

Solid State High Power Amplifier Systems

75-110GHz/30dB Gain/30dBm Psat/220V AC

Model: TLPA75G110G-30-30-BC

TLPA75G110G-30-30-BC is a solid state high power amplifier systems provides high output power and high gain across the 75 to 110 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: 75-110GHz
- Gain: 30dB Min
- Psat Output Power:30dBm Min
- Protection:Over TEM,over voltage, over current ,infinite 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	75-110			GHz
工作模式 Working Mode	MOD	CW/PULSE compatible			
功率增益 Power Gain@Psat	GP	30			dB
增益平坦度 Gain flatness	Δ GL		± 3		dB
饱和输出功率 Output Psat	Psat	30			dBm
杂散 Spurious@Psat	Spur			-50	dBc
输入信号体制 Input Signal Mode	IPS_MOD	CW/PULSE			
调制信号电平 Modulation Signal Level	TTL	0		5	V
调制频率 Modulation Frequency	MF			200	KHz
上升/下降沿 Rise/Fall Time	Tr		30		ns
顶降 Pulse Drop@T=100us	Pdrop		0.5		dB
交流电压 AC Voltage	Vac		220		V AC
功耗 Power consumption	Pdiss			100	W
阻抗 Impedance	I/O-IMP		50		Ohms

机械特性 Mechanical Specifications:

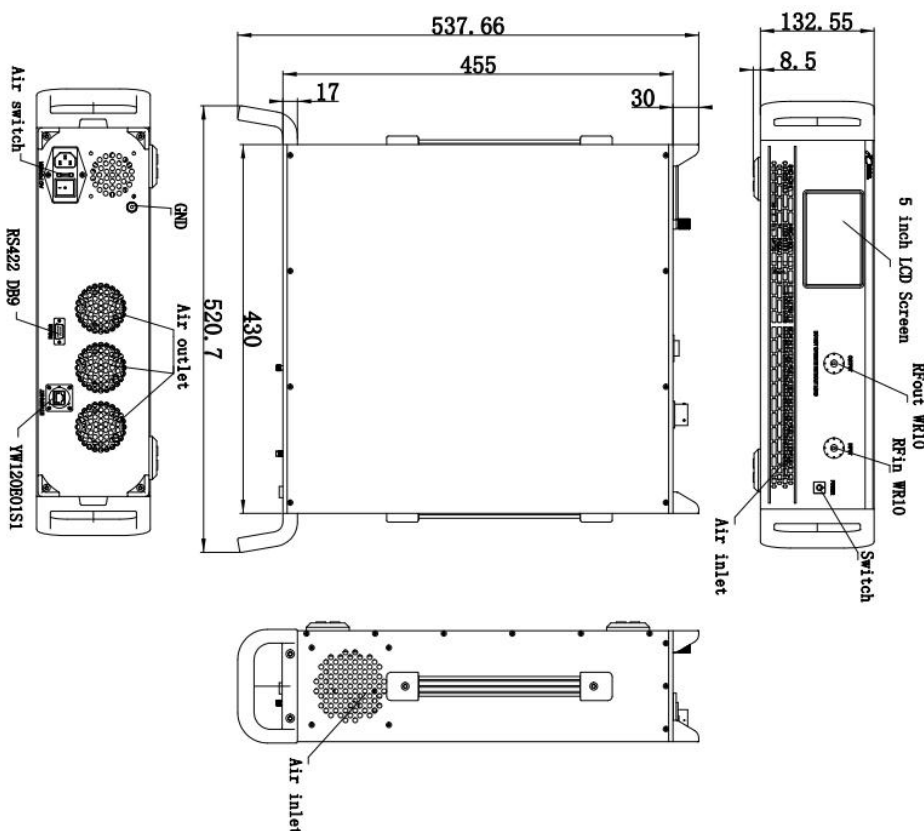
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	WR-10/WR-10	
脉冲输入接口 Pulse Input Connector	BNC Female	
液晶显示屏 Front Panel LCD Screen Display	5 inch LCD Screen Display	
通信接口 Communication Connector	DB9/RJ-45	
尺寸 Size	19 Inch 3U*550 depth	mm
重量 Weight	≤30	Kg

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, Infinite VSWR
显示功能 Display functions	1, Output/reflected power 2, Fault informations
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		+50	°C
存储温度 Non-operating Temperature*	-30		+60	°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
TLPA75G110G-30-30-BC	Solid State High Power Amplifier Systems 75-110GHz, Gain:30dB, Psat:30 dBm, 220V AC, Built in Fan Cooling	Rev.1.1