

Solid State High Power Amplifier Systems

1-2GHz/65dB Gain/65dBm Psat/380V AC

Model: TLPA1G2G-65-65-BC

TLPA1G2G-65-65-BC is a solid state high power amplifier systems provides high output power and high gain across the 1 to 2 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: 1-2GHz
- Gain: 65dB Min
- Psat Output Power: 65dBm 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	1-2			GHz
Power Gain	GP	65			dB
Gain flatness	Δ GL		± 3		dB
Output Psat	Psat	65			dBm
Spurious	Spur			-60	dBc
Harmonics	HAM		-15		dBc
Input VSWR	VSWR _{in}			2	:1
AC Voltage	Vac	340	380	420	V AC
Power Consumption	Pdiss			18000	W
Impedance	I/O-IMP	50			Ohms

Mechanical Specifications:

Parameter	Value	Units
Input /Output Connector	N Female/L29 Female	
Forward/Reverse Coupling	N Female/ N Female	
Front Panel LCD Screen Display	7 inch LCD Screen Display	
Size	32U	
Weight	≤ 350	Kg

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



Key Features:

Parameter	Advantages
Control functions	Power setting On/Off
Protection functions	1,Over TEM 2,Over voltage 3,Over current 4,Over VSWR
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
TLPA1G2G-65-65-BC	Solid State High Power Amplifier Systems 1-2GHz,Gain:65dB,Psat:65dBm,380V AC,Built in Fan Cooling	Rev.1.1