

Solid State High Power Amplifier Systems

4-8GHz/57dB Gain/55 dBm Psat/220V AC

Model: TLPA4G8G-57-55-BC

TLPA4G8G-57-55-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:

- Frequency range: 4-8GHz
- Gain: 57dB Min
- Output Psat:55dBm Min
- Protection:Over TEM,over voltage,under voltage, input overdrive ,load VSWR protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter		Symbol	Min	Typ	Max	Units
Frequency range		BW	4-8			GHz
Power Gain		GP	57			dB
Working Mode		MOD	CW			
Input Power		Pin	-2			dBm
Gain adjust Range		Δ GR	20			dB
Gain adjust Step		Δ GS		0.5		dB
Output Psat		Psat	55			dBm
Saturated output power flatness		Δ Psat			± 2	dB
Output P1dB		P1dB		47		dBm
Spurious@Pout=58dBm		Spur			-60	dBc
Harmonics @Pout=55dBm	@4-4.5GHz	HAM			-15	dBc
	@4.5-8GHz				-20	
Input VSWR		VSWRin			1.25	:1
AC Voltage		Vac		220		V AC
Power Consumption@Pout=55dBm		Pdiss		2.7		KW
Power Consumption@Psat		Pdiss			3.5	KW
Impedance		I/O-IMP	50			Ohms

Mechanical Specifications:

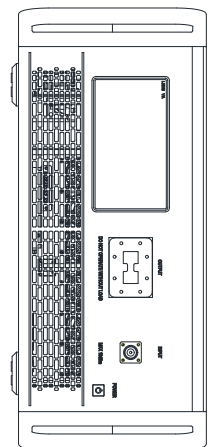
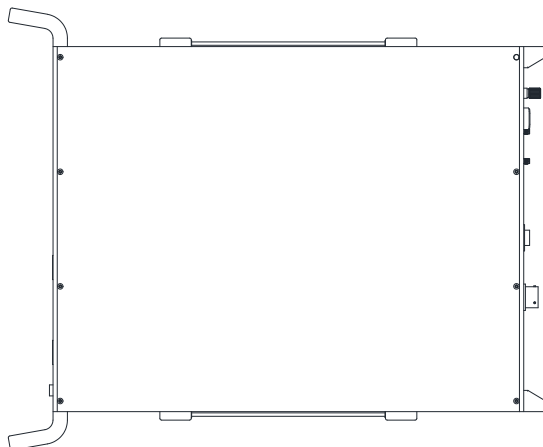
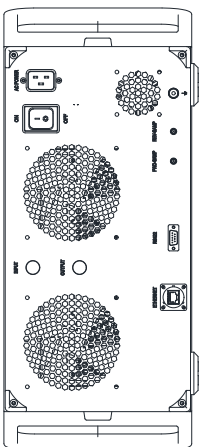
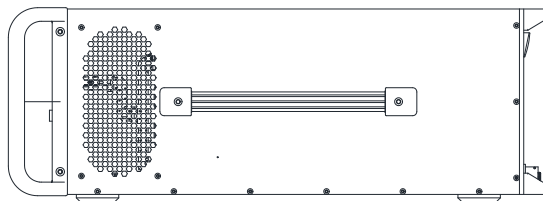
Parameter	Value	Units
Input /Output Connector	N Female WRD350	
Forward/Reverse Coupling	N Female/N Female	
Communication Connector	Serial:RS422;Ethernet:RJ-45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 5U	mm
Weight	≤40	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	TBD
ESD sensitivity (HBM)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Protection functions	1,Input overdrive:≥10dBm shutdown 2,Over TEM:≥+45℃ shutdown 3,Over DC voltage:≥29V shutdown 4,Under DC voltage:≤20V shutdown 5,Load VSWR protection:The unit disables RF when reverse power exceeds the safe level of 3:1 VSWR or reduces power by 6dB
Remote control	RS422/LAN
Cooling system	Built in Cooling system,forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-10		+40	℃
Non-operating Temperature*	-20		+70	℃
Relative humidity			95	%
Altitude	3,000			meters
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-57-55-BC	Solid State High Power Amplifier Systems 4-8GHz,Gain:57dB,Psat:55 dBm,220V AC,Built in Fan Cooling	Rev.1.1