

Solid State High Power Amplifier Systems

5.8-6.8GHz /64dB Gain/64 dBm Psat/380V AC

Model: TLPA5.8G6.8G-64-64-BC

TLPA5.8G6.8G-64-64-BC is a solid state high power amplifier systems provides high output power and high gain across the 5.8 to 6.8 GHz frequency range. The amplifier features a built-in 380V 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: 5.8-6.8GHz
- Gain: 64dB Min
- Psat Output Power:64dBm 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	5.8-6.8			GHz
Power Gain@Pout=63dBm	GP	64			dB
Gain flatness	ΔGL			± 3	dB
Output Psat	Psat	63	64		dBm
Pout adjust range	Padj	20			dB
Gain stability@24h	Gstb			± 0.25	dB
Gain fluctuation@-40~+55°C	Gvrt		± 2		dB
Gain slope	Gslp			± 0.02	dB/MHz
Spurious@Pout=63dBm	Spur			-60	dBc
2nd Harmonics	HAM		-30	-20	dBc
Input VSWR	VSWRin			1.5	:1
Output VSWR	VSWRout			1.5	:1
AC Voltage	Vac		380		V AC
Power Consumption	Pdiss	8000@Max			W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

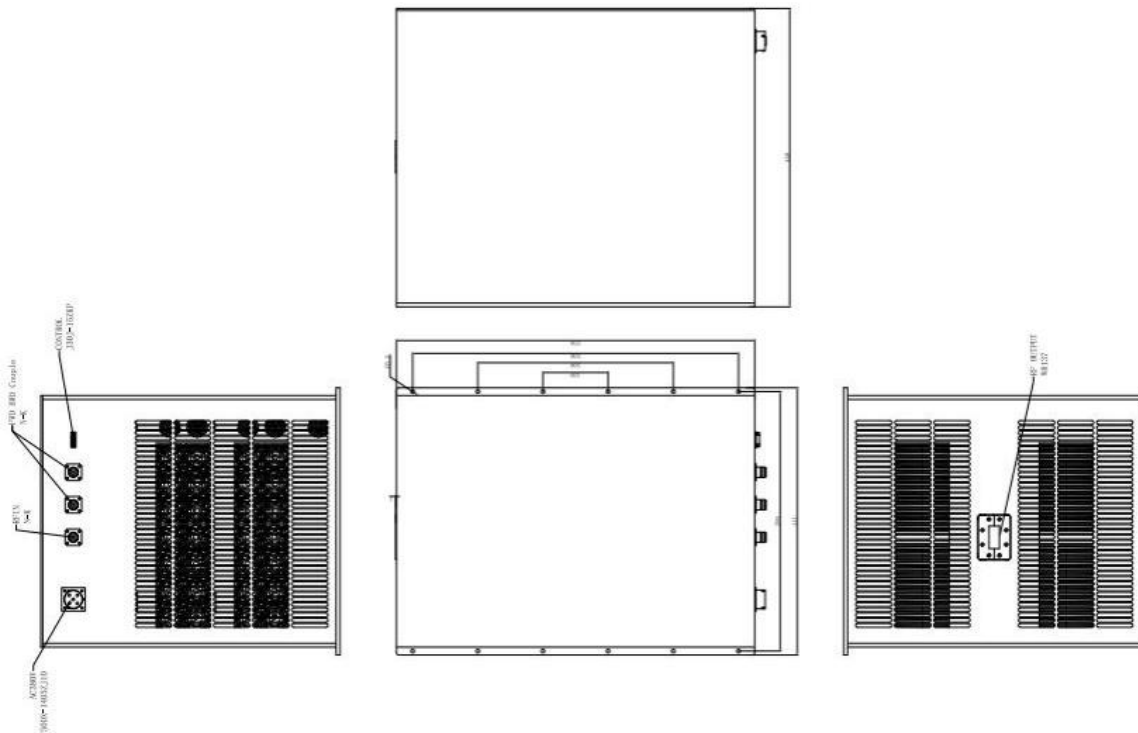
Parameter	Value	Units
Input /Output Connector	N Female/WR137	
Forward/Reverse Coupling	N Female/N Female	
Size	/	mm
Weight	≤100	Kg

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
Monitor functions	1, Temperature 2, Voltage 3, Current 4, Output/Reverse Power
Remote control	RS422/RS485
Cooling system	Built in Cooling system, forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-40		+55	°C
Non-operating Temperature*	-55		+125	°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
TLPA5.8G6.8G-64-64-BC	Solid State High Power Amplifier Systems 5.8-6.8GHz, Gain: 64dB, Psat: 64 dBm, 380V AC, Built in Fan Cooling	Rev.1.1