

Solid State High Power Amplifier Systems

2.5-6GHz /60dB Gain/60 dBm Psat/380V AC

Model: TLPA2.5G6G-60-60-BC

TLPA2.5G6G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 2.5 to 6 GHz frequency range. The amplifier features a built-in 380V 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: 2.5-6GHz
- Gain: 60dB Min
- Psat Output Power:60dBm 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	2.5-6			GHz
Working Mode	MOD	CW/PULSE compatible			
Power Gain	GP	60			dB
Gain flatness	Δ GL		± 4		dB
Output Psat	Psat	60			dBm
Spurious@Pout=60dBm	Spur			-60	dBc
Harmonics@Pout=60dBm	HAM		-15	-10	dBc
Input VSWR	VSWR _{in}			1.5	:1
AC Voltage	Vac		380		V AC
AC Supply Current	Iac		30		A
Power Consumption	Pdiss		11000	12000	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

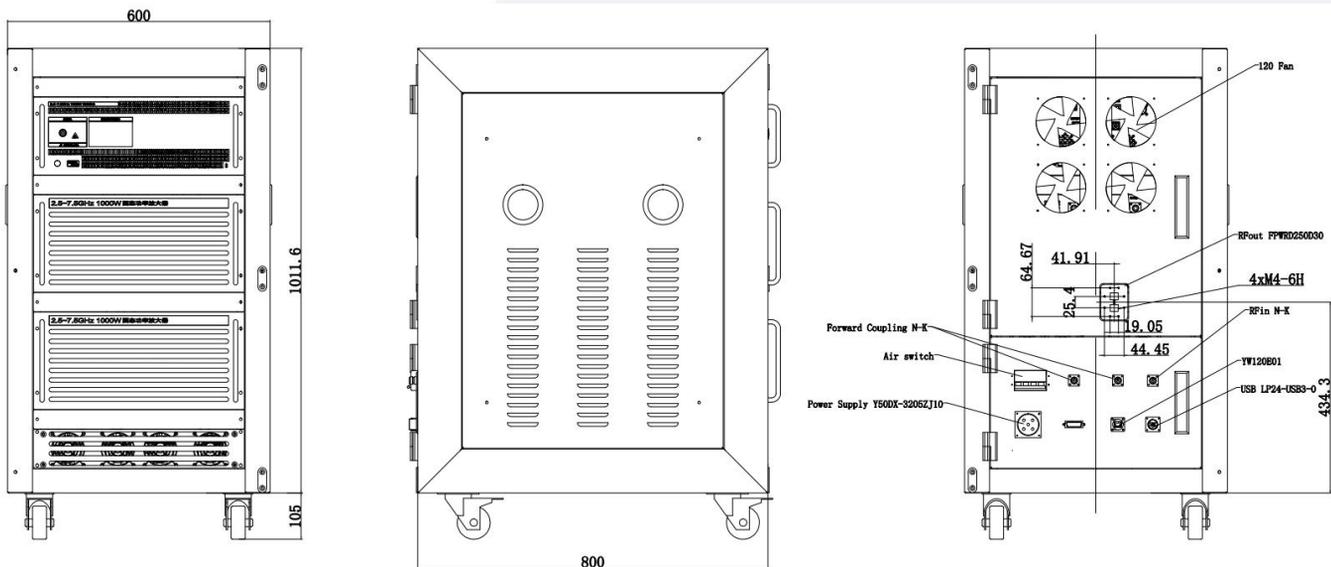
Parameter	Value	Units
Input /Output Connector	N Female/WRD250	
Forward/Reverse Coupling	SMA Female/ SMA Female	
Communication Connector	DB9/RJ45	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	20U	
Weight	≤250	Kg

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, Over VSWR(3:1)
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
TLPA2.5G6G-60-60-BC	Solid State High Power Amplifier Systems 2.5-6GHz, Gain:60dB, Psat:60 dBm, 380V AC, Built in Fan Cooling	Rev.1.1