

Solid State High Power Amplifier Systems

0.5-2.5GHz/60dB Gain/60dBm Psat/380V AC

Model: TLPA0.5G2.5G-60-60-BC

TLPA0.5G2.5G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 0.5 to 2.5 GHz frequency range. The amplifier features a built-in 380V 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:0.5-2.5GHz
- 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	0.5-2.5			GHz
工作模式 Working Mode	MOD	CW/PULSE compatible			
功率增益 Power Gain@Pout=60dBm	GP	60			dB
线性增益平坦度 Linear Gain flatness	ΔGL		±3		dB
饱和输出功率 Output Psat	Psat	60			dBm
杂散 Spurious@Pout=60dBm	Spur			-60	dBc
谐波 Harmonics@Pout=60dBm	HAM		-15	-10	dBc
输入驻波 Input VSWR	VSWR			1.5	:1
交流电压 AC Voltage	Vac		380		V AC
交流电流 AC Current	Iac		18		A
功耗Power consumption	Pdiss		7000	8000	W
阻抗 Impedance	I/O-IMP	50			Ohms

机械特性 Mechanical Specifications:

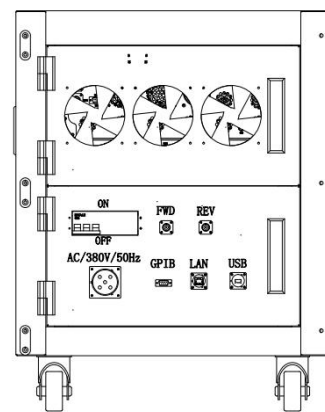
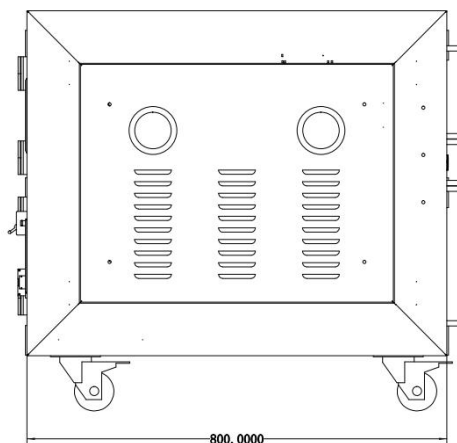
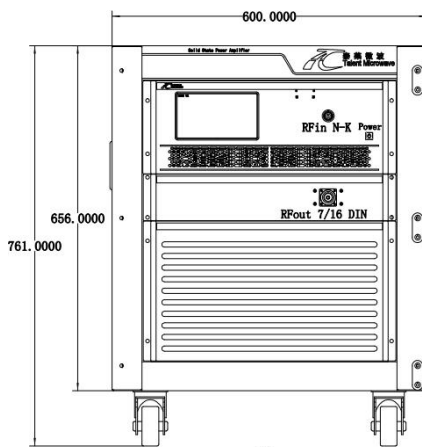
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	N Female/7/16 DIN Female	
正向/反向耦合 Forward/Reverse Coupling	SMA Female/SMA Female	
液晶显示屏 Front Panel LCD Screen Display	7 inch LCD Screen Display	
通信接口 Communication Connector	DB9/RJ-45	
尺寸 Size	12U*800 depth	mm
重量 Weight	≤200	Kg

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
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
控制功能 Control functions	1, Power setting On/Off 2, ALC automatic level control
内置保护功能 Protection functions	1, Over TEM 2, Over voltage 3, Over current 4, Over VSWR
监控和控制 Remote control	RS422/Ethernet
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		+40	°C
存储温度 Non-operating Temperature*	-30		+50	°C
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
TLPA0.5G2.5G-60-60-BC	Solid State High Power Amplifier Systems 0.5-2.5GHz, Gain: 60dB, Psat: 60 dBm, 380V AC, Built in Fan Cooling	Rev.1.1