

Solid State High Power Amplifier Systems

0.2-1GHz/55dB Gain/55dBm P1dB/220V AC

Model: TLPA0.2G1G-55-55-BC

TLPA0.2G1G-55-55-BC is a solid state high power amplifier systems provides high output power and high gain across the 0.2 to 1GHz 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: 0.2-1GHz
- Gain: 55dB Min
- P1dB Output Power: 55dBm 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	0.2		1	GHz
Power Gain	GP	55			dB
Linear Gain flatness	ΔGL		± 3		dB
Gain adjust Range	ΔGR	20			dB
Gain adjust Step	ΔGS		0.5		dB
Output P1dB	P1dB	55			dBm
Spurious@Pout=55dBm	Spur			-60	dBc
Harmonics@Pout=55dBm	HAM		-20		dBc
Input VSWR	VSWR _{in}			2.0	:1
AC Voltage	Vac		220		V AC
Power Consumption	P _{diss}			2400	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	
Communication Connector	DB9/RJ45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	

Mechanical Specifications:

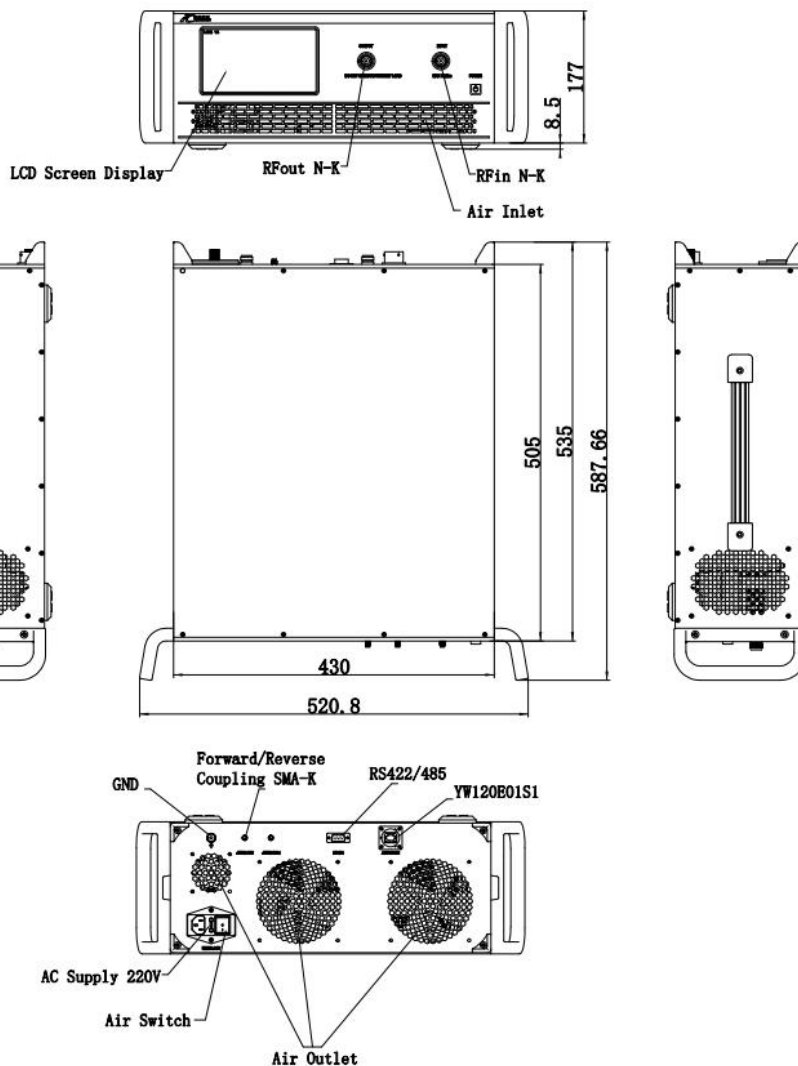
Parameter	Value	Units
Size	19 Inch 4U*550	mm
Weight	≤35	Kg

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 3, Gain 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		+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
TLPA0.2G1G-55-55-BC	Solid State High Power Amplifier Systems 0.2-1GHz, Gain:55dB, P1dB:55dBm, 220V AC, Built in Fan Cooling	Rev.1.1