

Solid State High Power Amplifier Systems

0.5-2.5GHz/60dB Gain/60dBm Psat/380V AC

Model: TLPA0.5G2.5G-60-60-BC

TLPA0.5G2.5G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 0.5 to 2.5 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:

- Frequency range:0.5-2.5GHz
- Gain: 60dB Min
- Psat Output Power:60dBm 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	0.5-2.5			GHz
Working Mode	MOD	CW/PULSE compatible			
Power Gain@Pout=60dBm	GP	60			dB
Linear Gain flatness	ΔGL		± 3		dB
Output Psat	Psat	60			dBm
Spurious@Pout=60dBm	Spur			-60	dBc
Harmonics@Pout=60dBm	HAM		-15	-10	dBc
Input VSWR	VSWR			1.5	:1
AC Voltage	Vac		380		V AC
AC Current	Iac		18		A
Power consumption	Pdiss		7000	8000	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/7/16 DIN Female	
Forward/Reverse Coupling	SMA Female/SMA Female	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Communication Connector	DB9/RJ-45	
Size	12U*800 depth	mm
Weight	≤200	Kg

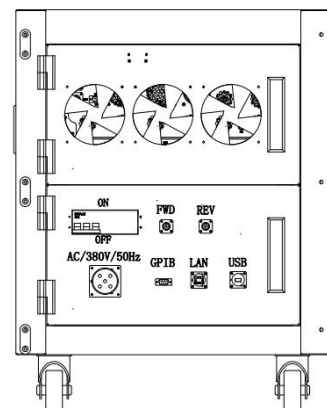
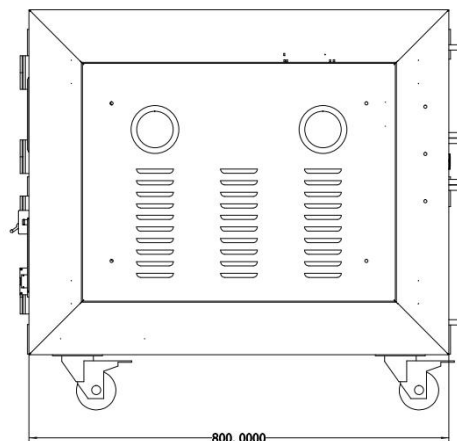
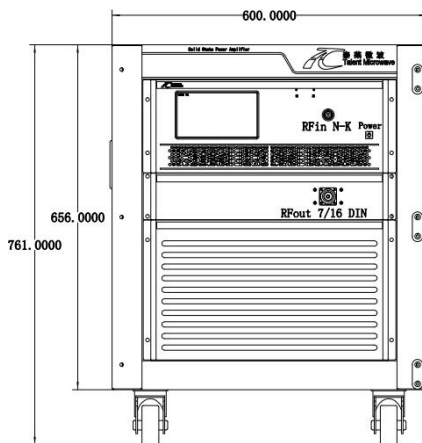
Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm

Regulatory Compliance:



Key Features:

Parameter	Advantages
Control functions	1, Power setting On/Off 2, ALC automatic level control
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
TLPA0.5G2.5G-60-60-BC	Solid State High Power Amplifier Systems 0.5-2.5GHz, Gain: 60dB, Psat: 60 dBm, 380V AC, Built in Fan Cooling	Rev.1.1