

Solid State High Power Amplifier Systems

75-110GHz/40dB Gain/35dBm Psat/220V AC

Model: TLPA75G110G-40-35-BC

TLPA75G110G-40-35-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: 40dB Min
- Psat Output Power: 35dBm 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
小信号增益 Small Signal Gain	SSGP	45			dB
功率增益 Power Gain	GP	40			dB
饱和输出功率 Output Psat	Psat	35			dBm
饱和输出功率平坦度 Output Psat Flatness	Δ Psat		± 1.2		dB
线性增益调节范围 Linear Gain Adjust Range	Gadj		20		dB
杂散 Spurious	Spur			-60	dBc
输出耦合度 Output Coupling	Cout		30		dB
输入驻波 Input VSWR	VSWRin			1.8	:1
交流电压 AC Voltage	Vac		220		V AC
功耗 Power Consumption	Pdiss			400	W

机械特性 Mechanical Specifications:

参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input/Output Connector	WR10/UG-387/U	
通信接口 Communication Connector	DB9/RJ45	

机械特性 Mechanical Specifications:

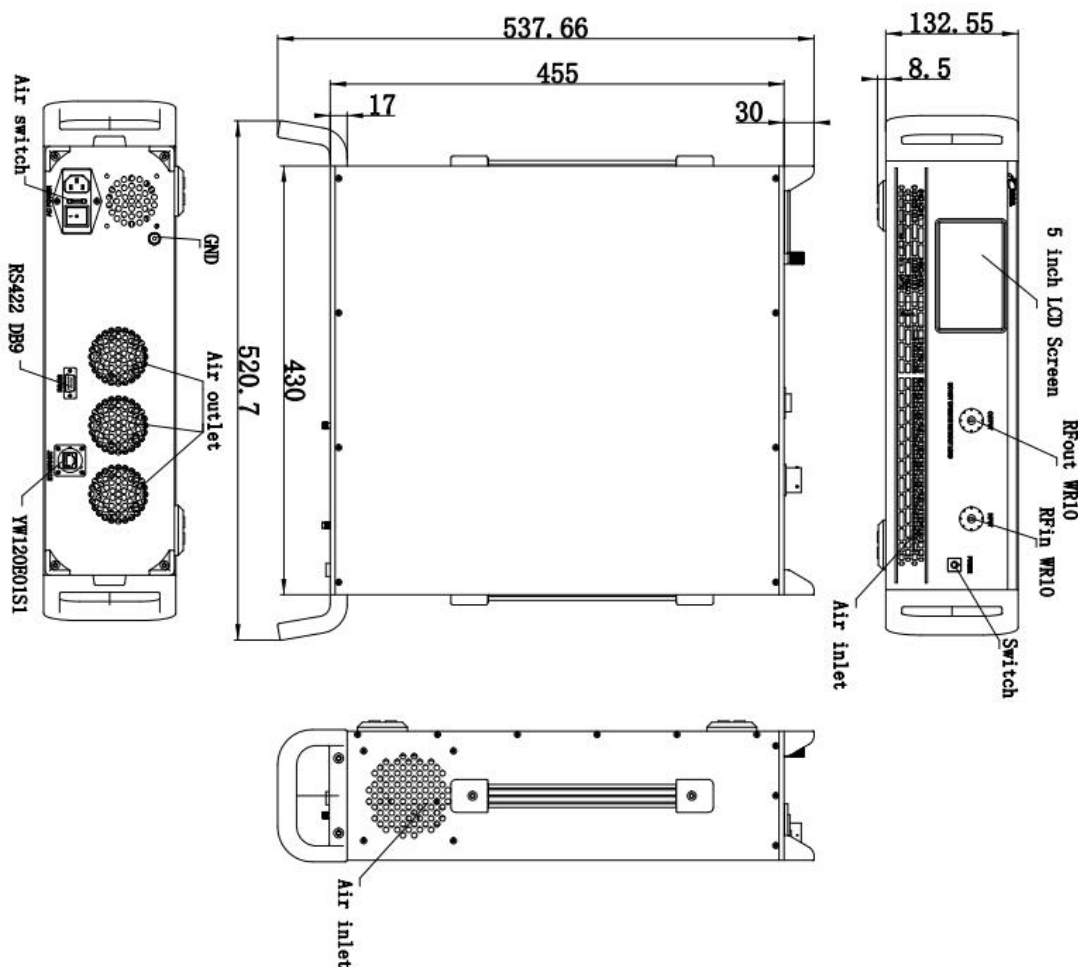
参数 Parameter	指标 Value	单位 Units
液晶显示屏 Front Panel LCD Screen Display	5.1 inch LCD Screen Display	
尺寸 Size	19 Inch 3U*400 depth	mm
重量 Weight	≤13	Kg

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	Power setting On/Off
内置保护功能 Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Infinite 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		+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-40-35-BC	Solid State High Power Amplifier Systems 75-110GHz,Gain:40dB,Psat:35 dBm,220V AC,Built in Fan Cooling	Rev.1.1