

Solid State High Power Amplifier Systems

40-50GHz/50dB Gain/50dBm Psat/220V AC

Model: TLPA40G50G-50-50-BC

TLPA40G50G-50-50-BC is a solid state high power amplifier systems provides high output power and high gain across the 40 to 50 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: 40-50GHz
- Gain: 50dB Min
- Psat Output Power: 50dBm 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	40		50	GHz
Power Gain@Pout=50dBm	GP	50			dB
Gain flatness	ΔGL		± 5		dB
Output Psat	Psat	50			dBm
Spurious@Pout=50dBm	Spur			-60	dBc
Harmonics	HAM			-20	dBc
Input VSWR	VSWRin		2.5	3	:1
AC Voltage	Vac		220		V AC
Power Consumption	Pdiss			2000	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

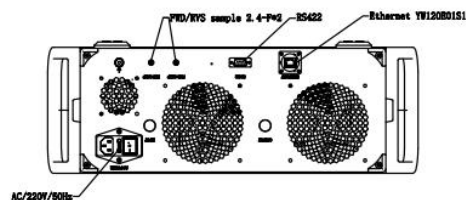
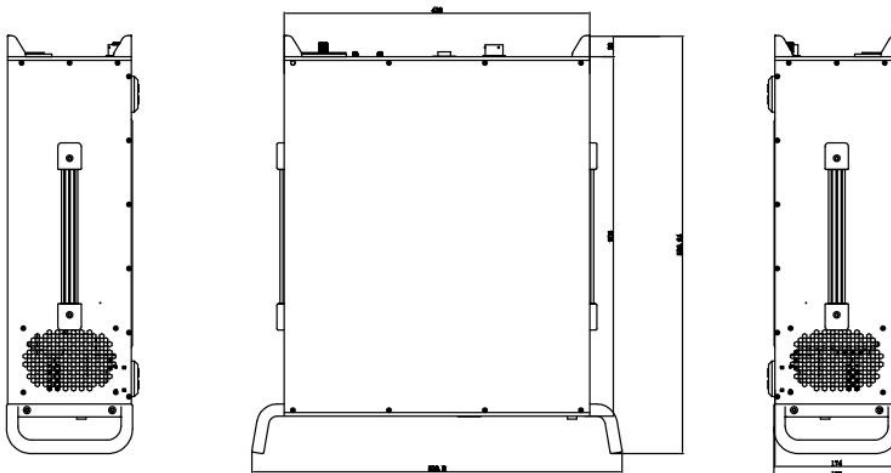
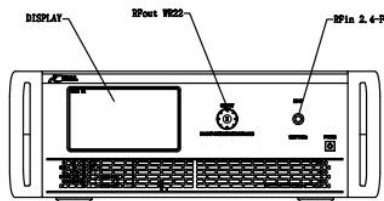
Parameter	Value	Units
Input /Output Connector	2.4mm Female/WR22	
Forward/Reverse Coupling	2.4mm Female/2.4mm Female	
Communication Connector	DB9/RJ45	
Size	19 Inch 4U*550	mm
Weight	≤35	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm; Tolerance:±0.1mm



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, Over 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		+40	°C
Non-operating Temperature*	-30		+50	°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
TLPA40G50G-50-50-BC	Solid State High Power Amplifier Systems 40-50GHz,Gain:50dB,Psat:50dBm,220V AC,Built in Fan Cooling	Rev.1.0