

Solid State High Power Amplifier Systems

5.8-6.8GHz /63dB Gain/63 dBm Psat/28V DC

Model: TLPA5.8G6.8G-63-63-BC

TLPA5.8G6.8G-63-63-BC is a solid state high power amplifier systems provides high output power and high gain across the 5.8 to 6.8 GHz frequency range. The amplifier features a built-in 28V power supply, making it easy to use in most lab environments. This model features thermal self protection, preventing damage to the amplifier and providing added reliability.

Features:

- Wide Band: 5.8-6.8 GHz
- Gain: 63dB Min
- Psat Output Power:63dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection
- 50 Ohm Matched Input / Output

电气特性 Electrical Characteristics:

参数 Parameter	代码 Symbol	Min	Typ	Max	单位 Units
频率范围 Frequency range	BW	5.8-6.8			GHz
功率增益 Powr Gain	GP	63	64		dB
增益平坦度 Gain flatness	Δ GL		± 2	± 3	dB
增益调节范围 Gain adjust Range	Δ GR		20		dB
增益调节步进 Gain adjust Step	Δ GS		0.1		dB
饱和输出功率 Output Psat	Psat	63			dBm
杂散 Spurious@Pout=63dBm	Spur			-60	dBc
二次谐波 2nd Harmonics	HAM			-20	dBc
输入驻波 Input VSWR	VSWRin			1.5	:1
直流电压 DC Voltage	Vdc		28		V DC
功耗 Power Consumption	Pdiss			8000	W
工作模式 Working Mode	MOD	CW/PULSE compatible			
阻抗 Impedance	I/O-IMP	50			Ohms

机械特性 Mechanical Specifications:

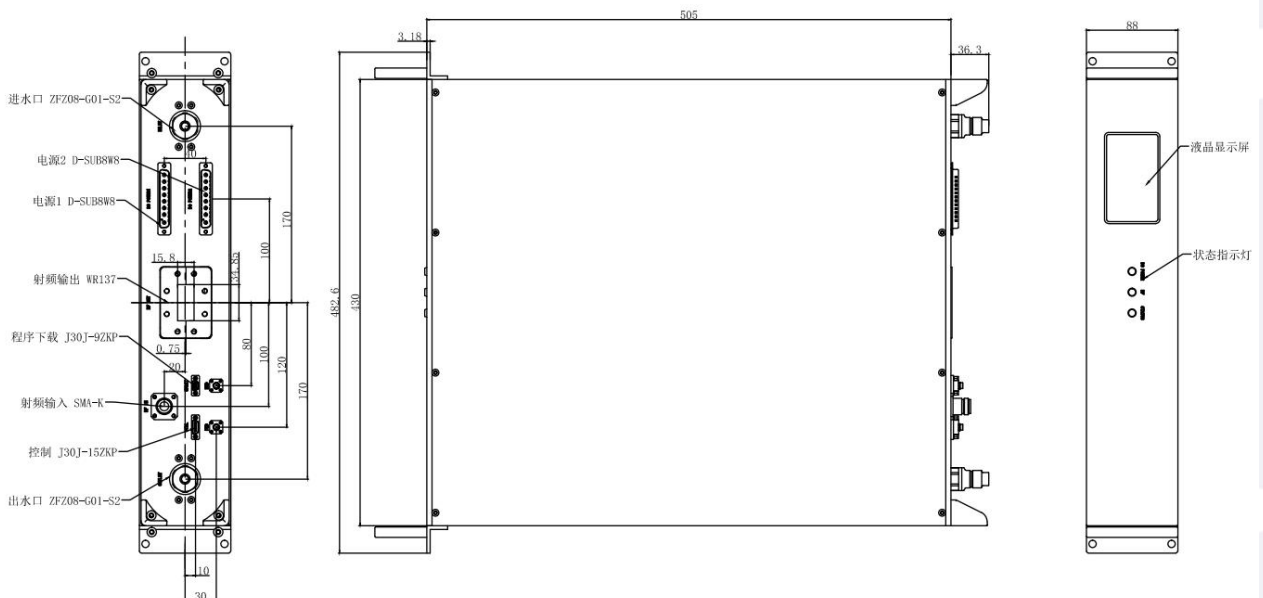
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	N Female/WR137	
正向/反向耦合 Forward/Reverse Coupling	SMA Female/ SMA Female	
通信接口 Communication Connector	J30J-15DKP/RJ45	
液晶显示屏 Front Panel LCD Screen Display	4 inch LCD Screen Display	
直流供电接口 DC Supply Connector	D-SUB8W8	
尺寸 Size	19 Inch 4U*550	mm
重量 Weight	≤30	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
输入功率 RF Input Power	+10 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



主要功能 Key Features:

参数 Parameter	特点 Advantages
控制功能 Control functions	1, Power setting On/Off 2,ALC automatic level control 3,RF setting On/Off
内置保护功能 Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
监测功能 Monitor functions	1,Core module temperature 2,Operating temperature¤t 3,Output/reflected power
监控和控制 Remote control	RS422/Ethernet
冷却系统 Cooling system	Built in Cooling system,forced liquid cooling

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+40	℃
存储温度 Non-operating Temperature*	-30		+50	℃
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
TLPA5.8G6.8G-63-63-BC	Solid State High Power Amplifier Systems 5.8-6.8GHz,Gain:63dB,Psat:63 dBm,+28V DC,Built in liquid Cooling	Rev.1.1