



Power Amplifier

Model: PA-6G-12G-20-HS

6-12GHz 20W CW

Ultrabroad frequency range, high performance and exceptional RF characteristics

Features:

- Frequency range: 6-12GHz
- High output power at saturation, 20W min.
- High gain, 43 dB min.
- 50 Ohm Matched Input / Output.

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Product Overview:

The PA-6G-12G-20-HS is a power amplifier with a minimum small signal gain of 43 dB and a minimum Psat of 20W across the frequency range of 6 to 12 GHz. The DC power requirement for the amplifier is +28 VDC/120 W. The input and output port configuration offers coax adapter structure with SMA female.



Electrical Specifications at 25°C:

Parameter	Min	Typ	Max	Units
Frequency range	6		12	GHz
Small Signal Gain	43			dB
Gain Flatness@Full band		±4		dB
Output Psat	43			dBm
Spurious@Pout=43dBm			-60	dBc
Harmonics@Pout=43dBm			-10	dBc
Input VSWR			2.2	:1
DC Voltage		+28		V DC
Power Consumption			120	W
Impedance		50		Ohms

Mechanical Specifications:

Parameter	Value	Notes
Operating Temperature*	-40°C to +50°C	
Non-operating Temperature*	-50°C to +60°C	
Relative humidity	95	%
RF Input/Output Connector	SMA Female/SMA Female	
DC Power Supply Connector	J30J-9ZKP	Pin1~3: +28V Pin4~7: GND Pin8: TLL Pin9: NC
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	143.4 x 85 x 16(Without heatsink)	mm

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

Absolute Maximum Ratings:

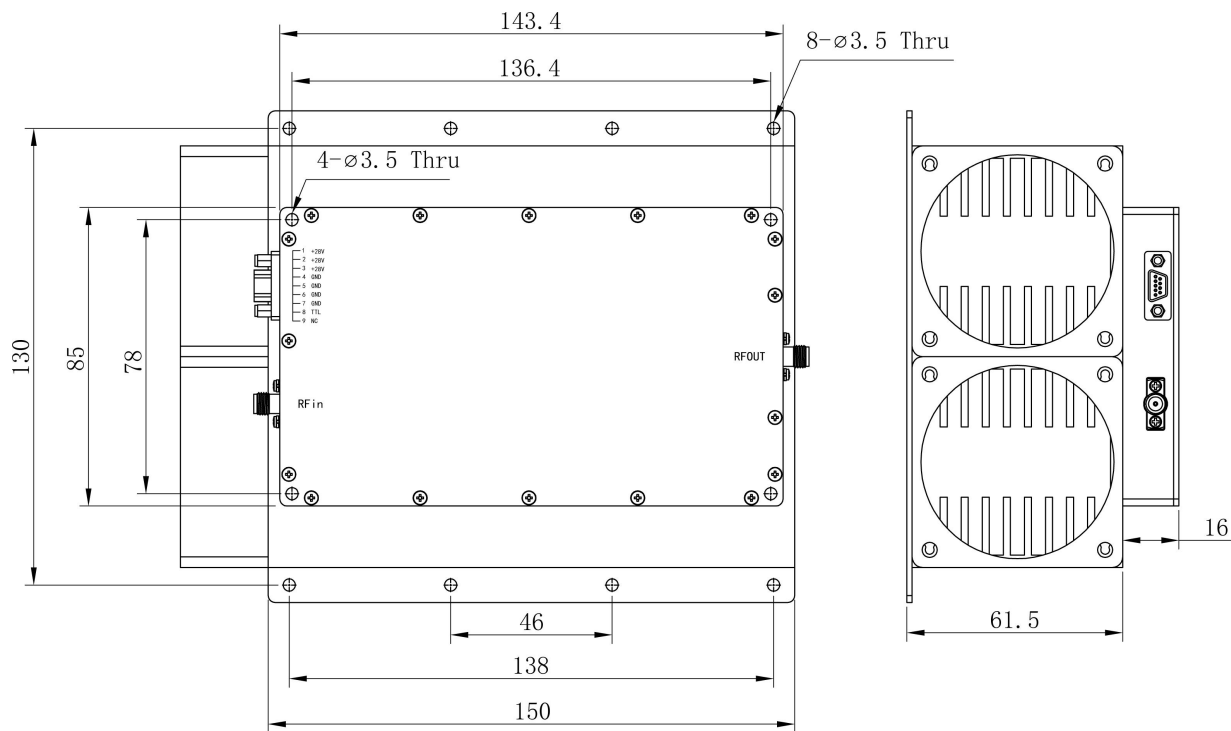
Parameter	Value
Supply Bias Voltage	+30 V
RF Input Power	+15 dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing:

Unit:mm

PA-6G-12G-20-HS



Ordering Information:

Base Number	Description	Optional
RPA-6G-12G-20-HS	Power Amplifier, 6-12GHz, Gain:43dB,Psat:20W,+28V DC	Without Heatsink
RPA-6G-12G-20-HS-HS	Power Amplifier, 6-12GHz, Gain:43dB,Psat:20W,+28V DC	With Heatsink