

General Description

Part:	Solid-State High-Power Amplifier System 1-6GHz/63dB Gain/63dBm Psat/220 V AC
Model:	TLPA1G6G-63-63-P-BC
Part Description:	
The TLPA1G6G-63-63-P-BC is a solid-state high-power amplifier system provides high output power and high gain across the 1 to 6 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	BW	1		6	GHz
2	Power gain	GP	63			dB
3	Power gain flatness@Pout = 63dBm	ΔGL		± 4		dB
4	Output Psat	Psat	63			dBm
5	Spurious@Pout = 63dBm	Spur			-60	dBc
6	Harmonics@Pout = 63dBm	HAM			-10	dBc
7	Modulation signal level	TTL	0		5	V
8	Modulation frequency	MF	1		1000	Hz
9	Pulse width	T	20		1000	ns
10	Duty cycle	τ			10	%
11	Rise/fall time	Tr		15		ns
12	Pulse drop @T = 1us	Pdrop		0.5		dB
13	AC voltage	Vac		220		V AC
14	Static power consumption	Pdiss		2500		W
15	Power consumption @10% duty cycle	Pdiss		3000		W
16	Impedance	I/O-IMP		50		Ohms

Mechanical Specifications

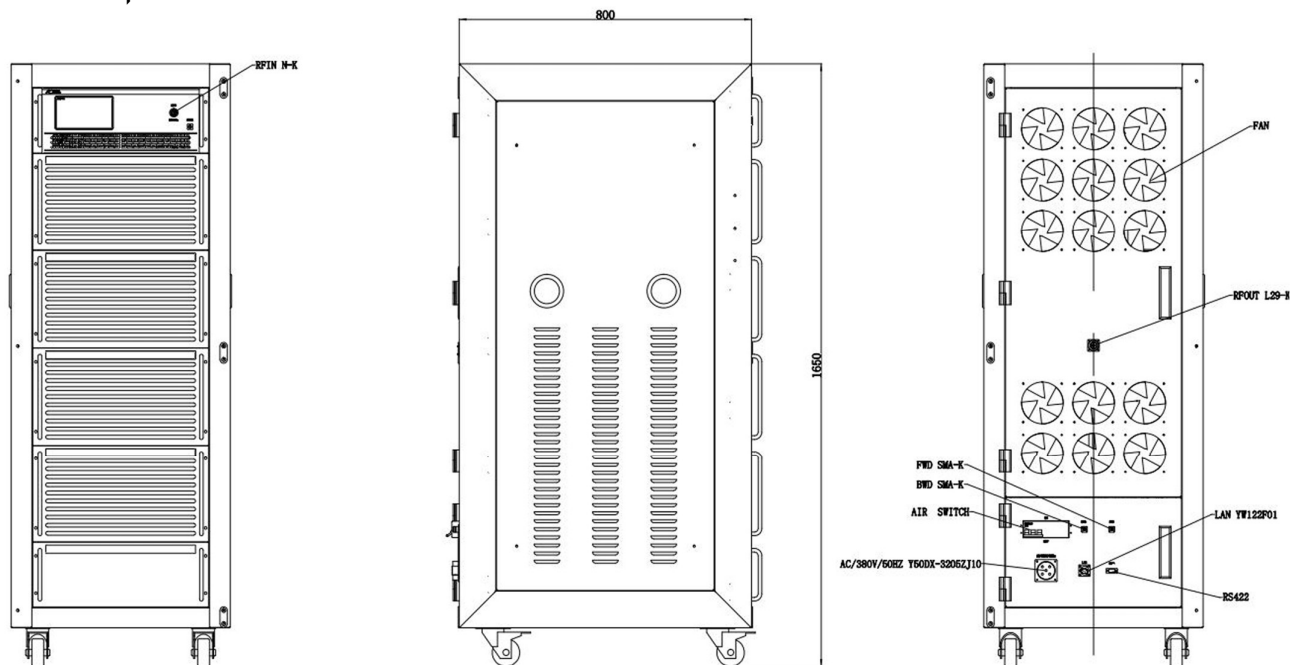
No.	Parameter	Value	Units	Note
1	Input connector	N		Female
2	Output connector	L29		
3	Forward coupling	SMA		Female
4	Reverse coupling	SMA		Female
5	Front panel LCD screen display	7	inch	LCD Screen Display
6	Pulse input connector	BNC		Female
7	Communication connector	Ethernet/RS422		
8	Size	32U*600*850	mm	Depth
9	Weight	≤500	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;



TLPA1G6G-63-63-P-BC

Key Features

No.	Parameter	Advantages
1	Control functions	Power/gain setting On/Off, Output power and gain level control, Status monitoring
2	Display functions	Output and reflected power, Fault informations
3	Protection functions	Over TEM, Over voltage, Over current, Over VSWR
4	Remote control	RS422/Ethernet
5	Cooling system	Built in cooling system, forced air cooling

Environmental Conditions

No.	Parameter	Minimum	Typical	Maximum	Units
1	Operating temperature	-20		+40	°C
2	Non-operating temperature	-30		+50	°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			