

Solid State High Power Amplifier Systems

4.4-5 GHz /70dB Gain/60 dBm Psat/380V AC

Model: TLPA4.4G5G-70-60-BC

TLPA4.4G5G-70-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 4.4 to 5 GHz frequency range. The amplifier features a built-in 380V 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: 4.4-5GHz
- Gain: 70dB Min
- Psat Output Power:60dBm 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	4.4-5			GHz
Gain	GP	70	73		dB
Gain flatness	ΔGL		±3		dB
Output Psat	Psat	60			dBm
Output P1dB	P1dB		57		dBm
Spurious	Spur			-60	dBc
Harmonics	HAM		-20		dBc
Input VSWR	VSWRin		1.5	2.0	:1
AC Voltage	Vac		380		V AC
Power Consumption	Pdiss	45000@typ			W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

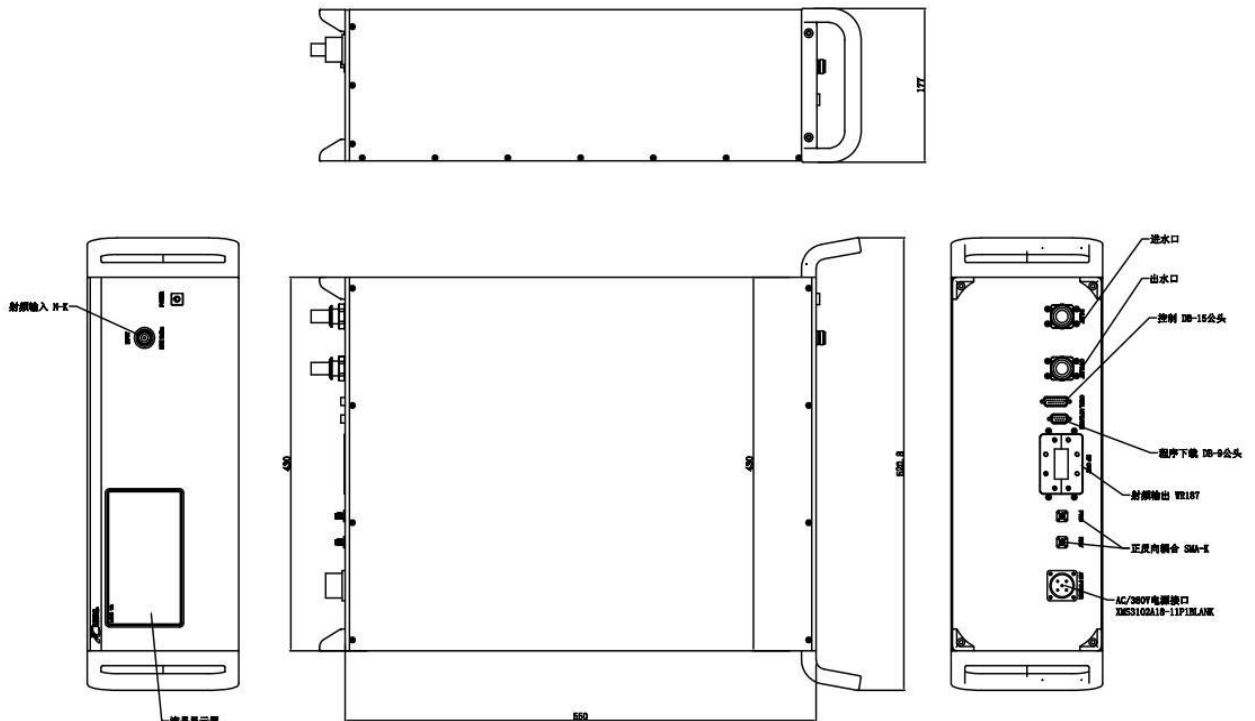
Parameter	Value	Units
Input /Output Connector	N Female/WR187	
Monitor and control interface	D-SUB15	
Size	19 inch 4U	mm
Weight	50	Kg

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	RS422/Ethernet
Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
Control functions	1,Power setting On/Off 2,ALC
Cooling system	Built in Cooling system, liquid cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-10		+50	°C
Non-operating Temperature*	-40		+85	°C
Relative humidity		98		%
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
TLPA4.4G5G-70-60-BC	Solid State High Power Amplifier Systems 4.4-5GHz,Gain:70dB,Psat:60dBm,220V AC,Built in Fan Cooling	Rev.1.0