

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:

- Wide Band: 12-18 GHz
- Gain: 63dB Min
- Psat Output Power:62dBm 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	12-18			GHz
Gain	GP	63			dB
Peak Output Power	P.P	62	63		dBm
Output power adjust range	ΔPR		40		dB
Output power adjust step	ΔPS		0.5		dB
Output power control accuracy	ΔPA		±1		dB
Duty Cycle	PWM			10	%
Pulse Width	PW	0.2		300	us
Modulation frequency	FM	0.2		100	KHz
Rise time	PT		50	100	ns
Fall time	NT		50	100	ns
Spurious	Spur			-60	dBc
Harmonics	HAM			-20	dBc
Input VSWR	VSWRin			2.0	:1
AC Voltage	Vac	220			V AC
Power Consumption@10%	Pdiss	1500			Watts
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

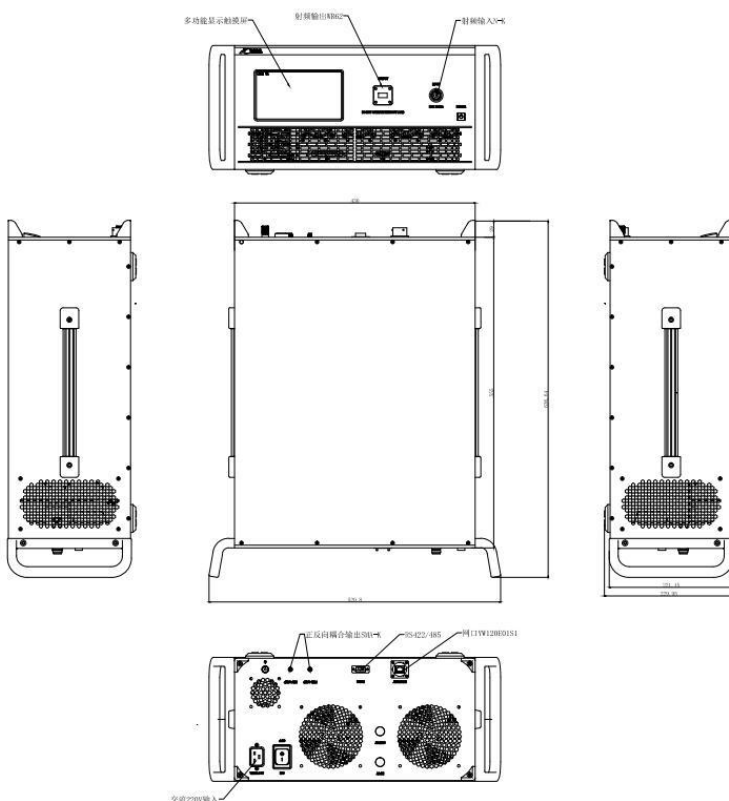
Parameter	Value	Units
Input /Output Connector	N Female/WR62	
Forward/Reverse Coupling	SMA Female/SMA Female	
Front Panel LCD Screen Display	LCD Screen Display	
Communication Interfaces	RJ45/DB9	
Pulse Input	TNC Female	
Size	19 Inch 5U	
Weight	45	Kg

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	260V AC
RF Input Power	5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control	RS422/Ethernet,LCD Screen Display
Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
Control functions	1, Power setting On/Off 2,ALC 3,RF ON/OFF 4,Gain adjustment 5,Real time status query
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		+50	°C
Non-operating Temperature*	-45		+65	°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,Peak output Power:62dBm,220V AC,Built in Fan Cooling	Rev.1.0