

## Solid State High Power Amplifier Systems

6-18GHz/63dB Gain/63dBm Psat/220V AC

Model: TLPA6G18G-63-63-P-BC

TLPA6G18G-63-63-P-BC is a solid state high power amplifier systems provides high output power and high gain across the 6 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: 6-18GHz
- Gain: 63dB Min
- Psat Output Power: 63dBm 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	6		18	GHz
Power Gain	GP	63			dB
Power Gain flatness@Pout=63dBm	$\Delta$ GL		$\pm 4.5$		dB
Output Psat	Psat	63			dBm
Spurious@Pout=63dBm	Spur			-60	dBc
Harmonics@Pout=63dBm	HAM		-15		dBc
Modulation Signal Level	TTL	0		5	V
Modulation Frequency	MF	1		1000	Hz
Pulse Width	T	20		1000	ns
Duty Cycle	$\tau$			10	%
Rise/Fall Time	Tr		15		ns
Pulse Drop@T=1us	Pdrop		0.5		dB
AC Voltage	Vac		220		V AC
Power consumption@10% duty cycle	Pdiss		2500		W
Impedance	I/O-IMP		50		Ohms

## Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/WRD500	
Forward/Reverse Coupling	SMA Female/SMA Female	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Pulse Input Connector	BNC Female	
Communication Connector	Ethernet/RS422	
Size	19 Inch 5U*550 depth	mm
Weight	≤45	Kg

## Absolute Maximum Ratings:

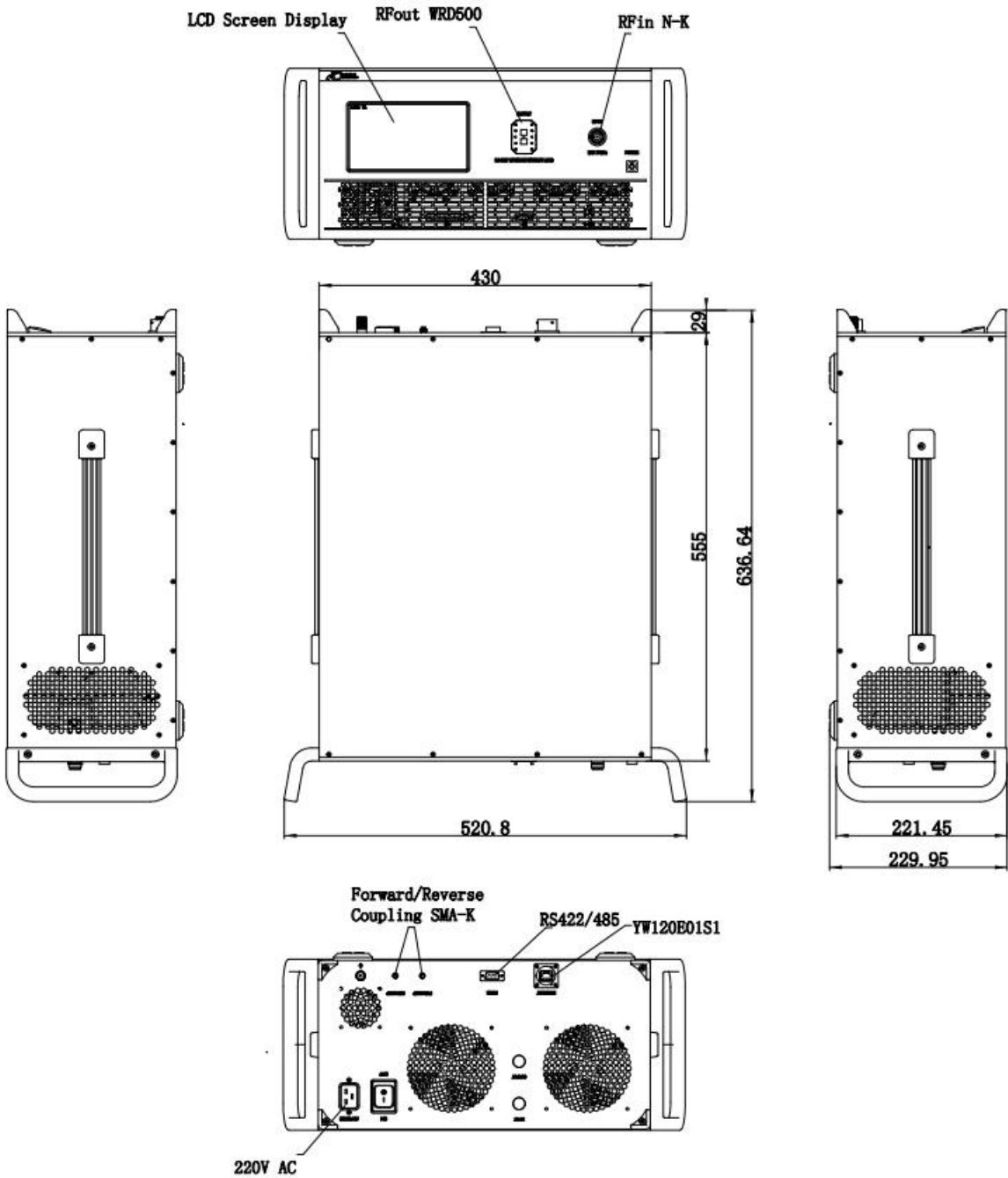
Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

## Key Features:

Parameter	Advantages
Control functions	1, Power setting on/off 2, Output power&gain level control 3, Status monitoring
Display functions	1, Output&reflected power 2, Fault informations
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

**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
TLPA6G18G-63-63-P-BC	Solid State High Power Amplifier Systems 6-18GHz, Gain:63dB, Psat:63dBm, 220V AC, Built in Fan Cooling	Rev.1.0