

Solid State High Power Amplifier Systems

800MHz-2GHz/56dB Gain/55dBm Psat/220V AC

Model: TLPA800M2G-56-55-BC

TLPA800M2G-56-55-BC is a solid state high power amplifier systems provides high output power and high gain across the 800MHz to 2GHz 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: 800MHz-2GHz
- Gain: 56dB Min
- Psat Output Power: 55dBm 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	0.8		2	GHz
Power Gain	GP	56	58		dB
Gain flatness	ΔGL		± 2	± 2.5	dB
Output P1dB	P1dB	52	53		dBm
Output Psat	Psat	55			dBm
Spurious	Spur			-60	dBc
Harmonics	HAM			-10	dBc
Input VSWR	VSWR _{in}		1.5	2.0	:1
AC Voltage	V _{ac}	110	220		V AC
AC Supply Current	I _{ac}		8		A
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

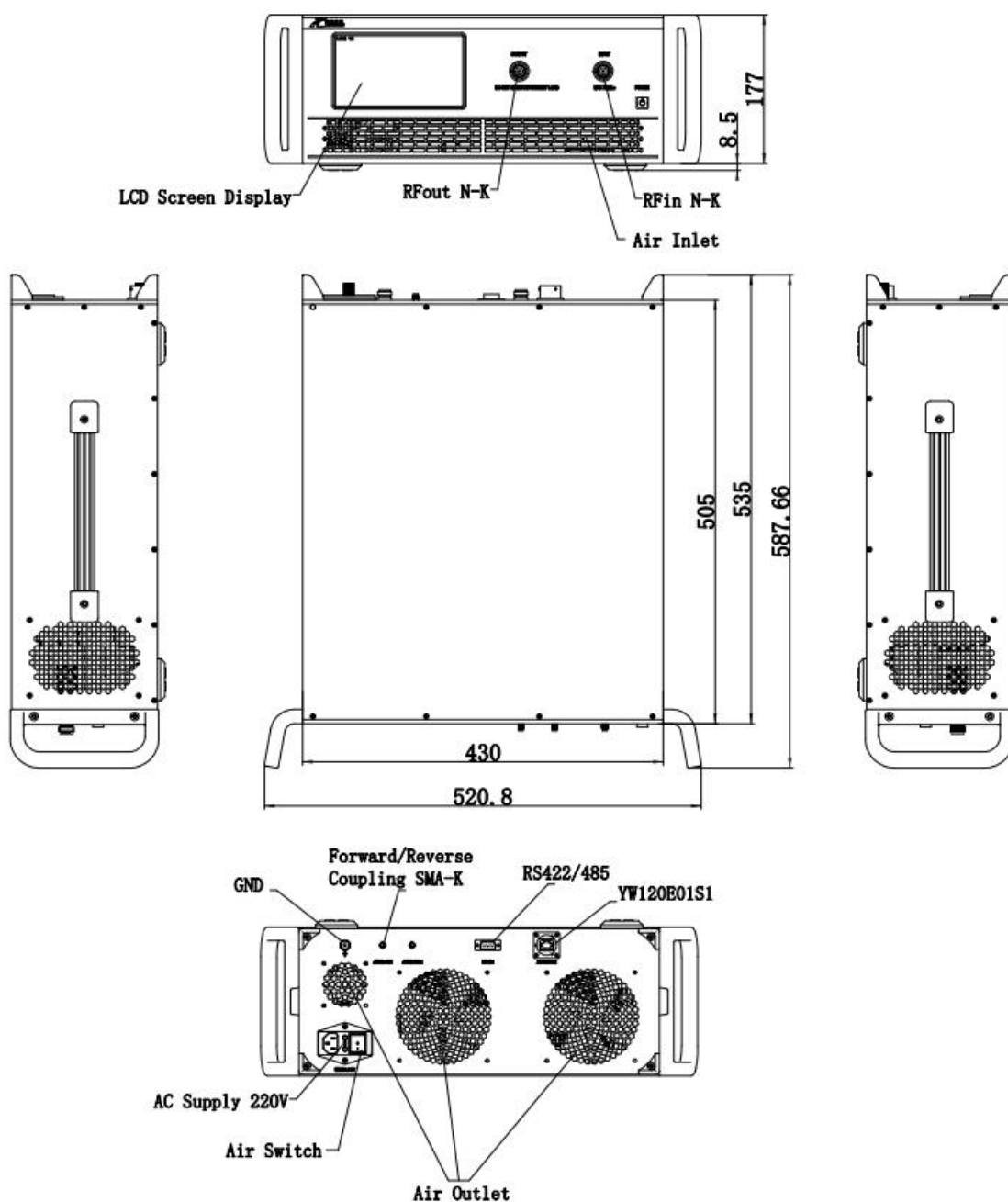
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Size	482.6*133.2*447	mm
Weight	≤15	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	0 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
TLPA800M2G-56-55-BC	Solid State High Power Amplifier Systems 800MHz-2GHz, Gain:56dB, Psat:55dBm, 220V AC, Built in Fan Cooling	Rev.1.1