

Solid State High Power Amplifier Systems

18-26.5GHz/40dB Gain/41dBm Psat/220V AC

Model: TLPA18G26.5G-40-41-BC

TLPA18G26.5G-40-41-BC is a solid state high power amplifier systems provides high output power and high gain across the 18 to 26.5 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: 18-26.5GHz
- Gain: 40dB Min
- Psat Output Power: 41dBm 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 | 18-26.5 | | | GHz |
| Power Gain | GP | 40 | | | dB |
| Gain flatness | Δ GL | | ± 3 | | dB |
| Gain adjust Range | Δ GR | 41 | 42 | | dB |
| Spurious | Spur | | -60 | | dBc |
| Harmonics | HAM | | -20 | | dBc |
| Input VSWR | VSWR _{in} | | | 2.0 | :1 |
| AC Voltage | V _{ac} | | 220 | | V AC |
| Power Consumption | P _{diss} | | 150 | | W |
| Impedance | I/O-IMP | 50 | | | Ohms |

Mechanical Specifications:

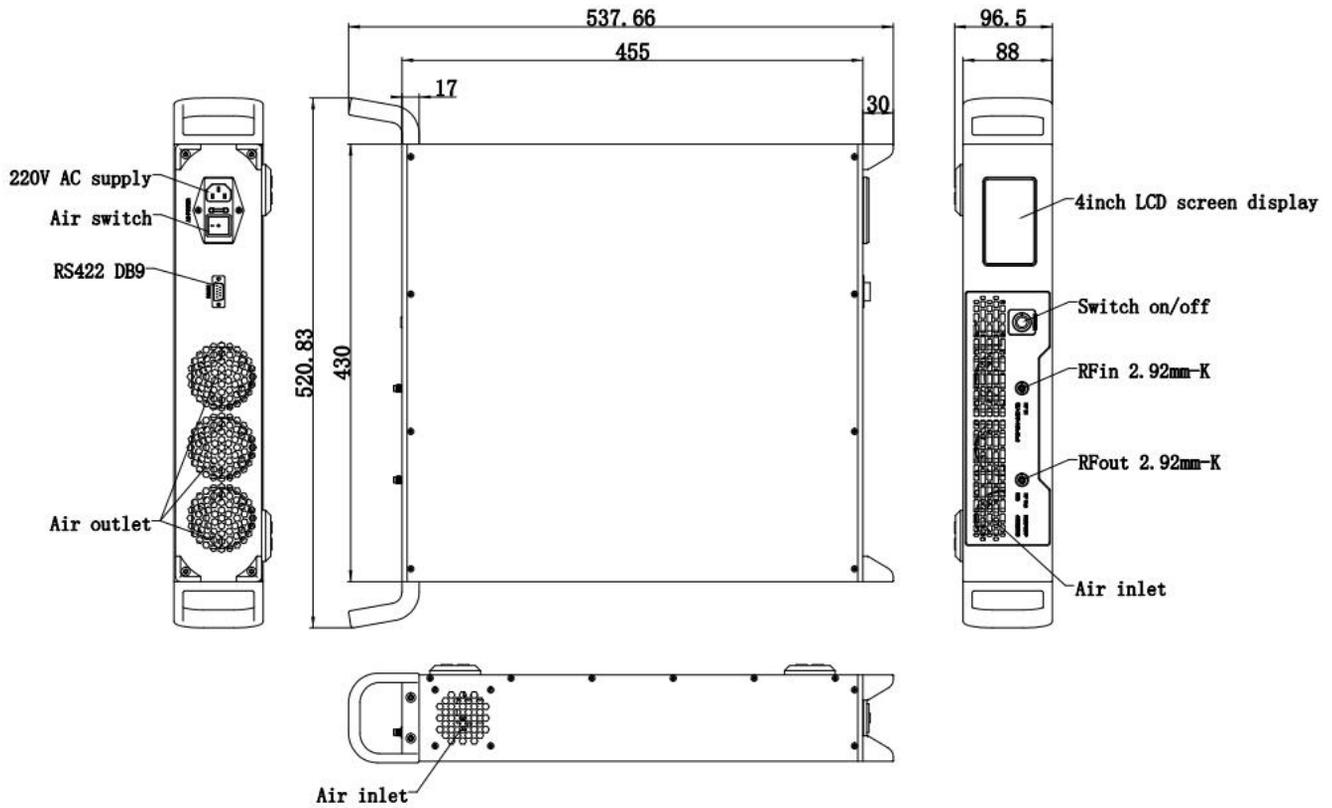
| Parameter | Value | Units |
|-------------------------|-----------------------------|-------|
| Input /Output Connector | 2.92mm Female/2.92mm Female | |
| AC Power Interface | Air switch | |
| Size | 19 Inch 2U | mm |
| Weight | ≤ 20 | Kg |

Absolute Maximum Ratings:

| Parameter | Value |
|-----------------------|----------------------|
| RF Input Power | +10 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 |
| emote control | Ethernet RJ-45 TCP/IP |
| 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 |
|-----------------------|---|----------|
| TLPA18G26.5G-40-41-BC | Solid State High Power Amplifier Systems 18-26.5GHz, Gain:40dB, Psat:41dBm, 220V AC, Built in Fan Cooling | Rev.1.1 |