

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



Electrical Characteristics:

Parameter	Symbol	Min	Typ	Max	Units
Frequency range	BW	75-110			GHz
Working Mode	MOD	CW/PULSE compatible			
Power Gain@Psat	GP	30			dB
Gain flatness	ΔGL		± 3		dB
Output Psat	Psat	30			dBm
Spurious@Psat	Spur			-50	dBc
Input Signal Mode	IPS_MOD	CW/PULSE			
Modulation Signal Level	TTL	0		5	V
Modulation Frequency	MF			200	KHz
Rise/Fall Time	Tr		30		ns
Pulse Drop@T=100us	Pdrop		0.5		dB
AC Voltage	Vac		220		V AC
Power consumption	Pdiss			100	W
Impedance	I/O-IMP		50		Ohms

Mechanical Specifications:

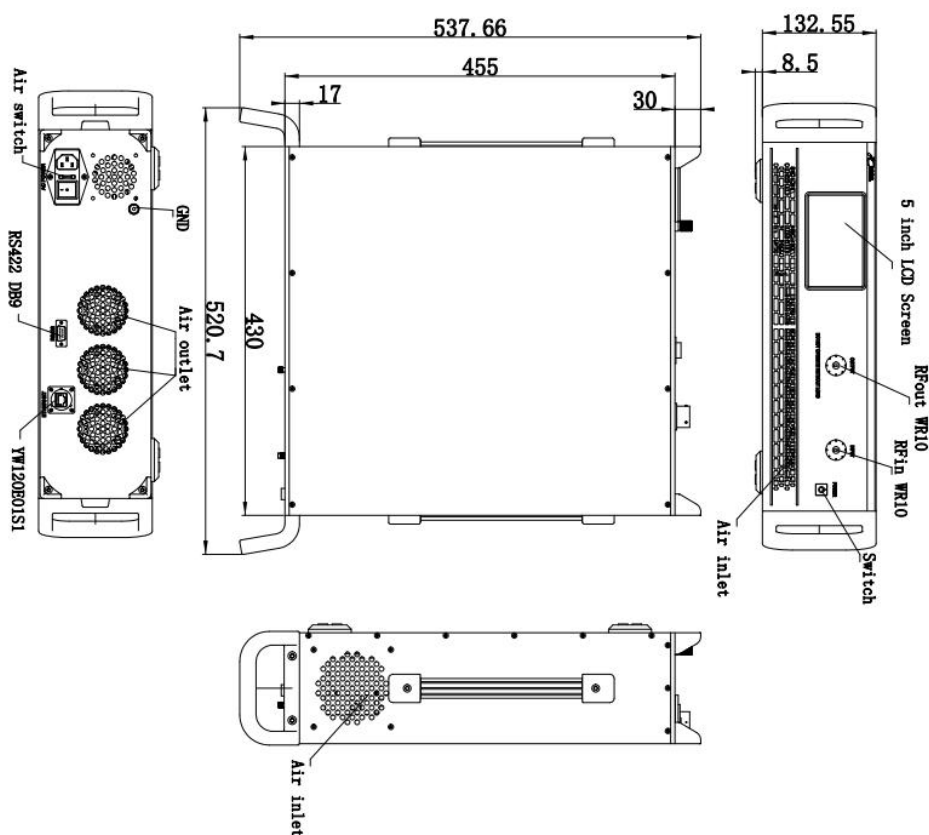
Parameter	Value	Units
Input /Output Connector	WR-10/WR-10	
Pulse Input Connector	BNC Female	
Front Panel LCD Screen Display	5 inch LCD Screen Display	
Communication Connector	DB9/RJ-45	
Size	19 Inch 3U*550 depth	mm
Weight	≤30	Kg

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	1, Power setting On/Off 2, ALC automatic level control
Protection functions	1, Over TEM 2, Over voltage 3, Over current 4, Infinite VSWR
Display functions	1, Output/reflected power 2, Fault informations
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-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