

Power Amplifier

1-8GHz/43dB Gain/43dBm Psat

Model: TLPA1G8G-43-43

TLPA1G8G-43-43 is a power amplifier with a minimum power gain of 43 dB and a minimum Psat of 43 dBm across the frequency range of 1 to 8 GHz. The DC power requirement for the amplifier is +28 VDC/8 A. The input and output port configuration offers coax adapter structure with SMA female.

Features:

- Frequency range: 1-8GHz
- Gain: 43dB Min
- Output Power Psat: 43dBm Min
- Good Power and Gain Flatness
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1-8			GHz
Power Gain	43			dB
Gain Flatness		±3		dB
Output Psat	43			dBm
Spurious@Pout=43dBm			-50	dBc
Harmonic@Pout=43dBm			-10	dBc
Input VSWR			2	:1
DC Voltage		28	29	V DC
DC Supply Current		8		A
Impedance	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	SMA Female/SMA Female	
DC Bias	DSUB-7W2	Pin1~5: NC A1: +28V A2; GND
Size	200*100*23(Without heatsink) 200*100*69.5(With heatsink)	mm
Weight	≤1	Kg

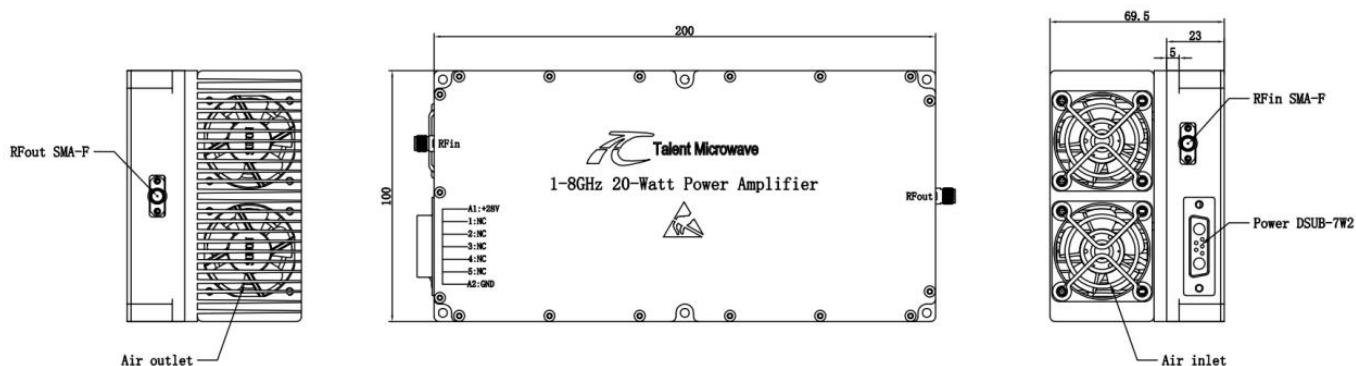
Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+8 V
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm

Regulatory Compliance:



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+50	°C
Non-operating Temperature*	-50		+60	°C
Relative humidity		95		%
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			

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

Ordering Information:

Base Number	Description	Revision
TLPA1G8G-43-43	Power amplifier 1-8GHz, Gain:43dB,Psat:43dBm,+28V DC,With Heatsink	Rev.1.1