

Power Amplifier

2-8GHz/50dB Gain/50dBm Psat

Model: TLPA2G8G-50-50

TLPA2G8G-50-50 is a power amplifier with power gain of 50 dB and a nominal Psat of 50 dBm across the frequency range of 2 to 8 GHz. The DC power requirement for the amplifier is +28 VDC/1350 W. The input port configuration offers coax adapter structure with SMA female and output port configuration offers coax adapter structure with N female.

Features:

- Frequency range: 2-8 GHz
- Gain: 50dB Min
- Output Power Psat: 50dBm Min
- 50 Ohm Matched Input / Output

Applications:

- Cellular
- PCN
- GSM
- ISM
- Lab Test

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	2		8	GHz
功率增益 Power Gain	50			dB
线性增益平坦度 Linear Gain flatness			±2.5	dB
增益调节范围 Gain adjust Range		31.5		dB
增益调节步进 Gain adjust Step		0.5		dB
饱和输出功率 Output Psat	50			dBm
杂散 Spurious@Pout=50dBm			-60	dBc
谐波 Harmonics@Pout=50dBm		-15	-10	dBc
输入驻波 Input VSWR			2	:1
输出驻波 Output VSWR			2.5	:1
直流电压 DC Voltage		28	29	V DC
功耗 Power Consumption@Pout=50dBm			1350	W
功耗 Power Consumption@Psat			1700	W
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/N Female	
直流供电接口 DC Supply Connector	DSUB-5W5	Pin1~2: +28V Pin3~5: GND
尺寸 Size	364*330*97.5	mm
重量 Weight	≤12	Kg

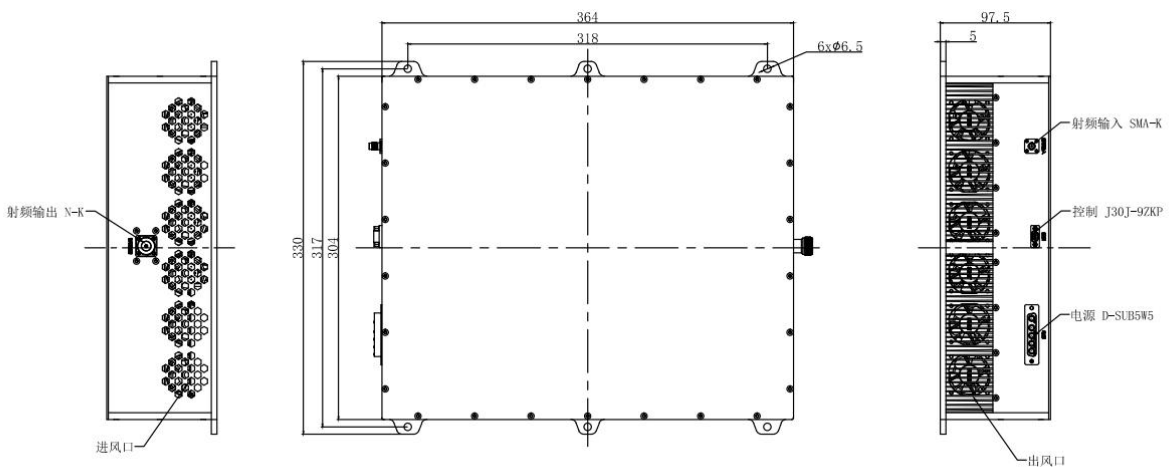
绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+29 V
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V



外形图 Outline Drawing:

Unit:mm



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

主要功能 Key Features:

参数 Parameter	特点 Advantages
控制功能 Control functions	1, Power setting on/off 2, Gain control
冷却系统 Cooling system	Built in Cooling system, forced air cooling

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+50	°C
存储温度 Non-operating Temperature*	-30		+60	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave, 3 axis both directions			

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

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TLPA2G8G-50-50	Power amplifier 2-8GHz, Gain:50dB, Psat:50dBm, +28V DC, With Heatsink	Rev.1.0