

Solid State High Power Amplifier Systems

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

Model: TLPA75G110G-40-40-BC

TLPA75G110G-40-40-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: 40dBm Min
- Protection: Over TEM, over voltage, over current, over VSWR protection
- 50 Ohm Matched Input / Output



Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	75-110			GHz
Small Signal Gain	SSGP	50			dB
Power Gain	GP	40			dB
Output Psat	Psat	40			dBm
Output Psat Flatness	Δ Psat		± 1.2		dB
Linear Gain Adjust Range	Gadj		20		dB
Spurious	Spur			-60	dBc
Output Coupling	Cout		30		dB
Input VSWR	VSWRin			1.8	:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss			400	W

Mechanical Specifications:

Parameter	Value	Units
Input/Output Connector	WR10/UG-387/U	
Communication Connector	DB9/RJ45	

Mechanical Specifications:

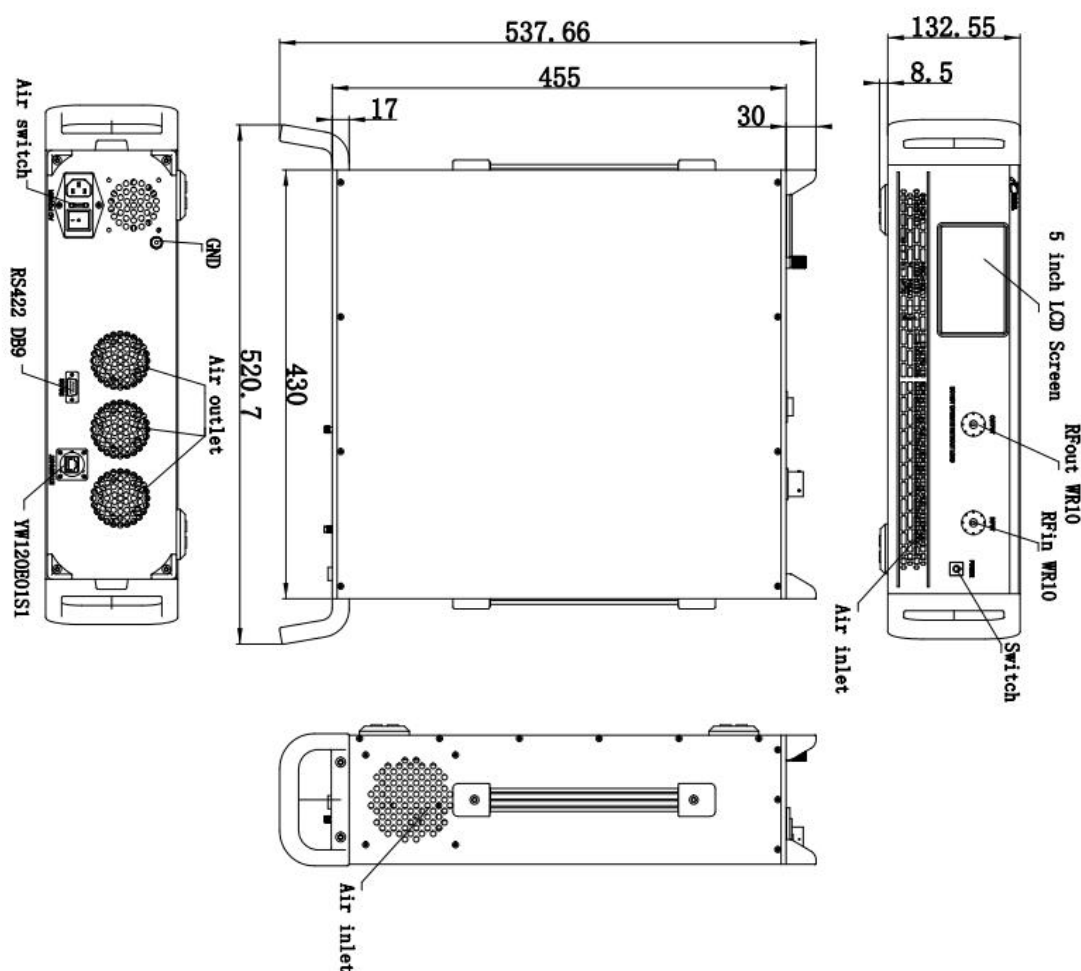
Parameter	Value	Units
Front Panel LCD Screen Display	5.1 inch LCD Screen Display	
Size	19 Inch 3U*400 depth	mm
Weight	≤17	Kg

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	+5 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control functions	Power setting on/off
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
Remote control	RS422/Ethernet
Cooling system	Built in Cooling system,forced air cooling

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature*	-20		+50	°C
Non-operating Temperature*	-30		+60	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

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

Ordering Information:

Base Number	Description	Revision
TLPA75G110G-40-40-BC	Solid State High Power Amplifier Systems 75-110GHz,Gain:40dB,Psat:40 dBm,220V AC,Built in Fan Cooling	Rev.1.1