

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:

- Wide Band: 15-18 GHz
- Gain: 60dB Min
- Psat Output Power:60dBm 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	15-18			GHz
增益 Gain	GP	60			dB
增益平坦度 Gain flatness	Δ GL		± 3		dB
峰值输出功率 Peak Output Power	P.P	60			dBm
峰值功率平坦度 Peak Power flatness	Δ PL			± 1.5	dB
输出功率可调范围 Output power adjust range	Δ PR		30		dB
输出功率可调步进 Output power adjust step	Δ PS		0.5		dB
脉冲占空比 Duty Cycle	PWM			20	%
脉冲宽度 Pulse Width	PW	0.1		300	us
调制频率 Modulation frequency	FM			100	KHz
上升沿时间 Rise time	PT		30	50	ns
下降沿时间 Fall time	NT		30	50	ns
杂散 Spurious	Spur		-60	-50	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@5%/10%	Pdiss	380/730@Max			Watts
阻抗 Impedance	I/O-IMP	50			Ohms

机械特性 Mechanical Specifications:

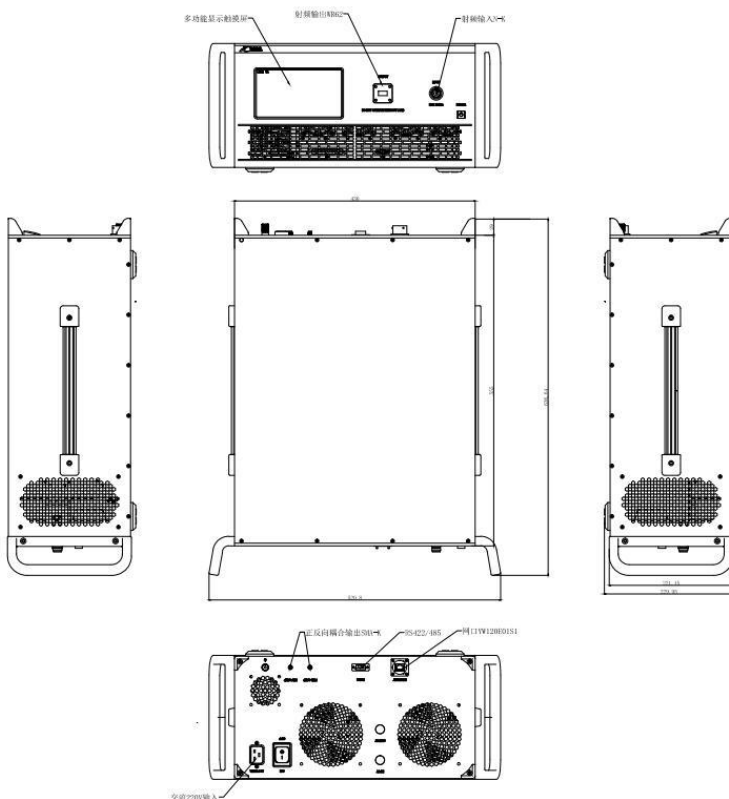
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	N Female/WR62	
控制接口 Control Ports	DB9/RJ-45	
尺寸 Size	19 Inch 5U	
重量 Weight	45	Kg

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
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
TLPA15G18G-60-60-BC	Solid State High Power Amplifier Systems 15-18GHz,Gain:60dB,Peak output Power:60dBm,220V AC,Built in Fan Cooling	Rev.1.0