

Solid State High Power Amplifier Systems

5.2-5.9GHz/61dB Gain/61dBm Psat/220V AC

Model: TLPA5.2G5.9G-61-61-BC

TLPA5.2G5.9G-61-61-BC is a solid state high power amplifier systems provides high output power and high gain across the 5.2 to 5.9 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: 5.2-5.9 GHz
- Gain: 61dB Min
- Psat Output Power: 61dBm Min
- Protection: Over TEM, over voltage, over current, infinite VSWR protection
- 50 Ohm Matched Input / Output



Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	5.2-5.9			GHz
Working Mode	MOD	PULSE ONLY			
Power Gain	GP	61			dB
Output Psat@Pout=61dBm	Psat	61			dBm
Spurious@Pout=61dBm	Spur			-60	dBc
Harmonics@Pout=61dBm	HAM		-20		dBc
Input Signal Mode	IPS_MOD	CW/PULSE			
Modulation Signal Level	TTL	0		5	V
Modulation Frequency	MF	1		100	KHz
Pulse Width	T	0.3		300	us
Duty Cycle	τ	0.1		10	%
Rise/Fall Time	Tr		50	100	ns
Pulse Drop@T=100us	Pdrop		0.5	1	dB
Input VSWR	VSWR		1.5	2	:1
AC Voltage	Vac		220		V AC
Power consumption@10%	Pdiss		1000		W
Impedance	I/O-IMP		50		Ohms

Mechanical Specifications:

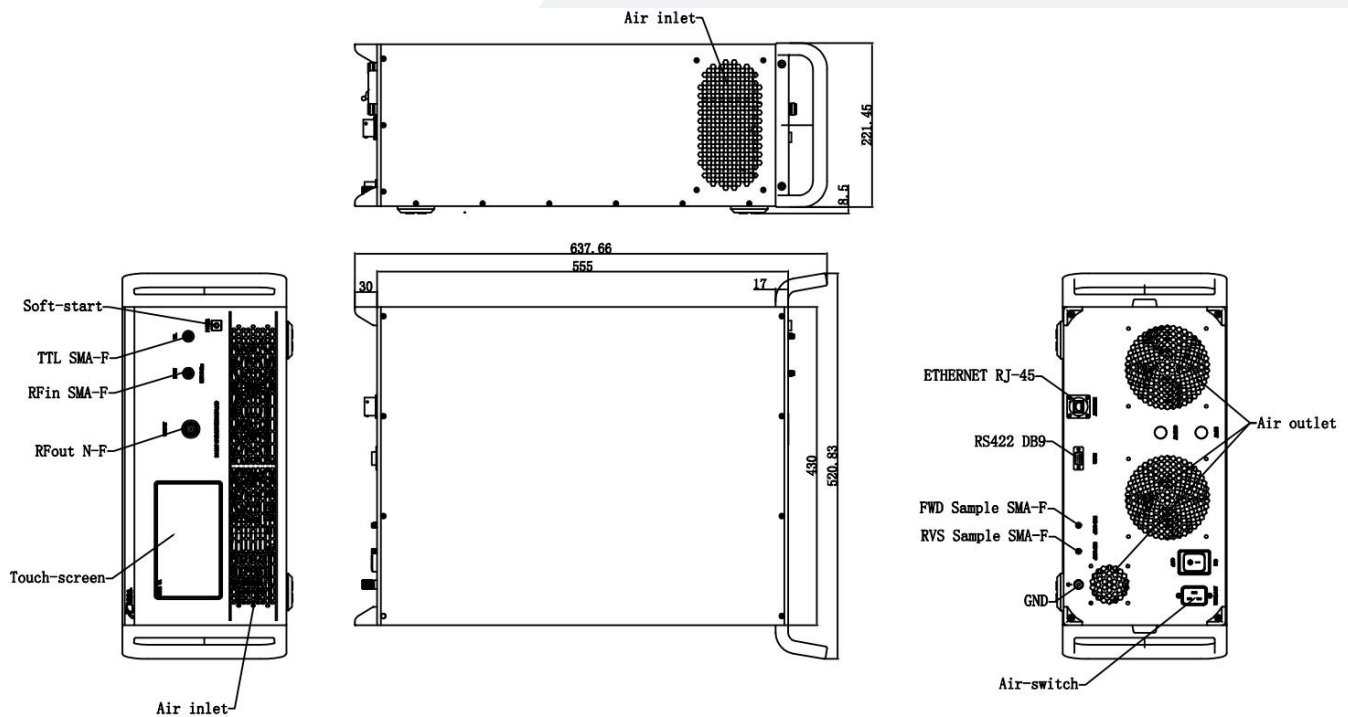
Parameter	Value	Units
Input /Output Connector	SMA Female/N Female	
Forward/Reverse Coupling	SMA Female/SMA Female	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Pulse Input Connector	BNC Female	
Communication Connector	DB9/RJ-45	
Size	19 Inch 5U*550 depth	mm
Weight	≤35	Kg

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
Protection functions	1, Over TEM 2, Over voltage 3, Over current 4, Infinite VSWR
Remote control	RS422/Ethernet
Cooling system	Built in Cooling system, forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°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
TLPA5.2G5.9G-61-61-BC	Solid State High Power Amplifier Systems 5.2-5.9GHz, Gain: 61dB, Psat: 61 dBm, 220V AC, Built in Fan Cooling	Rev.1.1