

Solid State High Power Amplifier Systems

12-18GHz/63dB Gain/62dBm Psat/220V AC

Model: TLPA12G18G-63-62-P-BC

TLPA12G18G-63-62-P-BC is a solid state high power amplifier systems provides high output power and high gain across the 12 to 18 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: 12-18GHz
- Gain: 63dB Min
- Psat Output Power: 62dBm Min
- Protection: Over TEM, over voltage, over current ,infinite VSWR protection
- 50 Ohm Matched Input / Output

Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	12-18			GHz
Power Gain	GP	63			dB
Peak Output Power	P.P	62	63		dB
Output Power adjust Range	ΔPR		40		dB
Output Power adjust Step	ΔPS		0.5		dB
Output power control accuracy	ΔPA		±1		dB
Spurious	Spur			-60	dBc
Harmonics	HAM			-20	dBc
Modulation Frequency	MF	0.2		100	KHz
Pulse Width	T	0.2		300	us
Duty Cycle	τ			10	%
Rise/Fall Time	Tr		50	100	ns
Input VSWR	VSWR			2	:1
AC Voltage	Vac		220		V AC
Power consumption@10% duty cycle	Pdiss		1500		W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/WR62	
Forward/Reverse Coupling	SMA Female/SMA Female	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Pulse Input Connector	TNC Female	
Communication Connector	DB9/RJ-45	
Size	19 Inch 5U	
Weight	≤45	Kg

Absolute Maximum Ratings:

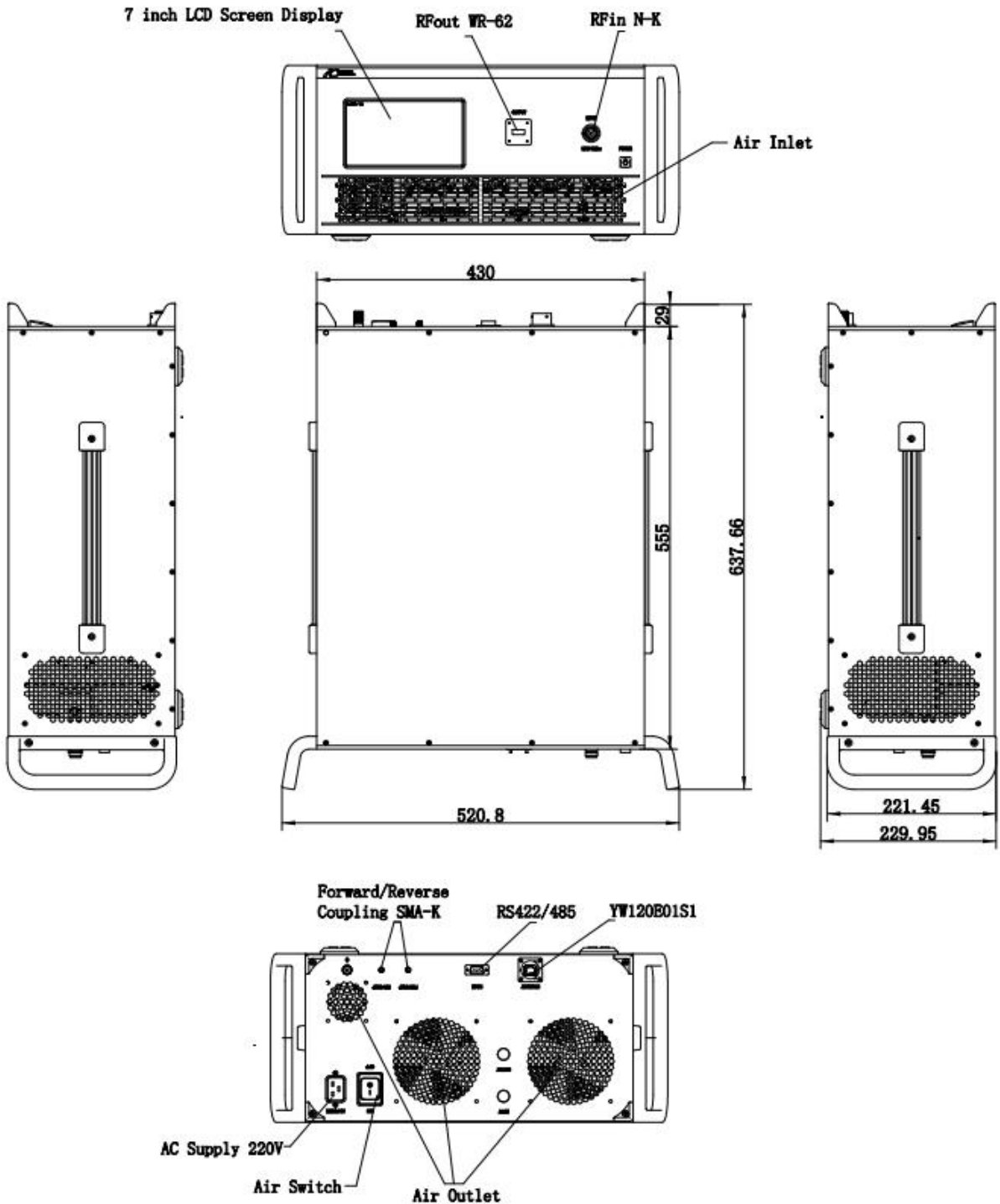
Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Key Features:

Parameter	Advantages
Control functions	1, Power setting on/off 2,ALC automatic level control 3,RF ON/OFF 4,Gain adjustment 5,Real time status query
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Infinite VSWR
Remote control	RS422/Ethernet
Indications	1,AC on/off 2,DC on/off 3,RF on/off 4,Fault
Cooling system	Built in Cooling system,forced air cooling

Outline Drawing:

Unit:mm



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
TLPA12G18G-63-62-P-BC	Solid State High Power Amplifier Systems 12-18GHz, Gain:63dB, Psat:62dBm, 220V AC, Built in Fan Cooling	Rev.1.1