



# Power Amplifier

## Model: PA-13G75-14G5-316

13.75-14.5GHz 316W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

### Features:

- Frequency range: 13.75-14.5GHz
- High output power at saturation, 316W Min.
- High gain, 55 dB Min.
- 50 Ohm Matched Input / Output.

### Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

### Product Overview:

The PA-13G75-14G5-316 is a power amplifier with a minimum gain of 55 dB and a minimum Psat of 316W across the frequency range of 13.75 to 14.5 GHz. The DC power requirement for the amplifier is +28 VDC/2500 W. The input port configuration offers coax adapter structure with SMA female and output port is WR62.



## Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	13.75		14.5	GHz
Gain	55			dB
Gain Flatness		±3.5		dB
Linear Gain Adjustment Range/Step		31.5/0.5		dB
Output Psat	55			dBm
Spurious@Pout=55dBm			-60	dBc
2nd Harmonics@Pout=55dBm			-20	dBc
Input VSWR			2.0	:1
DC Voltage		+28		V DC
Power Consumption			2500	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	
Forward/Reverse Coupling	SMA Female/ SMA Female	40±0.5dB
DC Supply	Y50DX-1804	PIN1~2: +28V PIN3~4: 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	305*342*128	mm
Weight	≤25	Kg

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

## Absolute Maximum Ratings:

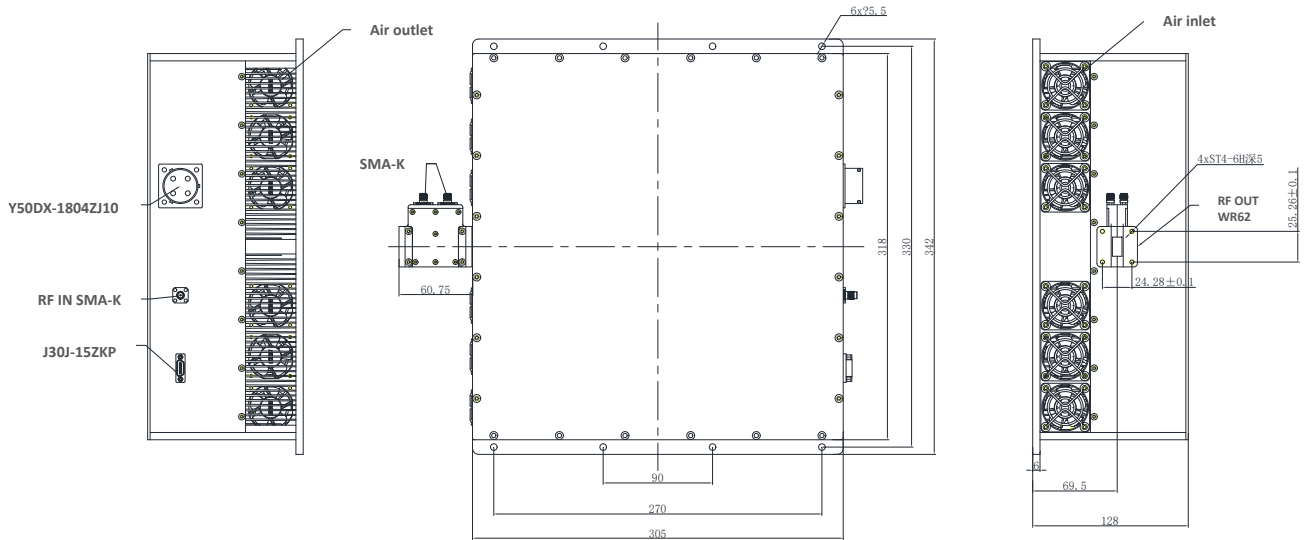
Parameter	Value
Supply Bias Voltage	+28 V
RF Input Power	+10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



## Outline Drawing:

Unit:mm

### PA-13G75-14G5-316



## J30J-15ZKP Define:

Parameter	Advantages
1~6	0.5/1/2/4/8/16 Decay control bit
7	Power On/Off
8	RF On/Off
9~15	GND

\*Note: All control levels are effective at the high level, while the low level and suspended level are invalid.

## Ordering Information:

Base Number	Description	Optional
PA-13G75-14G5-316	Power Amplifier, 13.75-14.5GHz, Gain:55dB,Psat:316W,+28V DC	With Heatsink