

## Solid State High Power Amplifier Systems

6-8 GHz /50dB Gain/48 dBm Psat/220 V AC

Model: TLPA6G8G-50-48-BC

TLPA6G8G-50-48-BC is a solid state high power amplifier systems provides high output power and high gain across the 6 to 8 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:

- Wide Band: 6-8GHz
- Gain: 50dB Min
- Psat Output Power:48dBm Min
- 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          | 6-8     |         |     | GHz      |
| 增益 Gain              | GP          | 50      |         |     | dB       |
| 增益平坦度 Gain flatness  | $\Delta$ GL |         | $\pm 3$ |     | dB       |
| 饱和输出功率 Output Psat   | Psat        | 48      |         |     | dBm      |
| 杂散 Spurious          | Spur        |         |         | -60 | dBc      |
| 谐波 Harmonics         | HAM         |         | -20     |     | dBc      |
| 输入驻波 Input VSWR      | VSWRin      |         |         | 2.0 | :1       |
| 交流电压 AC Voltage      | Vac         | 220     |         |     | V AC     |
| 功耗 Power Consumption | Pdiss       | 500@Max |         |     | W        |
| 阻抗 Impedance         | I/O-IMP     | 50      |         |     | Ohms     |

## 机械特性 Mechanical Specifications:

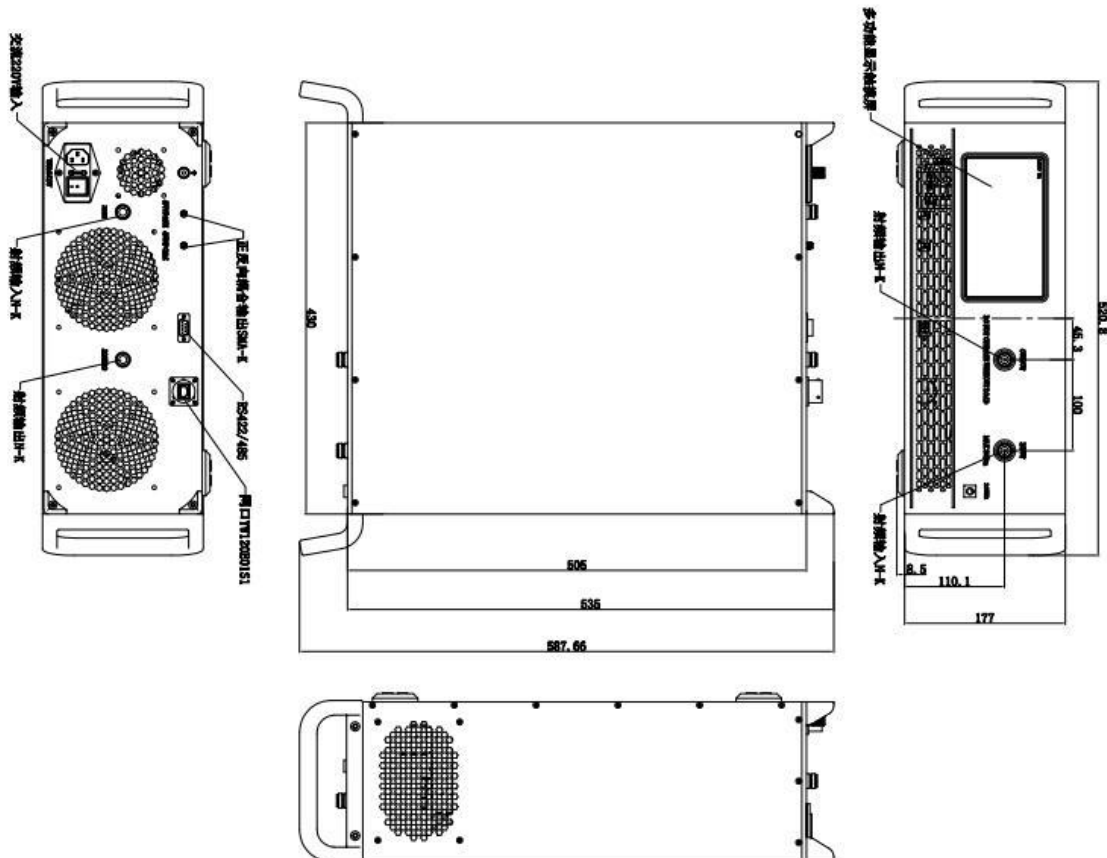
| 参数 Parameter                    | 指标 Value       | 单位 Units |
|---------------------------------|----------------|----------|
| 输入/输出接口 Input /Output Connector | N Female/WR137 |          |
| 尺寸 Size                         | 19 Inch 4U     |          |
| 重量 Weight                       | ≤35            | Kg       |

## 绝对最大值 Absolute Maximum Ratings:

| 参数 Parameter                 | 指标 Value             |
|------------------------------|----------------------|
| 供电偏置电压 Supply Bias Voltage   | 260V                 |
| 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 Control                  | RS422/Ethernet                                                           |
| 内置保护功能 Protection functions | 1,Over TEM<br>2,Over voltage<br>3,Over current protection<br>4,Over VSWR |
| 控制功能 Control functions      | 1,Power setting On/Off<br>2,ALC                                          |
| 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                                                 |     | +50  | °C       |
| 存储温度 Non-operating Temperature*    | -55                                                 |     | +125 | °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 Desciption                                                                                     | 版本号 Revision |
|-------------------|---------------------------------------------------------------------------------------------------|--------------|
| TLPA6G8G-50-48-BC | Solid State High Power Amplifier Systems 6-8GHz,Gain:50dB,Psat:48dBm,220V AC,Built in Fan Cooling | Rev.1.0      |