

## Solid State High Power Amplifier Systems

2.5-6GHz /60dB Gain/60 dBm Psat/380V AC

Model: TLPA2.5G6G-60-60-BC

TLPA2.5G6G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 2.5 to 6 GHz frequency range. The amplifier features a built-in 380V 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: 2.5-6GHz
- Gain: 60dB Min
- Psat Output Power:60dBm Min
- Protection:Over TEM,over voltage, over current ,infinite VSWR protection
- 50 Ohm Matched Input / Output

### Electrical Characteristics:

| Parameter            | Symbol      | Min                 | Typ     | Max   | Units |
|----------------------|-------------|---------------------|---------|-------|-------|
| Frequency range      | BW          | 2.5-6               |         |       | GHz   |
| Working Mode         | MOD         | CW/PULSE compatible |         |       |       |
| Power Gain           | GP          | 60                  |         |       | dB    |
| Gain flatness        | $\Delta GL$ |                     | $\pm 4$ |       | dB    |
| Output Psat          | Psat        | 60                  |         |       | dBm   |
| Spurious@Pout=60dBm  | Spur        |                     |         | -60   | dBc   |
| Harmonics@Pout=60dBm | HAM         |                     | -15     | -10   | dBc   |
| Input VSWR           | VSWRin      |                     |         | 1.5   | :1    |
| AC Voltage           | Vac         |                     | 380     |       | V AC  |
| AC Supply Current    | Iac         |                     | 30      |       | A     |
| Power Consumption    | Pdiss       |                     | 11000   | 12000 | W     |
| Impedance            | I/O-IMP     | 50                  |         |       | Ohms  |

## Mechanical Specifications:

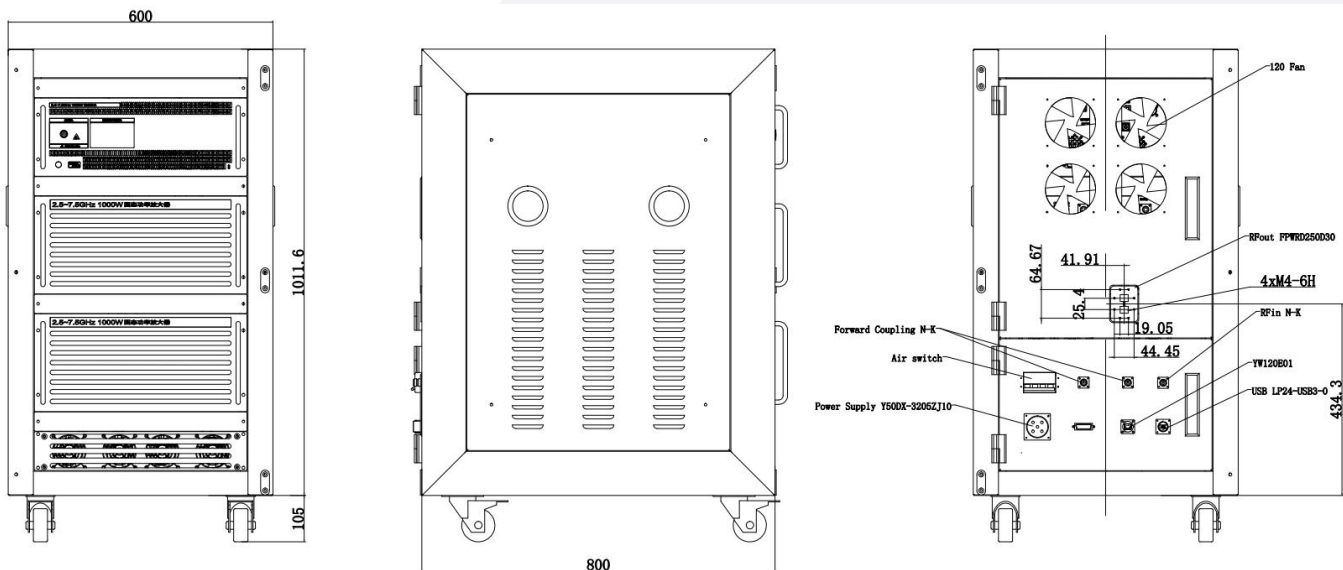
| Parameter                      | Value                     | Units |
|--------------------------------|---------------------------|-------|
| Input /Output Connector        | N Female/WRD250           |       |
| Forward/Reverse Coupling       | SMA Female/ SMA Female    |       |
| Communication Connector        | DB9/RJ45                  |       |
| Front Panel LCD Screen Display | 7 inch LCD Screen Display |       |
| Size                           | 20U                       |       |
| Weight                         | ≤250                      | 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, Infinite VSWR(3:1) |
| 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 |
|---------------------|----------------------------------------------------------------------------------------------------------|----------|
| TLPA2.5G6G-60-60-BC | Solid State High Power Amplifier Systems 2.5-6GHz, Gain:60dB, Psat:60 dBm, 380V AC, Built in Fan Cooling | Rev.1.1  |