

Solid State High Power Amplifier Systems

4-8 GHz /60dB Gain/60 dBm Psat/220V AC

Model: TLPA4G8G-60-60-BC

TLPA4G8G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 4 to 8 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:

- Wide Band: 4-8GHz
- Gain: 60dB Min
- Psat Output Power:60dBm Typ
- 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	4-8			GHz
Gain	GP	60			dB
Gain flatness	ΔGL		± 3		dB
Peak Output Power	P.P	59	60		dBm
Output power adjust range	ΔPR		30		dB
Output power adjust step	ΔPS		0.5		dB
Peak Power flatness	$\Delta P.PL$			± 1.5	dB
Duty Cycle	PWM			10	%
Pulse Width	PW	0.3		300	us
Modulation frequency	FM	0.5		100	KHz
Rise time	PT		50	100	ns
Fall time	NT		50	100	ns
Spurious	Spur		-60	-50	dBc
Harmonics	HAM		-15	-12	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac	220			V AC
Power Consumption@5%,10%	Pdiss	430/850@Max			Watts
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

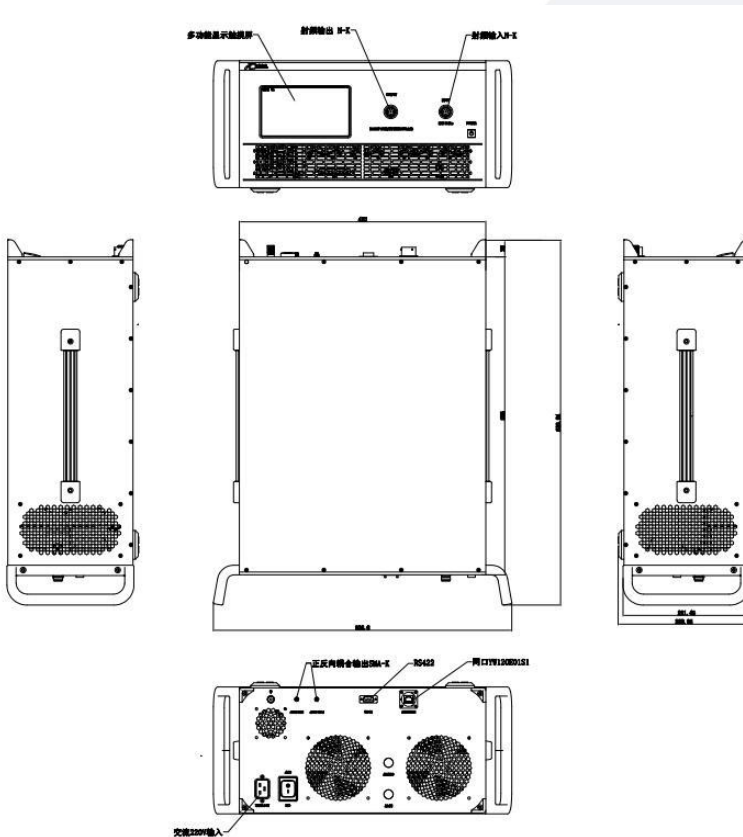
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Control interface	RS422/LAN	
Size	19 Inch 5U	
Weight	45	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	260V AC
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control	RS422/Ethernet,LCD Screen Display
Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
Control functions	1, Power setting On/Off 2,ALC 3,RF ON/Off 4,Gain adjustment 5,Real time status query
Cooling system	Built in Cooling system,forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-45		+65	°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
TLPA4G8G-60-60-BC	Solid State High Power Amplifier Systems 4-8GHz,Gain:60dB,Peak output Power:60dBm,220V AC,Built in Fan Cooling	Rev.1.0