Suzhou Talent Microwave,Inc
sales@talentmw.com
www.talentmw.com

Solid State High Power Amplifier Systems

2-6GHz/53dB Gain/53dBm Psat/220V AC

Model: TLPA2G6G-53-53-BC

TLPA2G6G-53-53-BC is a solid state high power amplifier systems provides high output power and high gain across the 2 to 6 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: 2-6GHz
- 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		2-6		GHz
Power Gain	GP	53	55		dB
Gain flatness	ΔGL		±3.5		dB
Gain adjust Range	ΔGR		31.5		dB
Output P1dB	P1dB		49		dBm
Output Psat	Psat	53			dBm
Spurious@Pout=53dBm	Spur			-60	dBc
Harmonics@Pout=53dBm	HAM		-10		dBc
Input VSWR	VSWRin			2	:1
AC Voltage	Vac		220		V AC
AC Supply Current	Iac		10		A
Impedance	I/O-IMP		50		Ohms

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Mechanical Specifications:

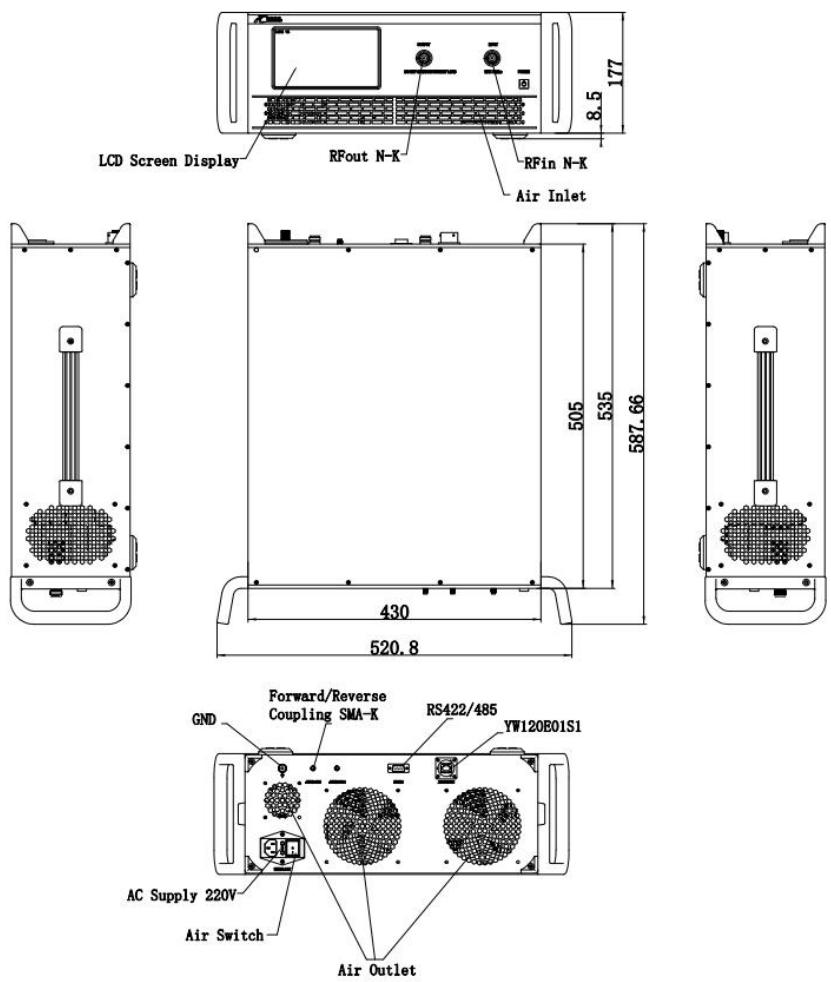
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	19 Inch 4U*600	mm
Weight	≤30	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



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DC Supply Connector(DSUB-15 Female):

Pin	Name	Function
1	Reset	When the amplifier triggers overcurrent or standing wave protection, the amplifier will be turned off and enter a state of lockout. Placing a 10ms high level on this pin will restart the amplifier. Only overcurrent or standing wave protection can be reset.
2	Over voltage	When the supply voltage exceeds 32V, the power amplifier will be turned off. This pin will output a high level. When the supply voltage is lower than 32V, this pin will output a low level.
3	Over current	When the power amplifier current exceeds the limit, the power amplifier will be closed and enter the state lock, this pin will output a high level.
4	Over TEM	When the temperature of the case exceeds 85 ℃, the power amplifier will turn off and this pin will be pulled high. If the temperature of case drops to 70 ℃, the power amplifier will return to normal operation, and this pin will be pulled low.
5	Over VSWR	When the external standing wave of the power amplifier output is greater than 5, the power amplifier is turned off, and this pin will output a high level. When the external standing wave is less than 5, this pin outputs a low level.
6	EN	Amplifier Enable: TTL High (5V) (Internally Pulled-High) Amplifier Disable: Short to ground
7	GND	Ground
8~15	NC	No connected

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

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Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+40	℃
Non-operating Temperature*	-30		+50	℃
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
TLPA2G6G-53-53-BC	Solid State High Power Amplifier Systems 0.5-6GHz,Gain:53dB,Psat:53dBm,220V AC,Built in Fan Cooling	Rev.1.1