

## 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:

- Wide Band: 2.5-6GHz
- Gain: 60dB Min
- Psat Output Power:60dBm Min
- Protection:Over TEM,over voltage, over current ,over VSWR protection
- 50 Ohm Matched Input / Output

### 电气特性 Electrical Characteristics:

| 参数 Parameter            | 代码 Symbol | Min                            | Typ   | Max   | 单位 Units |
|-------------------------|-----------|--------------------------------|-------|-------|----------|
| 频率范围 Frequency range    | BW        | 2.5-6                          |       |       | GHz      |
| 工作模式 Working Mode       | MOD       | PULSE ONLY&CW/PULSE compatible |       |       |          |
| 功率增益 Power Gain         | GP        | 60                             |       |       | dB       |
| 增益平坦度 Gain flatness     | ΔGL       |                                | ±3    |       | dB       |
| 饱和输出功率 Output Psat      | Psat      | 60                             |       |       | dBm      |
| 杂散 Spurious@Pout=60dBm  | Spur      |                                |       | -60   | dBc      |
| 谐波 Harmonics@Pout=60dBm | HAM       |                                | -15   | -10   | dBc      |
| 输入驻波 Input VSWR         | VSWRin    |                                |       | 1.5   | :1       |
| 交流电压 AC Voltage         | Vac       |                                | 380   |       | V AC     |
| 交流电流 AC Supply Current  | Iac       |                                | 30    |       | A        |
| 功耗 Power Consumption    | Pdiss     |                                | 11000 | 12000 | W        |
| 阻抗 Impedance            | I/O-IMP   | 50                             |       |       | Ohms     |

## 机械特性 Mechanical Specifications:

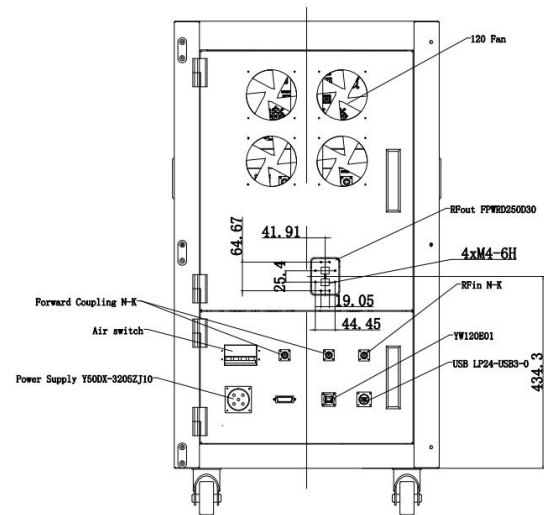
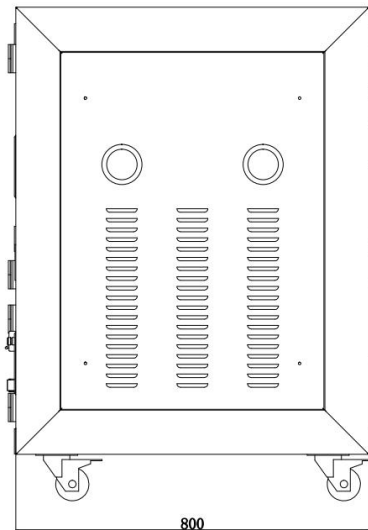
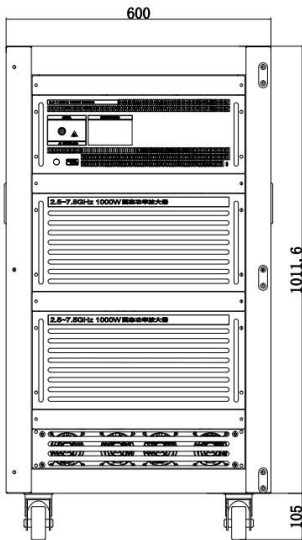
| 参数 Parameter                         | 指标 Value                  | 单位 Units |
|--------------------------------------|---------------------------|----------|
| 输入/输出接口 Input /Output Connector      | N Female/WRD250           |          |
| 正向/反向耦合 Forward/Reverse Coupling     | SMA Female/ SMA Female    |          |
| 通信接口 Communication Connector         | DB9/RJ45                  |          |
| 液晶显示屏 Front Panel LCD Screen Display | 7 inch LCD Screen Display |          |
| 尺寸 Size                              | 20U*800 depth             | mm       |
| 重量 Weight                            | ≤300                      | Kg       |

## 绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 输入功率 RF Input Power          | +5 dBm               |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

## 外形图 Outline Drawing:

Unit:mm



主要功能 Key Features:

| 参数 Parameter                | 特点 Advantages                                                          |
|-----------------------------|------------------------------------------------------------------------|
| 控制功能 Control functions      | 1, Power setting On/Off<br>2, ALC automatic level control              |
| 内置保护功能 Protection functions | 1, Over TEM<br>2, Over voltage<br>3, Over current<br>4, Over VSWR(3:1) |
| 监控和控制 Remote control        | RS422/Ethernet                                                         |
| 冷却系统 Cooling system         | Built in Cooling system, forced air cooling                            |

温度环境 Environmental Conditions:

| 参数 Parameter                       | Min                                                 | Typ | Max | 单位 Units |
|------------------------------------|-----------------------------------------------------|-----|-----|----------|
| 操作温度 Operating Temperature*        | -20                                                 |     | +40 | °C       |
| 存储温度 Non-operating Temperature*    | -30                                                 |     | +50 | °C       |
| 相对湿度 Relative humidity             |                                                     | 95  |     | %        |
| 海拔 Altitude                        | 10,000                                              |     |     | feet     |
| 震动 Shock / Vibration(MIL-STD-810F) | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |     |     |          |
| 冲击 Shock(non operating)            | 20G for 11msc half sin wave, 3 axis both directions |     |     |          |

\*Note: For a wider temperature range, please consult the manufacturer.

订货信息 Ordering Information:

| 标准型号 Base Number    | 描述 Description                                                                                           | 版本号 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      |