

Solid State High Power Amplifier Systems

17-22GHz /53dB Gain/53dBm Psat/220V AC

Model: TLPA17G22G-53-53-BC

TLPA17G22G-53-53-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:

- Wide Band: 17-22 GHz
- Gain: 53dB Min
- Psat Output Power:53dBm 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	17-22			GHz
Power Gain	GP	53			dB
Gain flatness	ΔGL		±4		dB
Output Psat	Psat	53			dBm
Spurious@Pout=53dBm	Spur			-60	dBc
Harmonics@Pout=53dBm	HAM			-20	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac	220			V AC
Power Consumption	Pdiss			2500	Watts
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

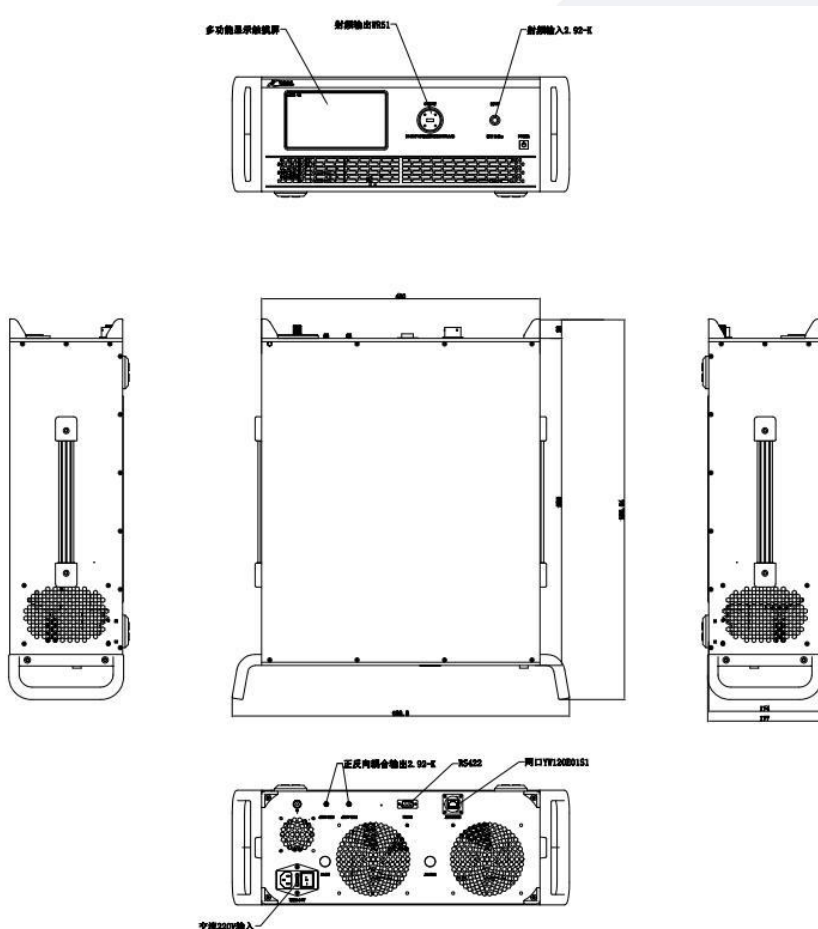
Parameter	Value	Units
Input /Output Connector	2.92mm Female/WR-51	
Communication Connector	DB9/RJ-45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 5U	
Weight	≤45	Kg

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
Display functions	1,Output Power 2,Reflect Power 3,Fault Informations
Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 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		+50	°C
Non-operating Temperature*	-45		+65	°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-53-53-BC	Solid State High Power Amplifier Systems 17-22GHz,Gain:53dB,Psat:53 dBm,220V AC,Built in Fan Cooling	Rev.1.0