

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

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	25		27.5	GHz
Small Signal Gain	SSG	65			dB
Power Gain@Pout=52dBm	GP	52			dB
Gain flatness	ΔGL		±3		dB
Gain adjust Range	ΔGR		31		dB
Gain adjust Step	ΔGS		0.5		dB
Coupling	Coup		40±2		dB
Output Psat	Psat	52			dBm
Spurious@Pout=55dBm	Spur			-55	dBc
Output IM3	IM3	25			dBc
Input VSWR	VSWRin			2	:1
AC Voltage	Vac	100	220	240	V AC
Power Consumption	Pdiss			1000	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	2.92mm Female/WR34	
Communication Connector	DB9/RJ45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 4U*520 depth	mm
Weight	≤35	Kg

Absolute Maximum Ratings:

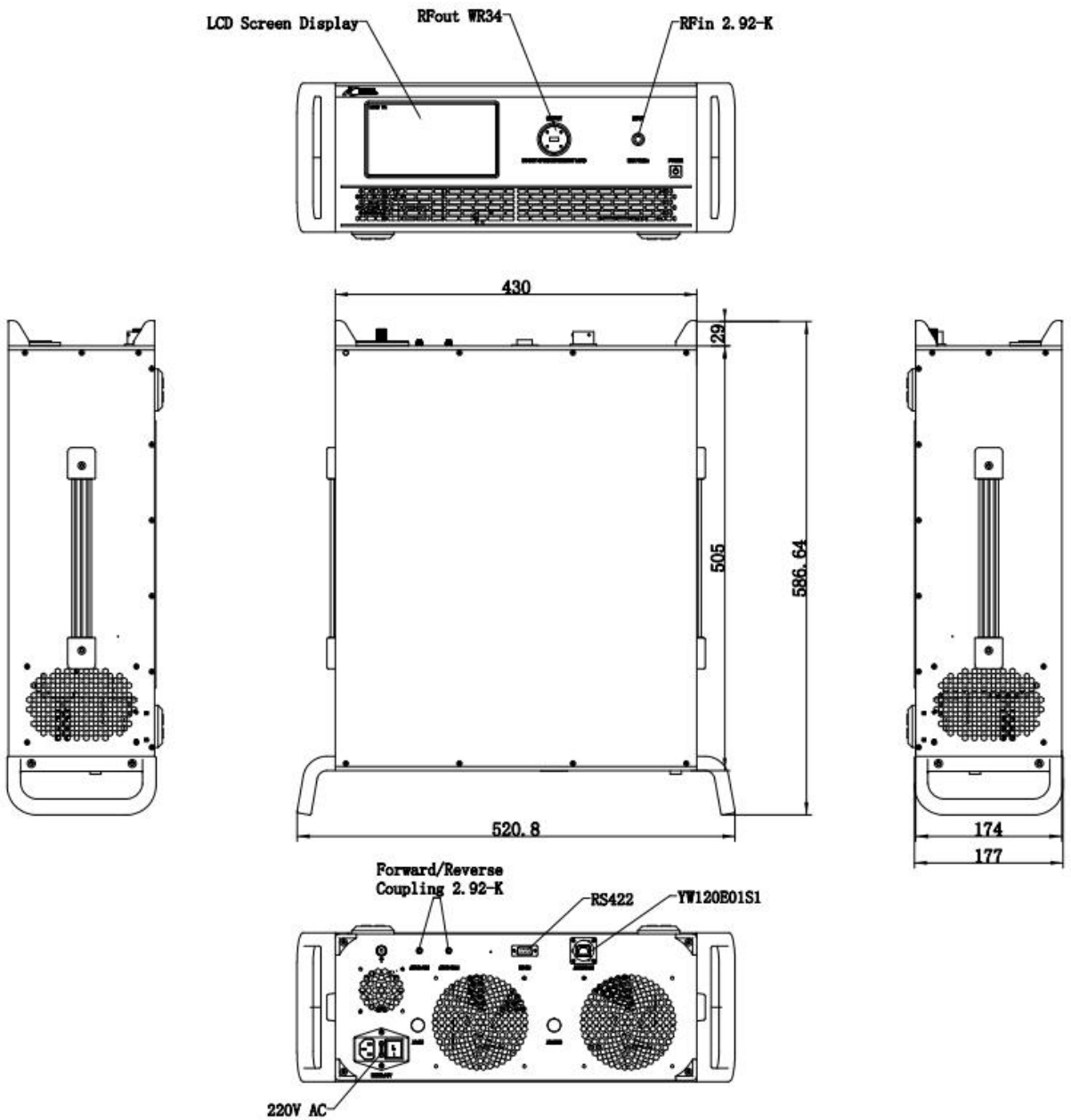
Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Key Features:

Parameter	Advantages
Control functions	1, Power setting on/off 2, Output power adjustment
Protection functions	1, Over TEM: environment temperature≤40°C 2, Over voltage: ≤24.5V 3, Over current: ≤50A 4, Over VSWR: ≤3:1
Remote control	RS422/Ethernet
Display functions	1, Output/reflected power 2, Fault informations
Cooling system	Built in Cooling system,forced air cooling

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	°C
Non-operating Temperature*	-30		+50	°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
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