

Solid State High Power Amplifier Systems

15-18GHz/60dB Gain/60dBm Psat/220V AC

Model: TLPA15G18G-60-60-BC

TLPA15G18G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 15 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: 15-18GHz
- Gain: 60dB 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	15-18			GHz
Power Gain	GP	60			dB
Gain flatness	ΔGL		± 3		dB
Peak Output Power	P.P	60			dB
Output Power adjust Range	ΔPR		30		dB
Output Power adjust Step	ΔPS		0.5		dB
Peak Output Power flatness	$\Delta P.P$			± 1.5	dB
Spurious	Spur		-60	-50	dBc
Harmonics	HAM		-20		dBc
Modulation Frequency	MF			100	KHz
Pulse Width	T	0.1		300	us
Duty Cycle	τ			20	%
Rise/Fall Time	Tr		30	50	ns
Input VSWR	VSWR			2	:1
AC Voltage	Vac		220		V AC
Power consumption@5% duty cycle	Pdiss			380	W
Power consumption@10% duty cycle	Pdiss			730	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

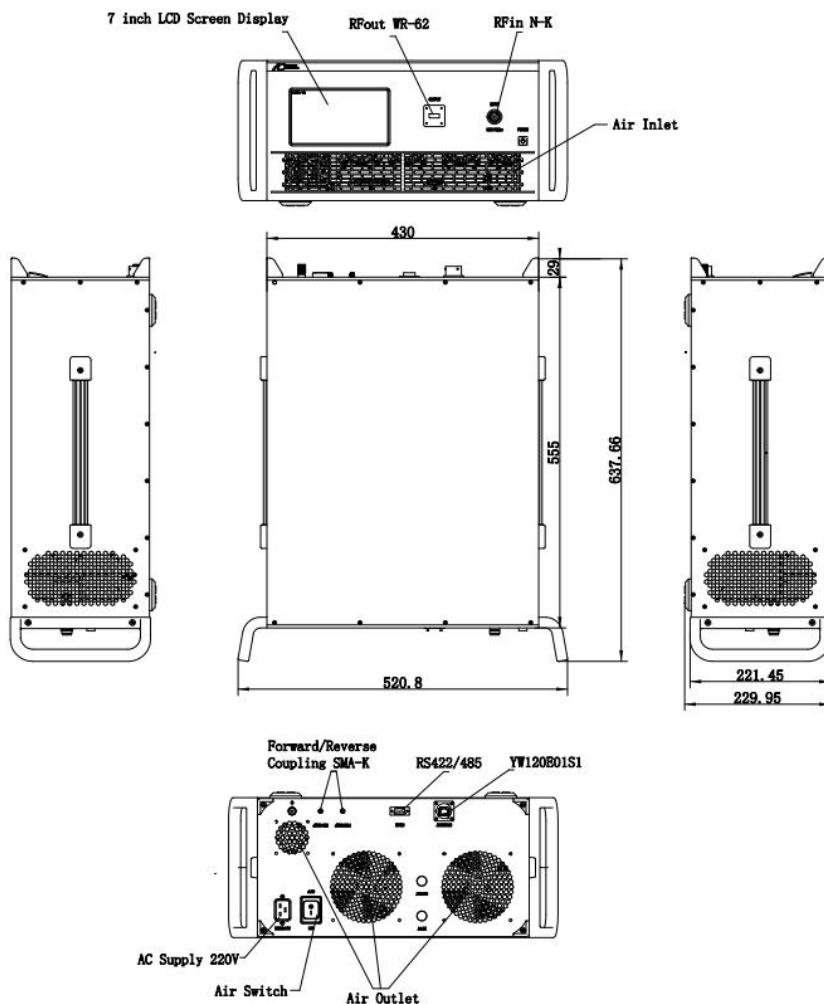
Parameter	Value	Units
Input /Output Connector	N Female/WR62	
Communication Connector	DB9/RJ45	
Size	19 Inch 5U	
Weight	≤45	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	TBD
SD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Regulatory Compliance:



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, Over 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

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
TLPA15G18G-60-60-BC	Solid State High Power Amplifier Systems 15-18GHz, Gain:60dB, Psat:60dBm, 220V AC, Built in Fan Cooling	Rev.1.1