

## Solid State High Power Amplifier Systems

2-18GHz/37dB Gain/37dBm Psat/220V AC

Model: TLPA2G18G-37-37-BC

TLPA2G18G-37-37-BC is a solid state high power amplifier systems provides high output power and high gain across the 0.5 to 6 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: 2-18GHz
- Gain: 37dB Min
- Psat Output Power: 37dBm 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                 | 2-18 |         |     | GHz   |
| Power Gain        | GP                 | 37   |         |     | dB    |
| Gain flatness     | $\Delta$ GL        |      | $\pm 3$ |     | dB    |
| Output Psat       | Psat               | 37   |         |     | dBm   |
| Spurious          | Spur               |      | -60     |     | dBc   |
| Harmonics         | HAM                |      | -15     |     | dBc   |
| Input VSWR        | VSWR <sub>in</sub> |      |         | 2.0 | :1    |
| AC Voltage        | Vac                |      | 220     |     | V AC  |
| Power Consumption | P <sub>diss</sub>  |      | 120     |     | W     |
| Impedance         | I/O-IMP            | 50   |         |     | Ohms  |

### Mechanical Specifications:

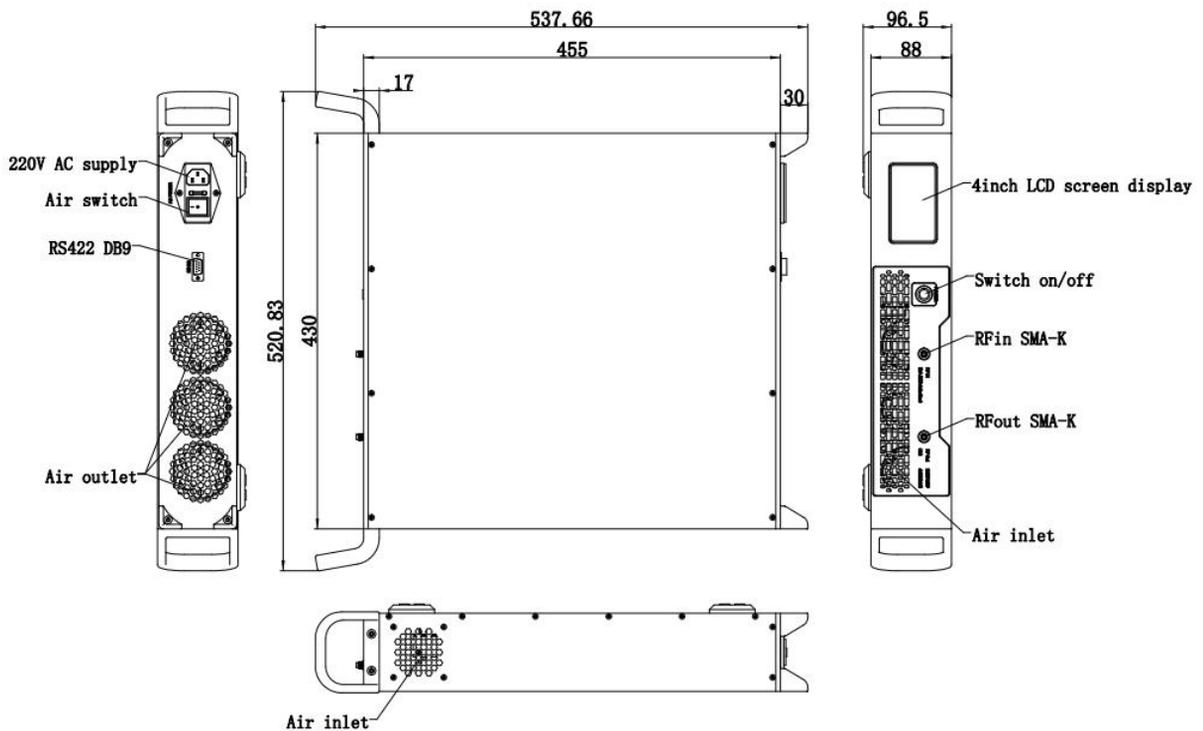
| Parameter                      | Value                     | Units |
|--------------------------------|---------------------------|-------|
| Input /Output Connector        | SMA Female/SMA Female     |       |
| Front Panel LCD Screen Display | 4 inch LCD Screen Display |       |
| Size                           | 19 Inch 2U                |       |
| Weight                         | $\leq 20$                 | 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<br>2, ALC automatic level control         |
| Protection functions | 1, Over TEM<br>2, Over voltage<br>3, Over current<br>4, Over VSWR |
| Remote control       | RS422                                                             |
| 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 |
|--------------------|--------------------------------------------------------------------------------------------------------|----------|
| TLPA2G18G-37-37-BC | Solid State High Power Amplifier Systems 2-18GHz, Gain:37dB, Psat:37dBm, 220V AC, Built in Fan Cooling | Rev.1.1  |