

Solid State High Power Amplifier Systems

0.5-6GHz/50dB Gain/49dBm Psat/220V AC

Model: TLPA0.5G6G-50-49-BC

TLPA0.5G6G-50-49-BC is a solid state high power amplifier systems provides high output power and high gain across the 0.5 to 6 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: 0.5-6GHz
- Gain: 50dB Min
- Psat Output Power: 49dBm 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	0.5-6			GHz
Power Gain	GP	50			dB
Gain flatness	ΔGL		± 3.5		dB
Gain adjust Range	ΔGR	20			dB
Gain adjust Step	ΔGS		0.5		dB
Output Psat	Psat	49			dBm
Spurious	Spur			-60	dBc
Harmonics	HAM		-10		dBc
Input VSWR	VSWR _{in}			2.0	:1
AC Voltage	Vac		220		V AC
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

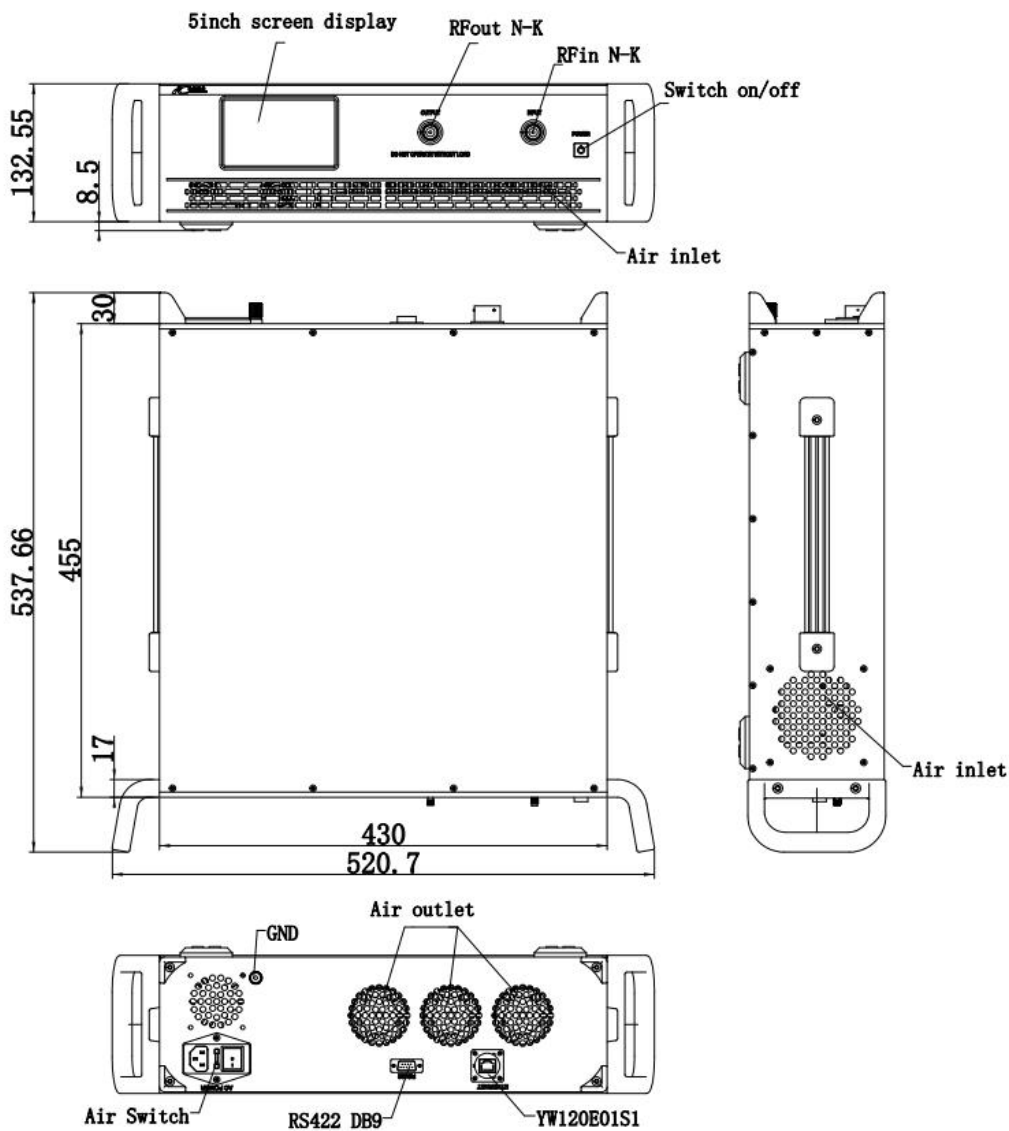
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
AC Supply Interface	Air switch	
Size	19 Inch 3U	mm
Weight	≤30	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	260 VAC
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Remote Control	Ethernet RJ-45 TCP/IP
Monitoring functions	1,Forward power 2,Temp fault
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
Control functions	1,Gain/power setting with 31.5dB range 2,ALC
Cooling system	Built in Cooling system,forced air cooling

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
TLPA0.5G6G-50-49-BC	Solid State High Power Amplifier Systems 0.5-6GHz,Gain:50dB,Psat:49 dBm,220V AC,Built in Fan Cooling	Rev.1.1