

Model: TLPA13.75G14.5G-55-55-BC
**Solid State High Power Amplifier Systems
 13.75-14.5GHz, Gain: 55dB, Psat: 55dBm,
 220V AC**
Feature:

- Ultra Wide Band: 13.75-14.5 GHz
- Gain: 55 dB Min
- Psat Output Power: 55 dBm Min
- Protection: Over TEM, over voltage, over current, over VSWR protection.
- 50 Ohm Matched Input / Output

电气特性 Electrical Specifications:

参数 Parameter	代码 Sympo	Min	Typ	Max	单位 Units
频率范围 Frequency range	BW	13.75-14.5			GHz
功率增益 Power Gain	GP	55			dB
增益平坦度 Gain flatness	Δ GL	±0.2@any 40MHz ±2@any 500MHz			dB
增益调节范围 Gain adjust range	Gadj	20			dB
增益稳定度 Gain stability@-20~+40°C	Gstb		±3		dB
饱和输出功率 Output Psat	Psat	55			dBm
杂散 Spurious@Pout=55dBm	Spur			-60	dBc
三阶互调 Output IM3@5MHz space	IM3	-25 max at total power 51dBm			dBc
群时延 Group delay	Gd	0.03 ns/MHz 0.003 ns/MHz2 1.0 ns peak to peak			
幅相变换 Ample phase transformation	AM/PM	3.5°/dB max. at pout=51dBm			
输出耦合度 Output coupling	/		-50		dB
输入驻波 Input VSWR	VSWRin			1.5	:1
输出驻波 Output VSWR	VSWRout			1.5	:1
交流电压 AC Voltage	Vac		220		V AC
功耗 Power Consumption	Pdiss	2000@Max			W
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/WR62	
正向/反向耦合 Forward/Reverse Coupling	SMA Female/ SMA Female	
通信接口 Communication Connector	DB9/RJ45	
液晶显示屏 Front Panel LCD Screen Display	7 inch LCD Screen Display	
尺寸 Size	19 Inch*5U*550	mm
重量 Weight	≤35	Kg

绝对最大值 Absolute Maximum Ratings:

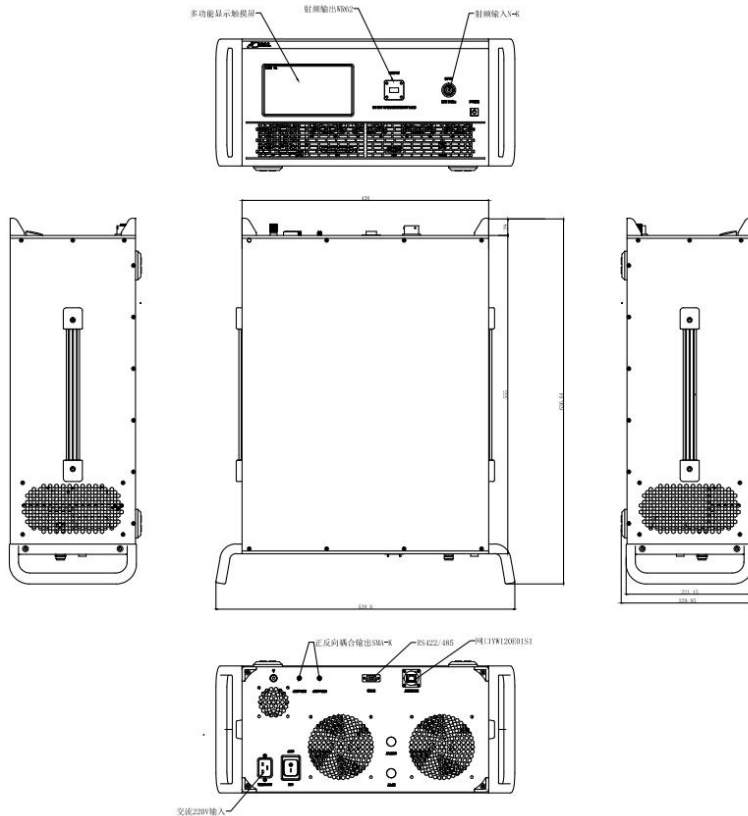
参数 Parameter	指标 Value
输入功率 RF Input Power	+5 dBm
ESD灵敏度 ESD sensitivity (HBM)	Class 0, passed 150V



Available 220V System
Benchtop Amplifier

外形尺寸 Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

主要功能 Key Features:

参数 Parameter	特点 Advantages
内置保护功能 Protection functions	1, Over TEM 2, Over voltage 3, Over current protection 4, Over VSWR
监控和控制 Remote control	RS422
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		+40	°C
存储温度 Non-operating Temperature*	-30		+50	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	20g,11ms,saw-tooth			
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 Part Number	描述 Description	版本号 Revision
TLPA13.75G14.5G-55-55-BC	Solid State High Power Amplifier Systems 13.75-14.5GHz, Gain:55dB, Psat:55 dBm, 220V AC, Built in Fan Cooling	Rev.1.1