

Solid State High Power Amplifier Systems

5-13GHz/55dB Gain/55dBm Psat/220V AC

Model: TLPA5G13G-55-55-P-BC

TLPA5G13G-55-55-P-BC is a solid state high power amplifier systems provides high output power and high gain across the 5 to 13 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: 5-13GHz
- Gain: 55dB Min
- Psat Output Power:55dBm 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	5-13			GHz
Working Mode	MOD	PULSE ONLY			
Power Gain	GP	55			dB
Power Gain flatness	ΔGP		± 4	± 4.5	dB
Output Psat	Psat	55			dBm
Spurious@Pout=55dBm	Spur			-60	dBc
Harmonics@Pout=55dBm	HAM			-10	dBc
Modulation Signal Level	TTL	0		5	V
Modulation Frequency	MF	0.5		100	KHz
Pulse Width	T	0.3		500	us
Duty Cycle	τ			25	%
Rise/Fall Time	Tr		50	100	ns
Pulse Drop@T=100us	Pdrop		0.5	1	dB
AC Voltage	Vac		220		V AC
Power consumption@20% duty cycle	Pdiss			1200	W
Impedance	I/O-IMP		50		Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N 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:

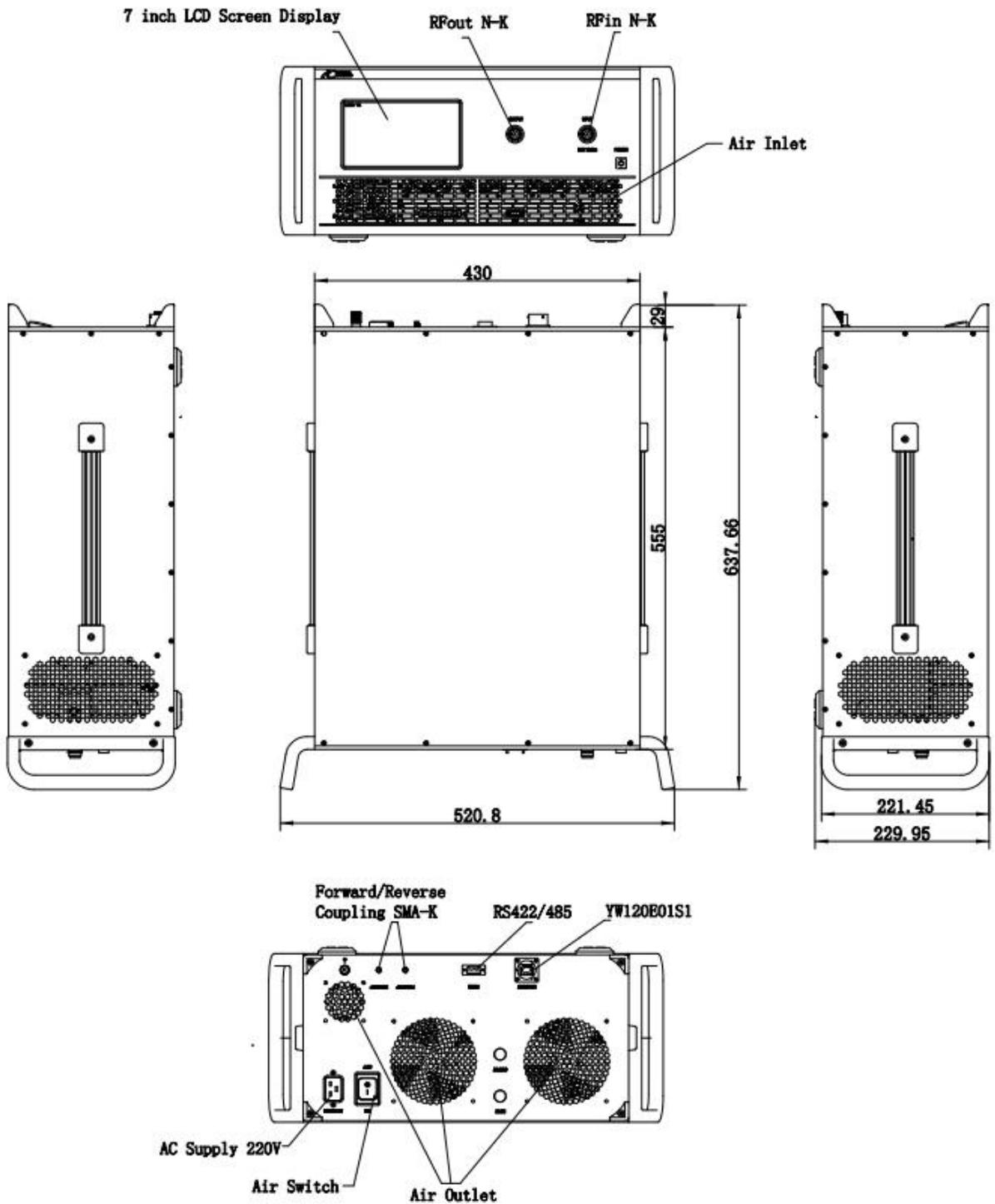
Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Key Features:

Parameter	Advantages
Control functions	1, Power setting on/off 2, Output power adjustment 3, Gain adjustment 4, Condition monitoring
Display functions	1, Output/reflected power 2, Fault informations
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

Outline Drawing:

Unit:mm



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
TLPA5G13G-55-55-P-BC	Solid State High Power Amplifier Systems 5-13GHz, Gain:55dB, Psat:55 dBm, 220V AC, Built in Fan Cooling	Rev.1.0