

Solid State High Power Amplifier Systems

26.5-40GHz/49dB Gain/49dBm Psat/220V AC

Model: TLPA26.5G40G-49-49-BC

TLPA26.5G40G-49-49-BC is a solid state high power amplifier systems provides high output power and high gain across the 26.5 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: 26.5-40GHz
- Gain: 49dB Min
- Psat Output Power:49dBm 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 | 26.5-40 | | | GHz |
| Power Gain | GP | 49 | | | dB |
| Gain flatness | Δ GL | | ± 5 | | dB |
| Output Psat | Psat | 49 | | | dBm |
| Spurious@Pout=49dBm | Spur | | | -50 | dBc |
| Harmonics@Pout=49dBm | HAM | | | -30 | dBc |
| Input VSWR | VSWRin | | | 2.0 | :1 |
| AC Voltage | Vac | | 220 | | V AC |
| Power Consumption | Pdiss | | | 1600 | W |
| Impedance | I/O-IMP | 49 | | | Ohms |

Mechanical Specifications:

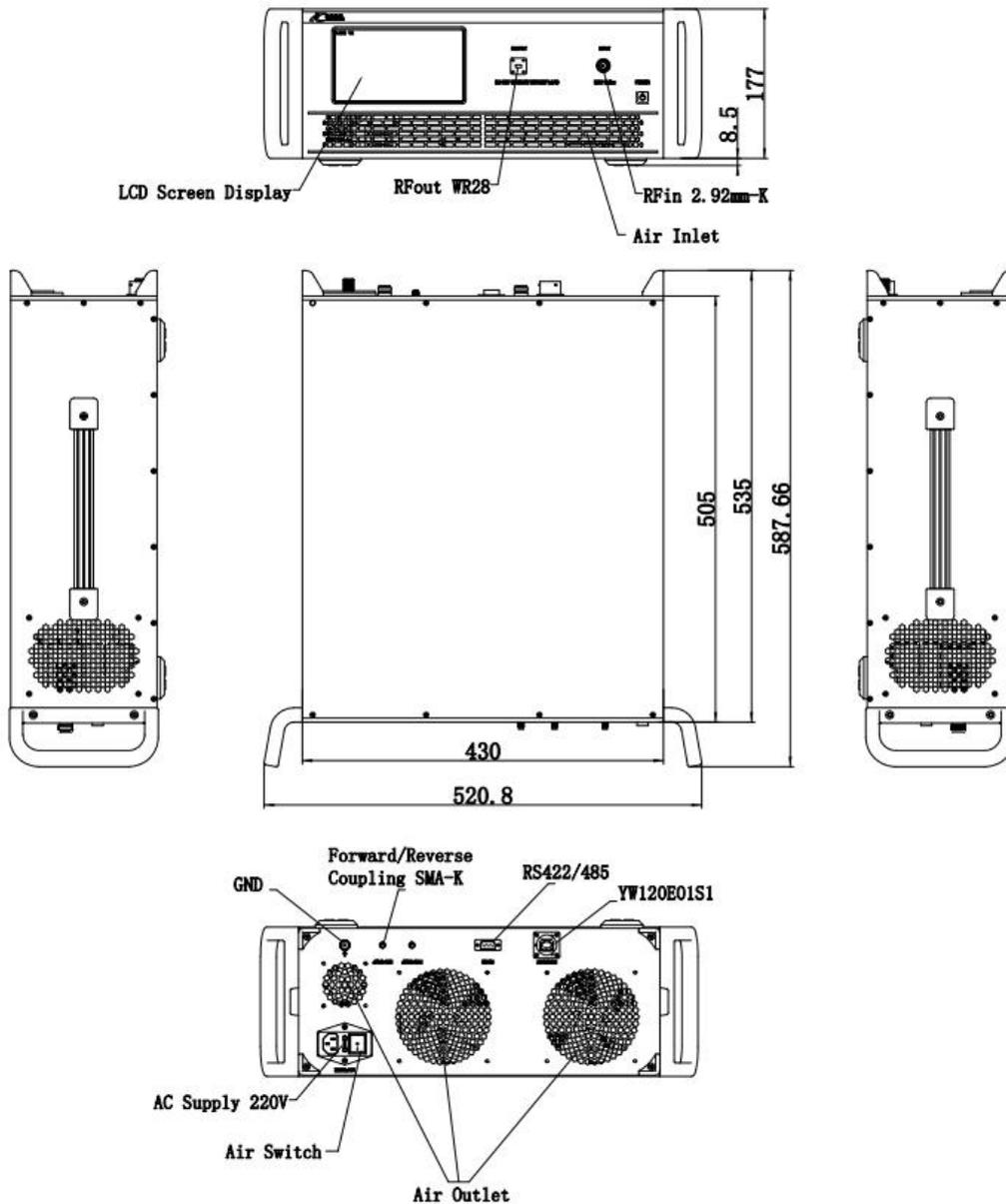
| Parameter | Value | Units |
|-------------------------|---------------------|-------|
| Input /Output Connector | 2.92mm Female/WR-28 | |
| Communication Connector | DB9/RJ45 | |
| Size | 19 Inch 4U | |
| Weight | ≤ 35 | Kg |

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, Output power adjustable |
| Protection functions | 1, Over TEM 2, Over voltage 3, Over current 4, Over VSWR |
| Display function | 1, Output/Reflected power 2, Fault informations |
| 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 |
|-----------------------|---|----------|
| TLPA26.5G40G-49-49-BC | Solid State High Power Amplifier Systems 26.5-40GHz, Gain:49dB, Psat:49dBm, 220V AC, Built in Fan Cooling | Rev.1.1 |