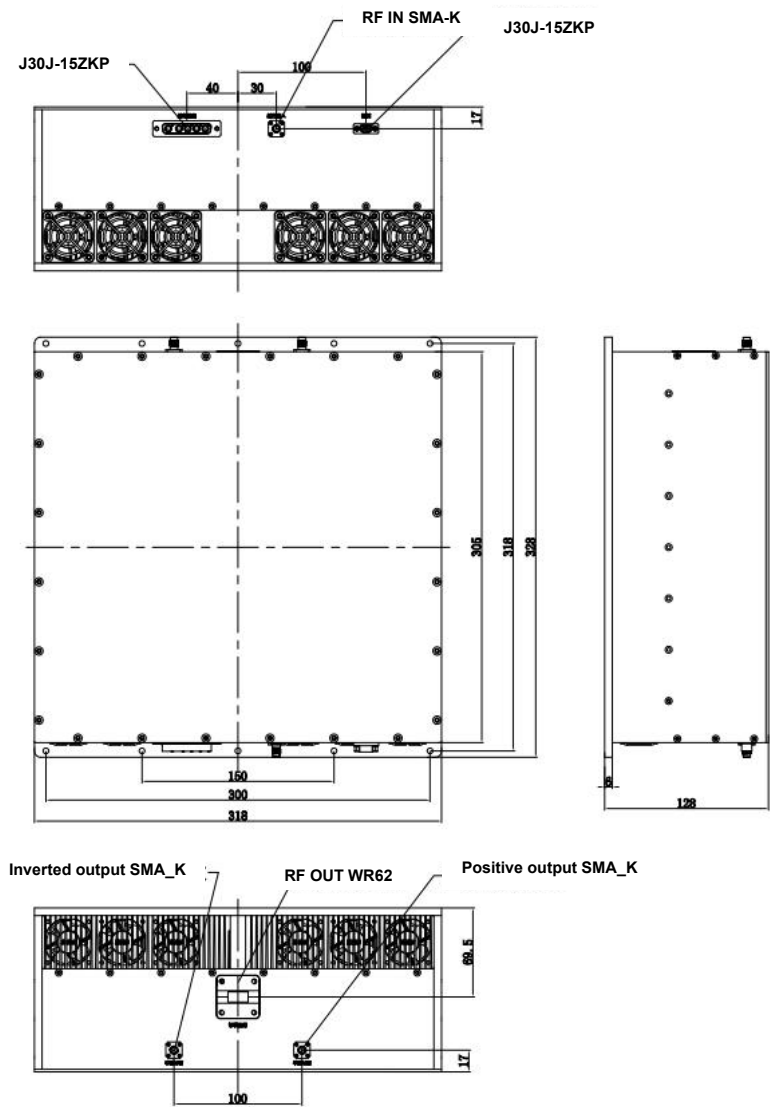
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+29 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

PA-13G75-14G5-200-HS





Key Features:

Parameter	Advantages
Control functions	1, Power setting on/off 2,ALC automatic level control 3, Gain control
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
Remote control	RS422
Cooling system	Built in Cooling system,forced air cooling

Ordering Information:

Base Number	Description	Optional
PA-13G75-14G5-200-HS	Power Amplifier, 13.75-14.5GHz, Gain:53dB, Psat:200W,+28V DC	With Heatsink