泰莱微波
Talent Microwave

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Solid State High Power Amplifier Systems

25-27.5GHz/52dB Gain/52dBm Psat/220V AC Model: TLPA25G27.5G-52-52-BC

TLPA25G27.5G-52-52-BC is a solid state high power amplifier systems provides high output power and high gain across the 25 to 27.5 GHz frequency range. The amplifier features a built-in 220V 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:

- Frequency range: 25-27.5GHz
- Gain: 52dB Min
- Psat Output Power: 52dBm 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	25		27.5	GHz
小信号增益 Small Signal Gain	SSG	65			dB
功率增益 Power Gain@Pout=52dBm	GP	52			dB
增益平坦度 Gain flatness	ΔGL		±3		dB
增益调节范围 Gain adjust Range	ΔGR		31		dB
增益调节步进 Gain adjust Step	ΔGS		0.5		dB
耦合值 Coupling	Coup		40±2		dB
饱和输出功率 Output Psat	Psat	52			dBm
杂散 Spurious@Pout=55dBm	Spur			-55	dBc
输出三阶交调 Output IM3	IM3	25			dBc
输入驻波 Input VSWR	VSWRin			2	:1
交流电压 AC Voltage	Vac	100	220	240	V AC
功耗 Power Consumption	Pdiss			1000	W
阻抗 Impedance	I/O-IMP		50		Ohms

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机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	2.92mm Female/WR34	
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 4U*520 depth	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

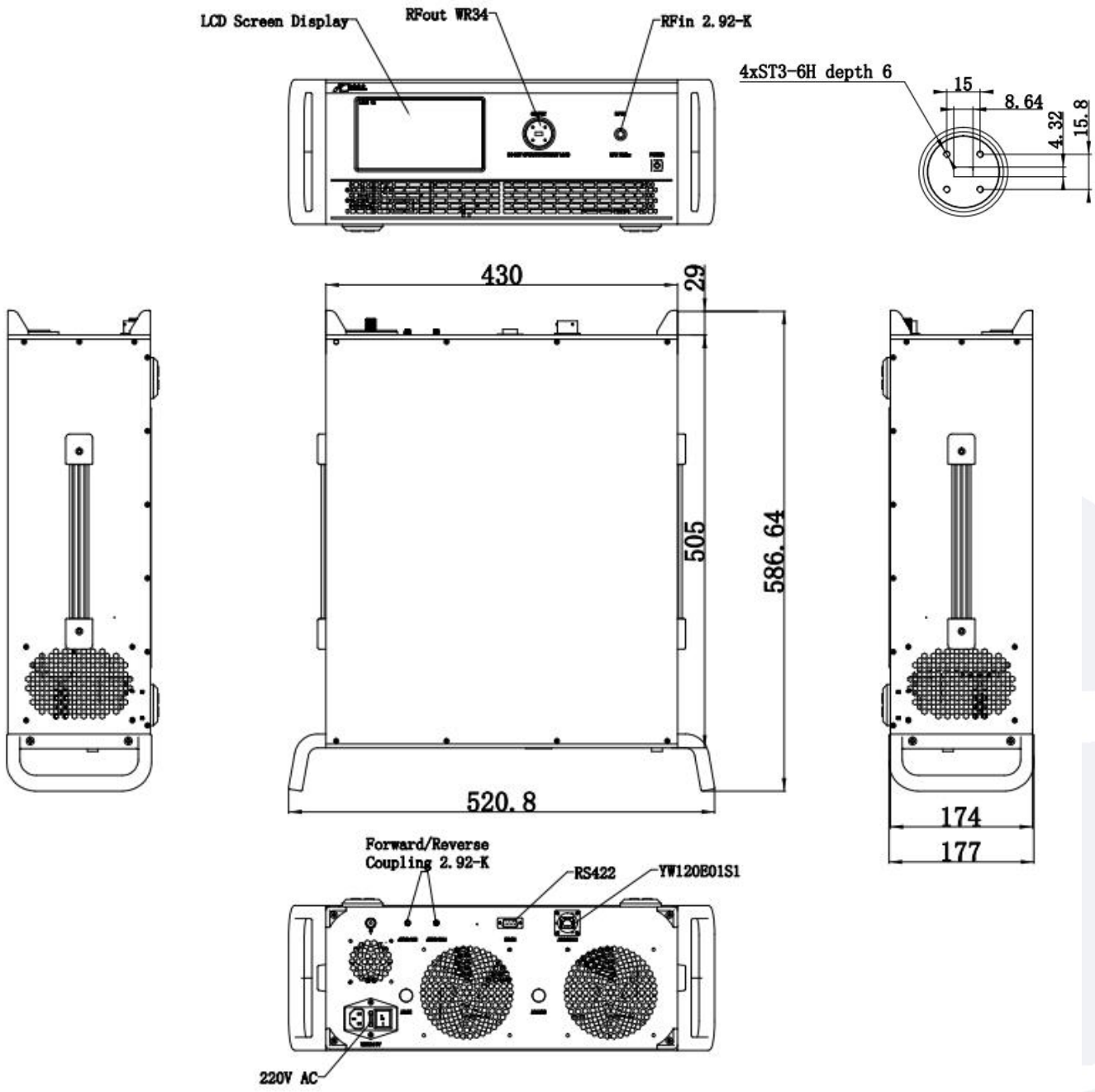
主要功能 Key Features:

参数 Parameter	特点 Advantages
控制功能 Control functions	1, Power setting on/off 2, Output power adjustment
内置保护功能 Protection functions	1, Over TEM: environment temperature≤40℃ 2, Over voltage: ≤24.5V 3, Over current: ≤50A 4, Over VSWR: ≤3:1
监控和控制 Remote control	RS422/Ethernet
显示功能 Display functions	1, Output/reflected power 2, Fault informations
冷却系统 Cooling system	Built in Cooling system,forced air cooling

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外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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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
TLPA25G27.5G-52-52-BC	Solid State High Power Amplifier Systems 25-27.5GHz,Gain:52dB,Psat:52dBm,220V AC,Built in Fan Cooling	Rev.1.0