

## Solid State High Power Amplifier Systems

1-1000MHz /52dB Gain/52 dBm Psat/220V AC

Model: TLPA1M1G-52-52-BC

TLPA1M1G-52-52-BC is a solid state high power amplifier systems provides high output power and high gain across the 1 to 1000 MHz 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: 1-1000MHz
- Gain: 52dB Min
- Psat Output Power:52dBm 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 1	BW1	1-100			MHz
Frequency range 2	BW2	100-1000			MHz
Power Gain	GP	52	55		dB
Gain flatness	$\Delta$ GL		$\pm 3.5$		dB
Gain adjust Range	$\Delta$ GR		31.5		dB
Gain adjust Step	$\Delta$ GS		0.5		dB
Output Psat	Psat	52	52.5		dBm
Output P1dB	P1dB		48		dBm
Spurious@Pout=160W	Spur			-60	dBc
Harmonics@Pout=160W	HAM		-15	-10	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac		220		V AC
AC Supply Current	Iac		3		A
Power Consumption	Pdiss		660		W
Impedance	I/O-IMP	50			Ohms

### Mechanical Specifications:

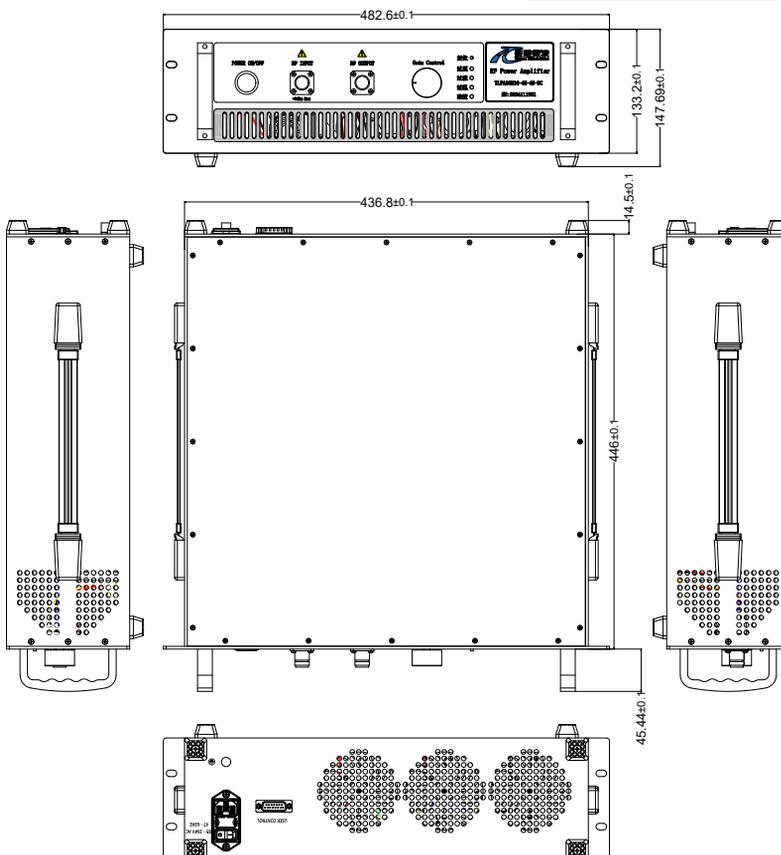
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Communication Connector	DB15	
Size	482.6*446*147.69	mm
Weight	≤30	Kg

### 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
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
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
TLPA1M1G-52-52-BC	Solid State High Power Amplifier Systems 1-1000MHz, Gain:52dB,Psat:52 dBm,220V AC,Built in Fan Cooling	Rev.1.0