

Solid State High Power Amplifier Systems

17-22GHz/51dB Gain/51dBm Psat/220V AC

Model: TLPA17G22G-51-51-BC

TLPA17G22G-51-51-BC is a solid state high power amplifier systems provides high output power and high gain across the 17 to 22 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: 17-22GHz
- Gain: 51dB Min
- Psat Output Power: 51dBm 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	17-22			GHz
Power Gain	GP	51			dB
Gain flatness	ΔGL		±4		dB
Output Psat	Psat	51			dBm
Spurious@Pout=51dBm	Spur			-60	dBc
Harmonics@Pout=51dBm	HAM			-20	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss			1200	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

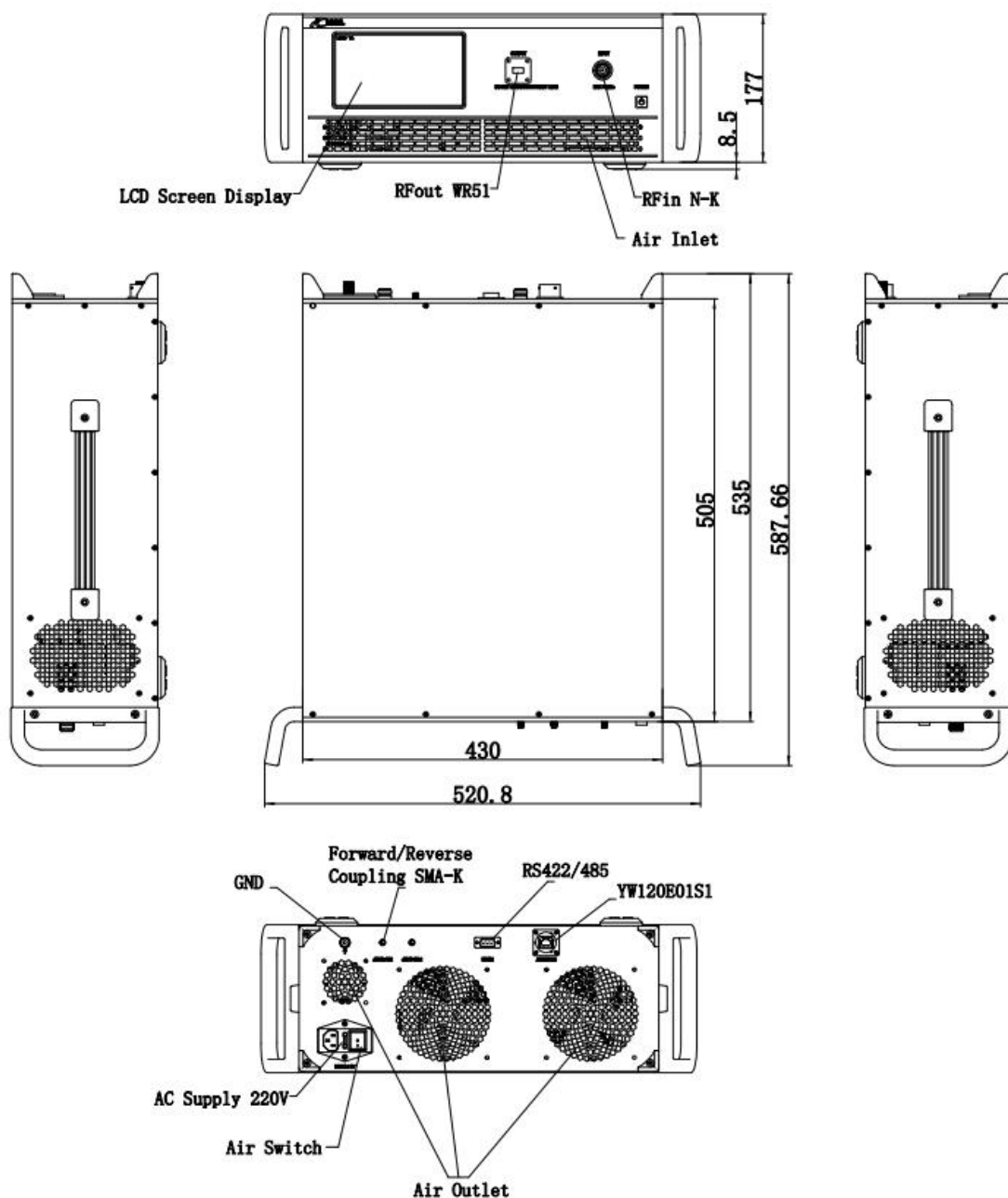
Parameter	Value	Units
Input /Output Connector	N Female/WR51	
Communication Connector	DB9/RJ45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 4U	
Weight	≤35	Kg

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
Display functions	1, Output/reflected power 2, Fault informations
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
TLPA17G22G-51-51-BC	Solid State High Power Amplifier Systems 17-22GHz, Gain:51dB, Psat:51dBm, 220V AC, Built in Fan Cooling	Rev.1.1