

General Description

Part:	Solid-State High-Power Amplifier System 1-40GHz/40dB Gain/40dBm Psat/220 V AC
Model:	TLPA1G40G-40-40-BC-2
Part Description:	
The TLPA1G40G-40-40-BC-2 is a solid-state high-power amplifier system provides high output power and high gain across the 1 to 40 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.	

Electrical Characteristics

No.	Parameter	Symbol	Minimum	Typical	Maximum	Units
1	Frequency range @Band A	BW	1		18	GHz
2	Frequency range @Band B	BW	18		40	GHz
3	Power gain	GP	40			dB
4	Gain flatness @Band A	ΔGL		± 5		dB
5	Gain flatness @Band B	ΔGL		± 5		dB
6	Output Psat	Psat	40			dBm
7	Spurious@Pout = 40dBm	Spur			-60	dBc
8	Harmonics @Band A	HAM			-10	dBc
9	Harmonics @Band B	HAM			-15	dBc
10	Input VSWR @Band A	VSWRin			2.0	:1
11	Input VSWR @Band B	VSWRin			2.5	:1
12	AC voltage	Vac		220		V AC
13	Power consumption @Band A	Pdiss			400	W
14	Power consumption @Band B	Pdiss			300	W
15	Impedance	I/O-IMP		50		Ohms

Mechanical Specifications

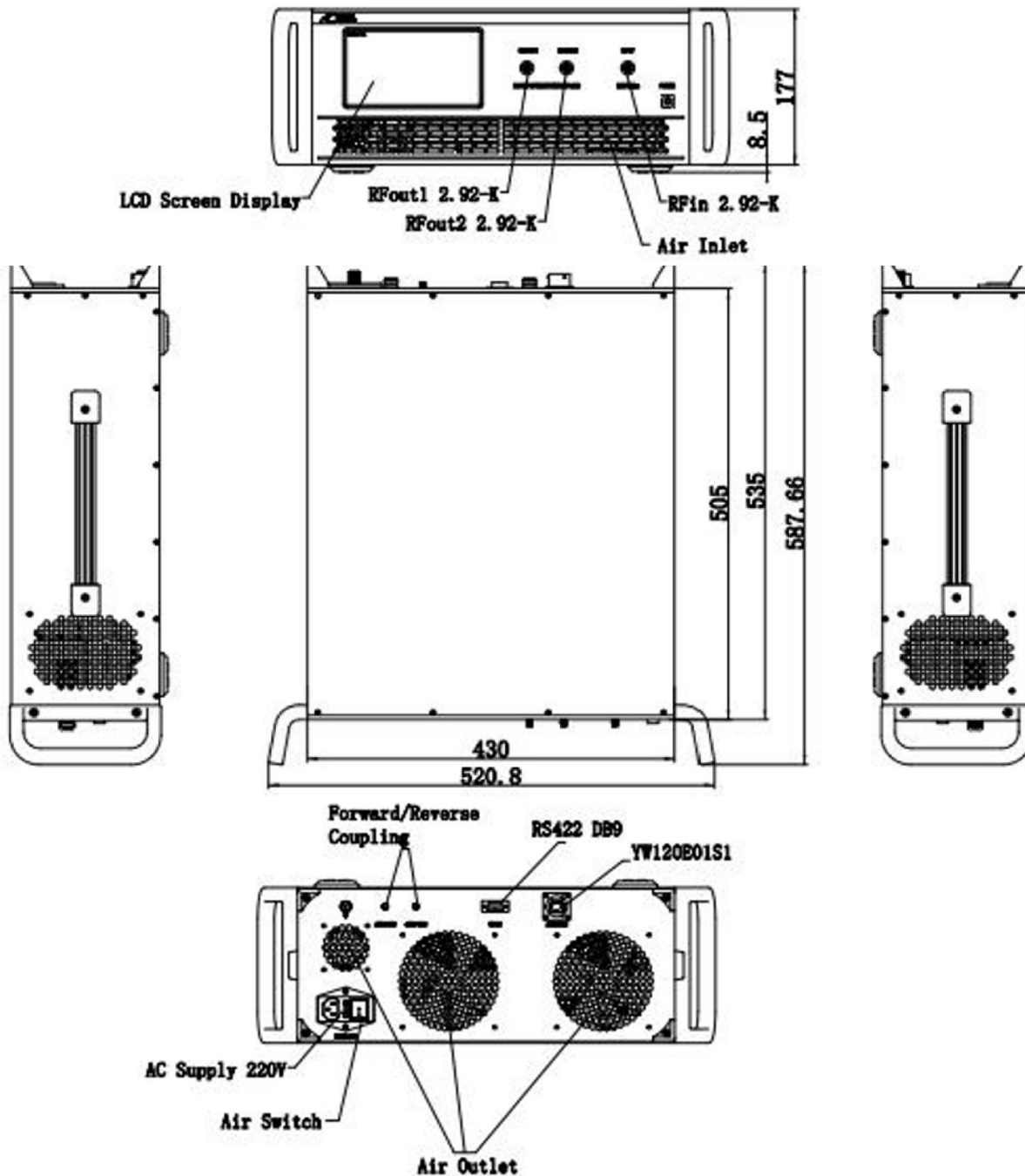
No.	Parameter	Value	Units	Note
1	Input connector	2.92	mm	Female
2	Output connector	2.92	mm	Female
3	Front panel LCD screen display	7	inch	LCD Screen Display
4	Size	19 inch 4U*540	mm	
5	Weight	≤30	kg	

Absolute Maximum Ratings

No.	Parameter	Value	Units	Note
1	RF Input power	+5	dBm	
2	ESD sensitivity (HBm)	passed 150	V	Class 0

Technical Drawing

Unit: mm;



TLPA1G40G-40-40-BC-2

Key Features

No.	Parameter	Advantages
1	Control functions	Power/gain setting On/Off, ALC automatic level control, Frequency band switching
2	Protection functions	Over TEM, Over voltage, Over current, Over VSWR
3	Remote control	RS422/Ethernet
4	Cooling system	Built in cooling system, forced air cooling

Environmental Conditions

No.	Parameter	Minimum	Typical	Maximum	Units
1	Operating temperature	-20		+50	°C
2	Non-operating temperature	-30		+60	°C
3	Relative humidity		95		%
4	Altitude		10,000		feet
5	Shock/Vibration (MIL-STD-810F)	25g rms (15 degrees 2kHz) endurance, 1 hour per axis			
6	Shock (non-operating)	20G for 11msc half sine wave, 3 axis both directions			