

## Solid State High Power Amplifier Systems

40-67GHz/40dB Gain/37dBm Psat/220V AC

Model: TLPA40G67G-40-37-BC

TLPA40G67G-40-37-BC is a solid state high power amplifier systems provides high output power and high gain across the 40 to 67 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: 40-67GHz
- Gain: 40dB Min
- Psat Output Power: 67dBm Min
- Protection: Over TEM, over voltage, over current, over VSWR protection
- 50 Ohm Matched Input / Output



### Electrical Characteristics:

| Parameter         | Symbol      | Min   | Typ | Max | Units |
|-------------------|-------------|-------|-----|-----|-------|
| Frequency range   | BW          | 40-67 |     |     | GHz   |
| Power Gain        | GP          | 40    |     |     | dB    |
| Gain adjust Range | $\Delta$ GR |       | 20  |     | dB    |
| Gain adjust Step  | $\Delta$ GS |       | 0.5 |     | dB    |
| Output Psat       | Psat        | 37    |     |     | dBm   |
| Spurious          | Spur        |       |     | -50 | dBc   |
| Input VSWR        | VSWRin      |       |     | 2   | :1    |
| AC Voltage        | Vac         |       | 220 |     | V AC  |
| Power Consumption | Pdiss       |       |     | 200 | W     |
| Impedance         | I/O-IMP     | 50    |     |     | Ohms  |

### Mechanical Specifications:

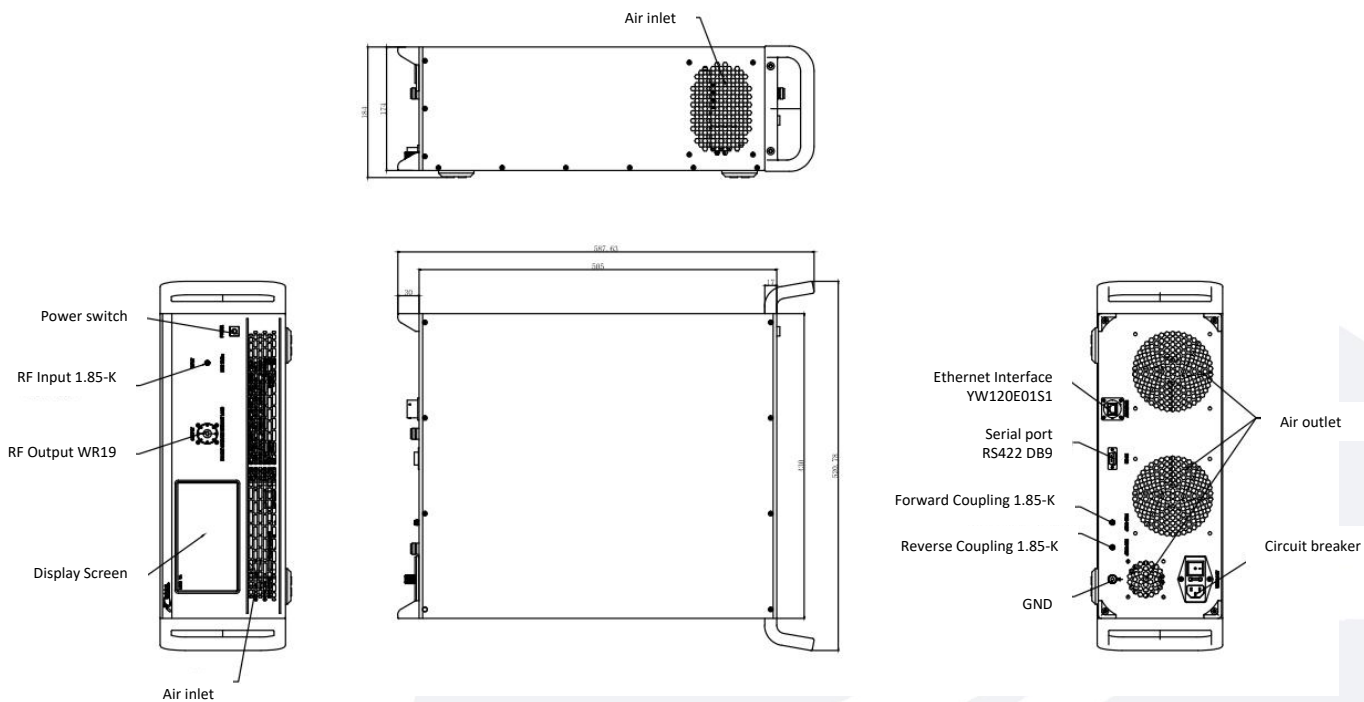
| Parameter                | Value                       | Units |
|--------------------------|-----------------------------|-------|
| Input /Output Connector  | 1.85mm Female WR19          |       |
| Forward/Reverse Coupling | 1.85mm Female/1.85mm Female |       |
| Communication Connector  | DB9/RJ45                    |       |
| Size                     | 19 Inch 3U*550              | mm    |
| Weight                   | ≤30                         | 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, Output power control                |
| Display functions    | 1, Output/reflected power<br>2, Fault informations                |
| Protection functions | 1, Over TEM<br>2, Over voltage<br>3, Over current<br>4, Over VSWR |
| Remote control       | RS422/Ethernet  |
| Cooling system       | Built in Cooling system, forced air cooling                       |

### Environmental Conditions:

| Parameter                       | Min   | Typ | Max | Units |
|---------------------------------|---|-----|-----|-------|
| Operating Temperature*          | -20   |     | +50 | °C    |
| Non-operating Temperature*      | -30   |     | +60 | °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 |
|---------------------|--|----------|
| TLPA40G67G-40-37-BC | Solid State High Power Amplifier Systems 40-67GHz, Gain:40dB, Psat:37 dBm, 220V AC, Built in Fan Cooling | Rev.1.1  |