

Solid State High Power Amplifier Systems

4-8GHz/63dB Gain/63dBm Psat/220V AC

Model: TLPA4G8G-63-62-P-BC

TLPA4G8G-63-62-P-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: 63dB Min
- Psat Output Power: 62dBm 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	4-8			GHz
Power Gain	GP	63			dB
Output Power adjust Range	Δ PR		30		dB
Output Power adjust Step	Δ PS		0.5		dB
Output Psat	Psat	62			dBm
Peak Output Power	P.P	62	63		dBm
Peak Power flatness	Δ P.PL		± 0.5		dB
Spurious	Spur			-60	dBc
Harmonics	HAM			-12	dBc
Modulation Frequency	MF	0.2		100	KHz
Pulse Width	T	0.2		300	us
Duty Cycle	τ			10	%
Rise/Fall Time	Tr		50	100	ns
Input VSWR	VSWR			2	:1
AC Voltage	Vac		220		V AC
Power consumption@10% duty cycle	Pdiss			1000	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

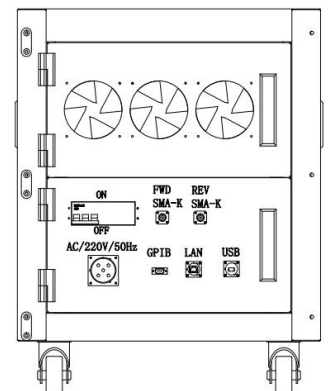
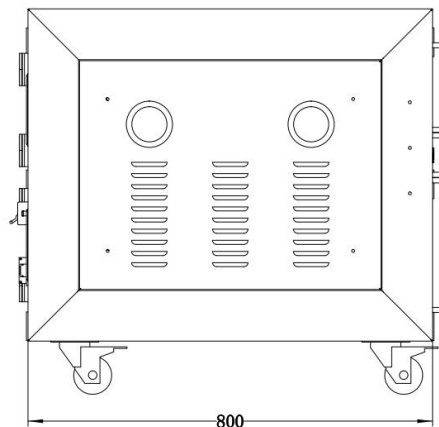
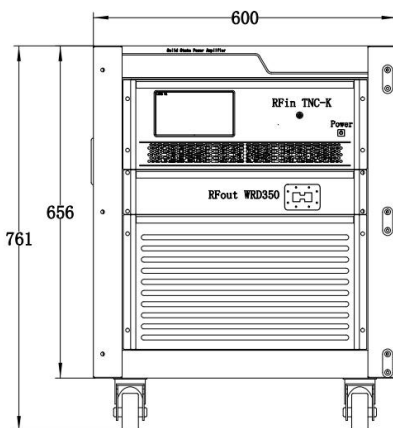
Parameter	Value	Units
Input/Output Connector	TNC Female/WRD350	
AC power Soft-Start	Push-button	
Forward/Reverse Coupling Connector	SMA Female/SMA Female	
Front Panel LCD Screen Display	7 inch touch screen	
Communication Interfaces	RJ45/DB9	
Pulse Input Connector	TNC Female	
Size	12U	
Weight	≤150	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control functions	1, Power setting on/off 2, ALC automatic level control 3, RF setting on/off 4, Gain adjustment 5, Real time status query
Protection functions	1, Over TEM 2, Over voltage 3, Over current 4, Over VSWR
Remote control	RS422/Ethernet
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
TLPA4G8G-63-62-P-BC	Solid State High Power Amplifier Systems 4-8GHz, Gain:63dB, Psat:62dBm, 220V AC, Built in Fan Cooling	Rev.1.1