

Solid State High Power Amplifier Systems

80MHz-1GHz/57dB Gain/57dBm Psat/220V AC

Model: TLPA80M1G-57-57-BC

TLPA80M1G-57-57-BC is a solid state high power amplifier systems provides high output power and high gain across the 80MHz to 1GHz 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: 80MHz-1GHz
- Gain: 57dB Min
- Psat Output Power: 57dBm 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	80MHz-1GHz			
Power Gain	GP	57	60		dB
Gain flatness	Δ GL		± 2	± 3	dB
Gain adjust Range	Δ GR		30		dB
Output P1dB	P1dB		53		dBm
Output Psat	Psat	57	58		dBm
Spurious	Spur			-70	dBc
Harmonics@P1dB	HAM		-15		dBc
Input VSWR	VSWR _{in}		1.5	2	:1
AC Voltage	Vac	110	220		V AC
AC Supply Current	Iac		16		A
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

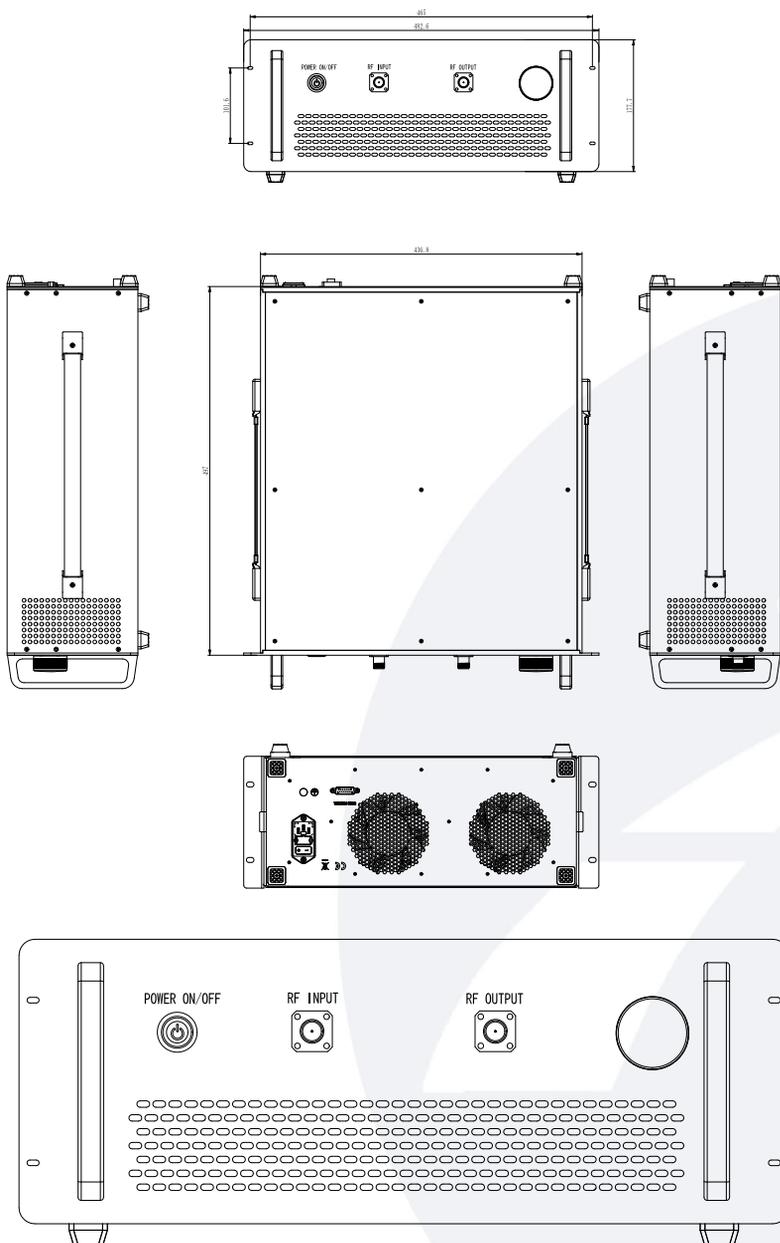
Parameter	Value	Units
Input /Output Connector	N Female/N Female	
Communication Connector	RS422/USB	
Size	19 Inch 4U*500	mm
Weight	≤ 25	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+10 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
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
TLPA80M1G-57-57-BC	Solid State High Power Amplifier Systems 80MHz-1GHz, Gain:57dB, Psat:57dBm, 220V AC, Built in Fan Cooling	Rev.1.1