

## Solid State High Power Amplifier Systems

9-9.5GHz /60dB Gain/60 dBm Psat/380V AC

Model: TLPA9G9.5G-60-60-BC

TLPA9G9.5G-60-60-BC is a solid state high power amplifier systems provides high output power and high gain across the 9 to 9.5 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: 9-9.5 GHz
- Gain: 60dB Min
- Psat Output Power:60dBm Min
- Protection:Over TEM,over voltage, load 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          | 9-9.5               |           |            | GHz      |
| 功率增益 Power Gain           | GP          | 60                  |           |            | dB       |
| 增益平坦度 Gain flatness       | $\Delta$ GL |                     | $\pm 1.5$ |            | dB       |
| 增益调节范围 Gain adjust Range  | $\Delta$ GR | 20                  |           |            | dB       |
| 增益调节步进 Gain adjust Step   | $\Delta$ GS |                     | 0.5       |            | dB       |
| 饱和输出功率 Output Psat        | Psat        | 60                  |           |            | dBm      |
| 线性输出功率 Output P1dB        | P1dB        |                     | 54        |            | dB       |
| 增益稳定度 Gain stability@24h  | Gs          |                     |           | $\pm 0.25$ | dB       |
| 杂散 Spurious               | Spur        |                     |           | -60        | dBc      |
| 谐波 Harmonics@Pout=60dBm   | HAM         |                     |           | -20        | dBc      |
| 输入驻波 Input VSWR           | VSWRin      |                     |           | 1.25       | :1       |
| 输出驻波 Output VSWR          | VSWRout     |                     |           | 1.5        | :1       |
| 交流电压 AC Voltage           | Vac         |                     | 380       | 420        | V AC     |
| 功耗 Power Consumption@Psat | Pdiss       |                     | 10        | 11         | KW       |
| 工作模式 Working Mode         | MOD         | CW/PULSE compatible |           |            |          |
| 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/WR90             |          |
| 正向/反向耦合 Forward/Reverse Coupling     | N Female/ N Female        |          |
| AC供电接口 AC Supply Connector           | Y50DX-3205                |          |
| 通信接口 Communication Connector         | RS422/RJ45                |          |
| 液晶显示屏 Front Panel LCD Screen Display | 7 inch LCD Screen Display |          |
| 尺寸 Size                              | 800*600*1116.6            | mm       |
| 重量 Weight                            | ≤300                      | Kg       |

## 绝对最大值 Absolute Maximum Ratings:

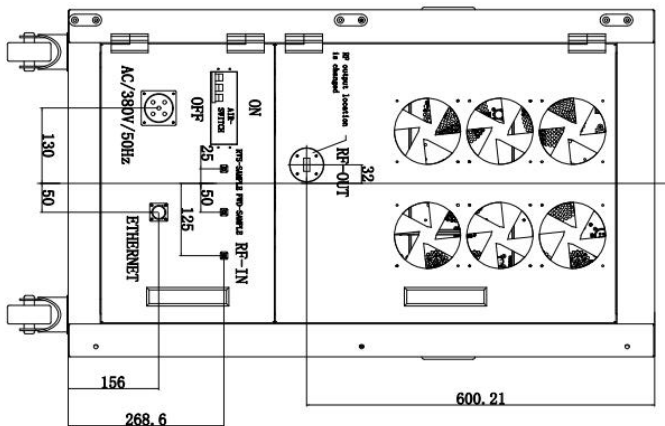
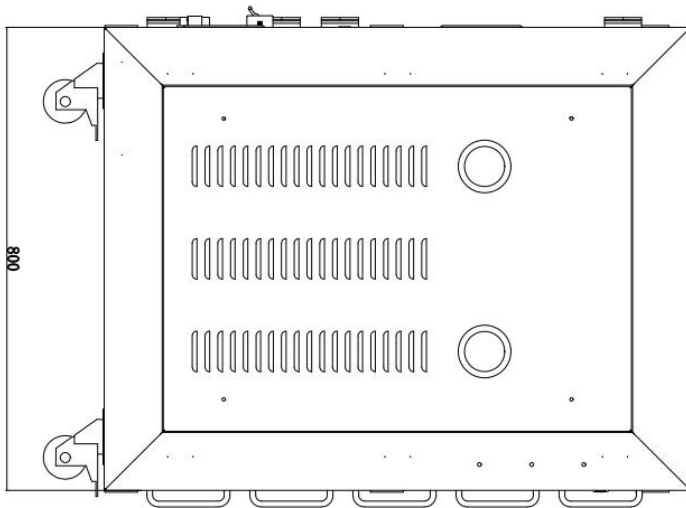
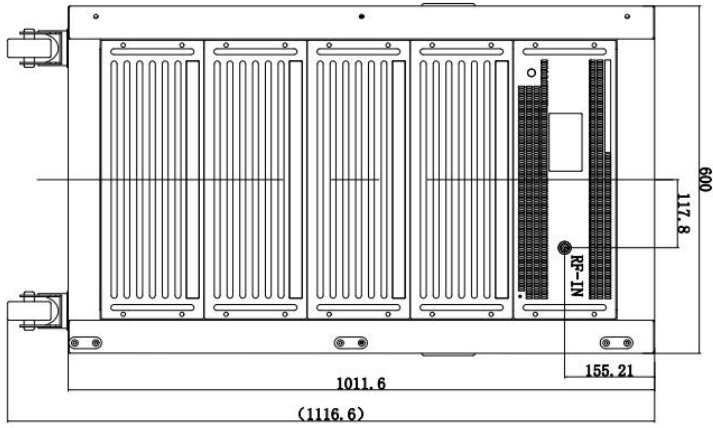
| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 输入功率 RF Input Power          | +5 dBm               |
| ESD灵敏度 ESD sensitivity (HBm) | Class 0, passed 150V |

## 主要功能 Key Features:

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

外形图 Outline Drawing:

Unit:mm



## 温度环境 Environmental Conditions:

| 参数 Parameter                       | Min                                                 | Typ | Max | 单位 Units |
|------------------------------------|-----------------------------------------------------|-----|-----|----------|
| 操作温度 Operating Temperature*        | -10                                                 |     | +40 | °C       |
| 存储温度 Non-operating Temperature*    | -20                                                 |     | +70 | °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 |
|---------------------|------------------------------------------------------------------------------------------------------|--------------|
| TLPA9G9.5G-60-60-BC | Solid State High Power Amplifier Systems 9-9.5GHz,Gain:60dB,Psat:60 dBm,380V AC,Built in Fan Cooling | Rev.1.1      |