



Solid State High Power Amplifier Systems

0.5-2.5GHz/60dB Gain/60dBm Psat/380V AC

TLPA0.5G2.5G-60-60-BC

TURPA0.5G2.5G-6060BC is a solid state high power amplifier systems provides high output power and high gain across the 0.5 to 2.5 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:

- Frequency range:0.5-2.5GHz
- 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        | 0.5-2.5             |      |      | GHz      |
| 工作模式 Working Mode             | MOD       | CW/PULSE compatible |      |      |          |
| 功率增益<br>Power Gain@Pout=60dBm | GP        | 60                  |      |      | dB       |
| 线性增益平坦度 Linear 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               | VSWR      |                     |      | 1.5  | :1       |
| 交流电压 AC Voltage               | Vac       |                     | 380  |      | V AC     |
| 交流电流 AC Current               | Iac       |                     | 18   |      | A        |
| 功耗Power consumption           | Pdiss     |                     | 7000 | 8000 | W        |
| 阻抗 Impedance                  | I/O-IMP   | 50                  |      |      | Ohms     |

机械特性 Mechanical Specifications:

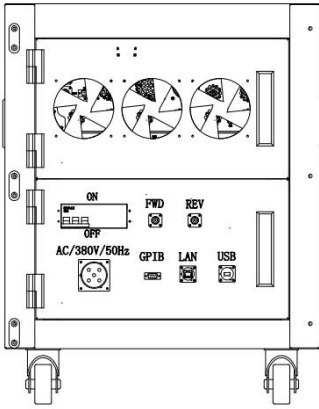
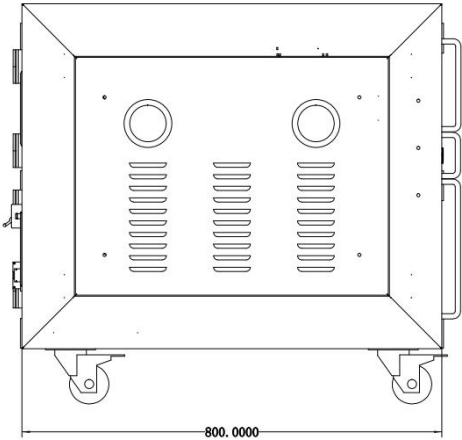
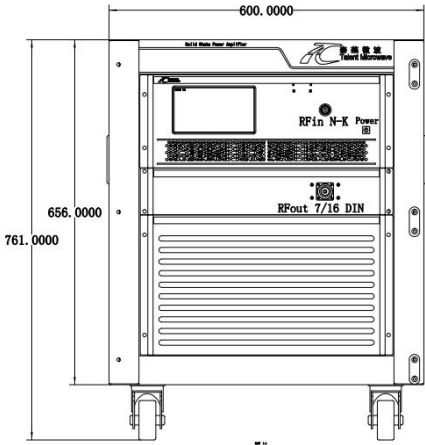
| 参数 Parameter                         | 指标 Value                  | 单位 Units |
|--------------------------------------|---------------------------|----------|
| 输入/输出接口 Input /Output Connector      | N Female/7/16 DIN Female  |          |
| 正向/反向耦合 Forward/Reverse Coupling     | SMA Female/SMA Female     |          |
| 液晶显示屏 Front Panel LCD Screen Display | 7 inch LCD Screen Display |          |
| 通信接口 Communication Connector         | DB9/RJ-45                 |          |
| 尺寸 Size                              | 12U*800 depth             | mm       |
| 重量 Weight                            | ≤200                      | 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 |
| 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 | ℃        |
| 存储温度 Non-operating Temperature*    | -30                                                 |     | +50 | ℃        |
| 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 |
|----------------------|--------------------------------------------------------------------------------------------------------|--------------|
| TURPA0.5G2.5G-6060BC | Solid State High Power Amplifier Systems 0.5-2.5GHz,Gain:60dB,Psat:60 dBm,380V AC,Built in Fan Cooling | Rev.1.1      |