

**Model:TLPA2G6G-53-53-BC**
**Solid State High Power Amplifier Systems  
 2-6GHz,Gain:53dB,Psat:53 dBm,220V AC**
**Feature:**

- Wide Band: 2-6GHz
- Gain: 53dB Min
- Psat Output Power:53dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection.
- 50 Ohm Matched Input / Output

**Electrical Specifications:**

| Parameter                    | Symbo       | Min         | Typ       | Max | Units |
|------------------------------|-------------|-------------|-----------|-----|-------|
| Frequency range              | BW          | 2-6         |           |     | GHz   |
| Gain                         | GP          | 53          | 55        |     | dB    |
| Gain flatness                | $\Delta$ GL |             | $\pm$ 3.5 |     | dB    |
| Output Psat                  | Psat        | 53          |           |     | dBm   |
| Output P1dB                  | P1dB        |             | 49        |     | dBm   |
| Gain adjust range@0.5dB step | $\Delta$ GR |             | 31.5      |     | dB    |
| Spurious@Pout=53dBm          | Spur        |             |           | -60 | dBc   |
| Harmonics@Pout=53dBm         | HAM         |             | -10       |     | dBc   |
| Input VSWR                   | VSWRin      |             |           | 2.0 | :1    |
| AC Voltage                   | Vac         |             | 220       |     | V AC  |
| AC Supply Current            | Iac         | 10A@220V AC |           |     | A     |
| Impedance                    | I/O-IMP     | 50          |           |     | Ohms  |

**Mechanical Specifications:**

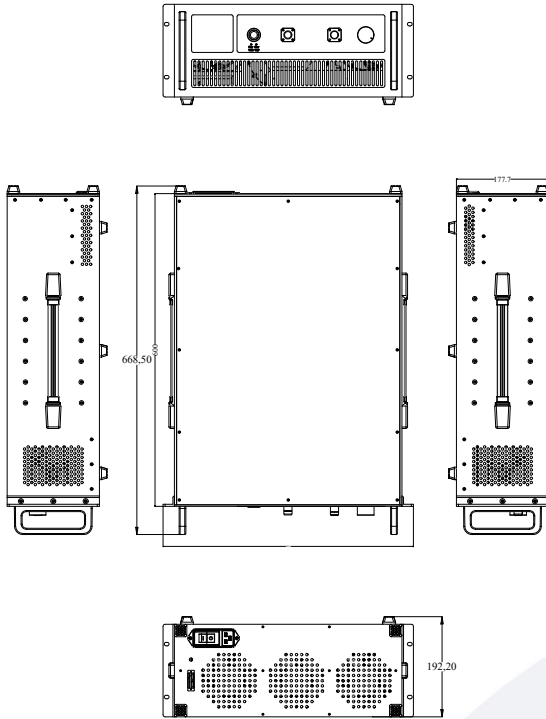
| Parameter                      | Value                     | Units |
|--------------------------------|---------------------------|-------|
| Input /Output Connector        | N Female/N Female         |       |
| Front Panel LCD Screen Display | 7 inch LCD Screen Display |       |
| Size                           | 19 Inch 4U*600            | mm    |
| Weight                         | $\leq$ 30                 | Kg    |

**Absolute Maximum Ratings:**

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

**Outline Drawing:**

Unit: mm



**D-SUB,15-Pin,Female:**

| Pin | Identification | Function specification  |
|-----|----------------|---|
| 1   | Reset          | When the amplifier triggers overcurrent or standing wave protection, the amplifier will be turned off and enter a state of lockout. Placing a 10ms high level on this pin will restart the amplifier. Only overcurrent or standing wave protection can be reset.  |
| 2   | Over voltage   | When the supply voltage exceeds 32V, the power amplifier will be turned off. This pin will output a high level. When the supply voltage is lower than 32V, this pin will output a low level.  |
| 3   | Over current   | When the power amplifier current exceeds the limit, the power amplifier will be closed and enter the state lock, this pin will output a high level.   |
| 4   | Over Temp      | When the temperature of the power amplifier shell is greater than 85°C, the power amplifier will be closed, and this pin will output a high level. When the temperature of the power amplifier shell is reduced to 70°C, the power amplifier will return to normal operation, and this pin will output a low level. |
| 5   | Over VSWR      | When the load VSWR of the power amplifier output is greater than 5, the power amplifier will be turned off. This pin will output a high level. When the external VSWR is less than 5, this pin outputs a low level.   |

**Note: Control voltage is 5V**

**D-SUB,15-Pin,Female:**

| Pin  | Identification | Function specification   |
|------|----------------|--|
| 6    | Enable         | Amplifier enable end, 5V or open to turn on the amplifier. This pin is grounded to turn off the amplifier. |
| 7    | GND            | GND  |
| 8~15 | NC             | No internal connection   |

**Note:** Control voltage is 5V

**Key Features:**

| Parameter            | Advantages   |
|----------------------|--|
| Control functions    | 1, Power setting On/Off  |
| Protection functions | 1,Over TEM<br>2,Over voltage<br>3,Over current protection<br>4,Over VSWR |
| 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                         |   | 10000 |     | 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:**

| Part Number       | Description  | Revision |
|-------------------|--|----------|
| TLPA2G6G-53-53-BC | Solid State High Power Amplifier Systems 2-6GHz,<br>Gain:53dB,Psat:53 dBm,220V AC,Built in Fan Cooling | Rev.1.0  |