

Solid State High Power Amplifier Systems

1.5-1.7GHz/60dB Gain/60dBm Psat/220V AC

Model: TLPA1.5G1.7G-60-60-BC

TLPA1.5G1.7G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 1.5 to 1.7 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: 1.5-1.7GHz
- 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	1.5		1.7	GHz
Working Mode	MOD	CW/PULSE compatible			dB
Power Gain	GP	60			dB
Gain flatness	Δ GL		± 2		dB
Gain adjust Range	Δ GR		31		dB
Gain adjust Step	Δ GS		0.5		dB
Output Psat	Psat	60			dBm
Spurious@Pout=60dBm	Spur			-60	dBc
Harmonics@Pout=60dBm	HAM			-15	dBc
Input VSWR	VSWRin			2	:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss			3500	W
Impedance	I/O-IMP		50		Ohms

Mechanical Specifications:

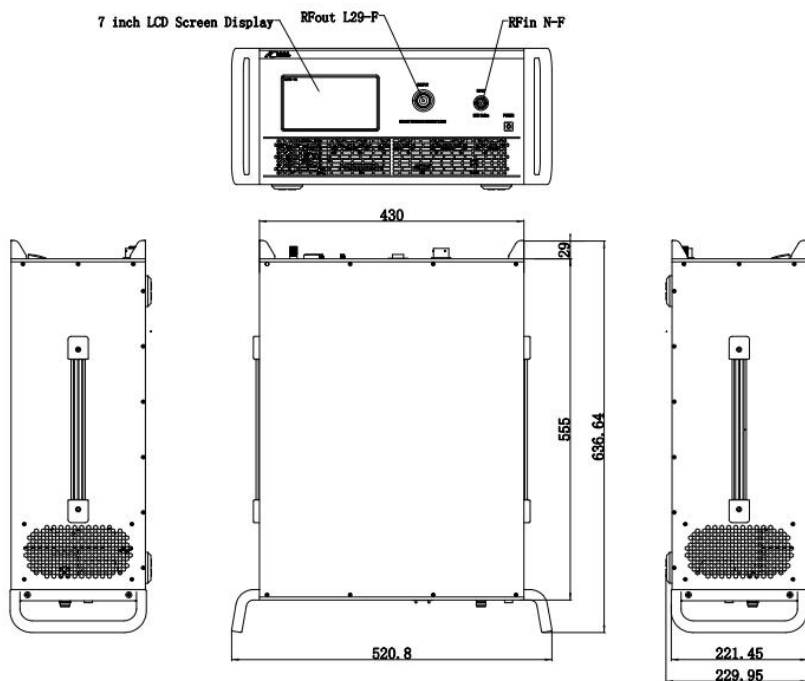
Parameter	Value	Units
Input /Output Connector	N Female/L29 Female	
Forward/Reverse Coupling	SMA Female/ SMA Female	
Communication Connector	DB9/RJ45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 5U*550 depth	mm
Weight	≤35	Kg

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, 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
TLPA1.5G1.7G-60-60-BC	Solid State High Power Amplifier Systems 1.5-1.7GHz, Gain:60dB, Psat:60dBm, 220V AC, Built in Fan Cooling	Rev.1.0