

Solid State High Power Amplifier Systems

1-40GHz/40dB Gain/40dBm Psat/220V AC

Model: TLPA1G40G-40-40-BC

TLPA1G40G-40-40-BC is a solid state high power amplifier systems 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.

Features:

- Frequency range: 1-40GHz
- Gain: 40dB Min
- Psat Output Power: 40dBm 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 | Band A: 1-18 Band B: 18-40 | | | GHz |
| Power Gain | GP | 40 | | | dB |
| Gain flatness | @Band A | ΔGL | ±5 | | dB |
| | @Band B | | ±5 | | |
| Output Psat | Psat | 40 | | | dBm |
| Spurious@Pout=40dBm | Spur | | | -60 | dBc |
| Harmonics | @Band A | HAM | | | dBc |
| | @Band B | | | | |
| Input VSWR | @Band A | VSWRin | | | :1 |
| | @Band B | | | | |
| AC Voltage | Vac | | 220 | | V AC |
| Power Consumption | @Band A | Pdiss | | | W |
| | @Band B | | | | |
| Impedance | I/O-IMP | 50 | | | Ohms |

Mechanical Specifications:

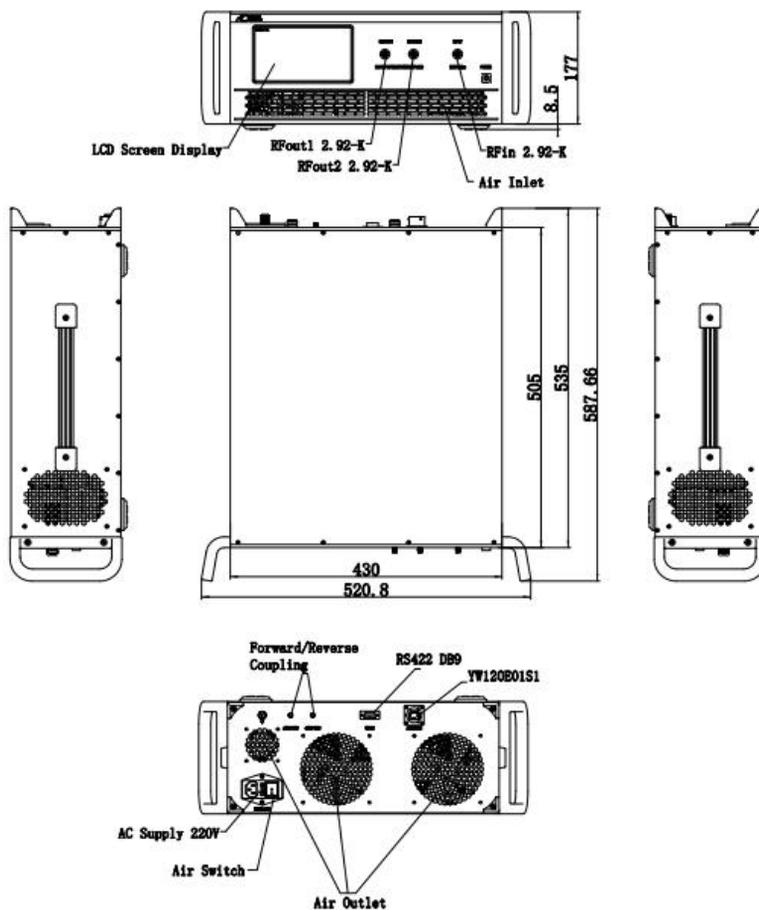
| Parameter | Value | Units |
|--------------------------------|-----------------------------|-------|
| Input /Output Connector | 2.92mm Female/2.92mm Female | |
| Front Panel LCD Screen Display | 7 inch LCD Screen Display | |
| Size | 19 Inch 4U*540 | mm |
| Weight | ≤30 | Kg |

Absolute Maximum Ratings:

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

Outline Drawing:

Unit:mm



Key Features:

| Parameter | 特点 Advantages |
|----------------------|--|
| Control functions | 1, Power setting On/Off 2, ALC automatic level control 3, Frequency Band Switching |
| Protection functions | 1, Over TEM 2, Over voltage 3, Over current protection 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 | | +50 | °C |
| Non-operating Temperature* | -30 | | +60 | °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 |
|--------------------|---|----------|
| TLPA1G40G-40-40-BC | Solid State High Power Amplifier Systems 1-40GHz, Gain:40dB, Psat:40 dBm, 220V AC, Built in Fan Cooling | Rev.1.1 |