

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

电气特性 Electrical Characteristics:

参数 Parameter	代码 Symbol	Min	Typ	Max	单位 Units
频率范围 Frequency range	BW	12-18			GHz
增益 Gain	GP	63			dB
峰值输出功率 Peak Output Power	P.P	62	63		dBm
输出功率可调范围 Output power adjust range	ΔPR		40		dB
输出功率可调步进 Output power adjust step	ΔPS		0.5		dB
输出功率调节精度 Output power control accuracy	ΔPA		±1		dB
脉冲占空比 Duty Cycle	PWM			10	%
脉冲宽度 Pulse Width	PW	0.2		300	us
调制频率 Modulation frequency	FM	0.2		100	KHz
上升沿时间 Rise time	PT		50	100	ns
下降沿时间 Fall time	NT		50	100	ns
杂散 Spurious	Spur			-60	dBc
谐波 Harmonics	HAM			-20	dBc
输入驻波 Input VSWR	VSWRin			2.0	:1
交流电压 AC Voltage	Vac	220			V AC
功耗 Power Consumption@10%	Pdiss	1500			Watts
阻抗 Impedance	I/O-IMP	50			Ohms

机械特性 Mechanical Specifications:

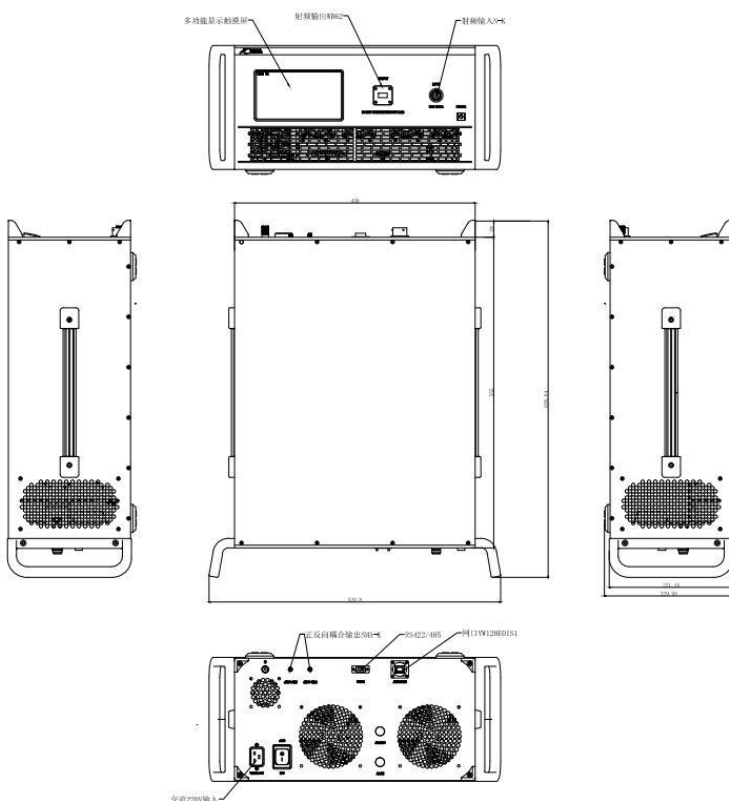
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	N Female/WR62	
正向/反向耦合 Forward/Reverse Coupling	SMA Female/SMA Female	
液晶显示屏 Front Panel LCD Screen Display	LCD Screen Display	
通信接口 Communication Interfaces	RJ45/DB9	
脉冲输入 Pulse Input	TNC Female	
尺寸 Size	19 Inch 5U	
重量 Weight	45	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	260V AC
输入功率 RF Input Power	5 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形图 Outline Drawing:

Unit:mm



主要功能 Key Features:

参数 Parameter	特点 Advantages
控制 Control	RS422/Ethernet,LCD Screen Display
内置保护功能 Protection functions	1,Over TEM 2,Over voltage 3,Over current protection 4,Over VSWR
控制功能 Control functions	1, Power setting On/Off 2,ALC 3,RF ON/OFF 4,Gain adjustment 5,Real time status query
指示灯 Indications	1,AC On/Off 2,DC On/Off 3,RF On/Off 4,Fault
冷却系统 Cooling system	Built in Cooling system,forced air cooling

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature*	-20		+50	℃
存储温度 Non-operating Temperature*	-45		+65	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 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