

# SWITCHING

SWITCHING POWER SUPPLY SPECIFICATION

# CP-67030-12

**CLAYPOWER**  
C O M P A N Y

REV.00

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1.1 Input Voltage Range --- 90~264Vac, full range with active power factor 90% min

1.2 Input Frequency Range --- 47Hz to 63Hz.

1.3 Input Ac Current ( Max ) --- 6.0A Max, full load.

1.4 Inrush Current --- At 132Vac / 264Vac, full load condition, no damage occur, input fuse shall not blow.

1.5 Efficiency --- 63% min, at nominal line input full load.

1.6 Input Leakage Current --- Leakage current from line to ground will be less 3.5mA rms, measurement will be made at 240Vac/60Hz.

## 2. Output Characteristics:

### 2.1 Static Output Characteristics.

|    | Output Voltage | Load Range |       | Regulation |       | Ripple Max<br>mV P-P | Ripple & Noise<br>Max. mV P-P |
|----|----------------|------------|-------|------------|-------|----------------------|-------------------------------|
|    |                | Min.       | Max.  | Min.       | Max.  |                      |                               |
| 1. | +48.0 V        | 0.0 A      | 6.2 A | - 5 %      | + 5 % | 200 mV               | 250 mV                        |

#### Note:

1. Noise Test --- Noise bandwidth is from Dc to 20MHz.
2. Ripple frequencies greater than 1 MHz shall be attenuated by the measurement system.
3. Add 0.1uF / 10uF capacitor at output connector terminals for ripple & noise measurements.
4. The total output power shall not exceed 300W.

### 2.2 Dynamic Output Characteristics:

2.2.1 Initial Delay Time --- NONE.

2.2.2 Rise Time --- 50 mS max, at nominal line full load.

2.2.3 Turn-on Delay Time --- 600mS max, at nominal line full load.

2.2.4 Hold-up Time --- 16mS min, at nominal line full load.

2.2.5 Transient Overshoot --- 10% Max. of delay state after load change of 25% within the range of 50% to 100% of full load.

2.2.6 Temperature Coefficient --- 0.03% per °C max.

### **3. Protections:**

- 3.1 Over Voltage Protection --- Standard on +48V output set at 53Vdc – 60Vdc.**
- 3.2 Short Circuit Protection --- A short circuit placed between DC return and output shall cause no damage and the power supply shall shutdown.**
- 3.3 Over Power Protection --- The power supply can use electronic circuit to limit the output. Power against excessing +120% - 170% of full load, or protected against excessive power delivery due to short circuit of any output or over total power.**
- 3.4 No load Operation --- No parts damaged on power supply.**

### **4. Dielectric Withstand Voltage:**

- 4.1 Primary to Secondary ----- 1500Vac for 1 minute, or 2200Vdc for 3 sec.**
- 4.2 Primary to Safety Ground --- 1500Vac for 1 minute, or 2200Vdc for 3 sec.**
- 4.3 Insulation Resistance ----- Primary to safety ground - 500Vdc, 100M ohms min.**

### **5. Conducted EMI: Internal Filter Can Meet.**

- 5.1 FCC Requirement --- Part15, SUB-Part J, Computing Devices “ Class A “ Limits.**
- 5.2 VDE Requirement --- Class “ A “ ( General Operating Permit ) Requirements Of VFG 234/1991.**
- 5.3 CISPR Requirement --- Class “ A “ Requirements Of CLSPR 22.**
- 5.4 Harmonic Requirement --- IEC10000-3-2 & IEC10000-3-3 Class “ D “.**

### **6. Product Safety: This Power Supply Is Designed Can Meet The Following Spec.**

- 6.1 UL/CUL ----- UL60950**
- 6.2 TUV ----- EN 60950**

### **7. Environment:**

- 7.1 Operation Temperature ----- Air temperature 0 °C to 50 °C.**
- 7.2 Operation Relative Humidity ----- 20% to 90%.**

7.3 Storage Temperature ----- Air temperature -20 °C to 60 °C.

7.4 Storage Relative Humidity ----- 5% to 95%.

7.5 Altitude ----- Operate properly at any altitude between 0 to 100,000 feet, storage 40,000 feet.

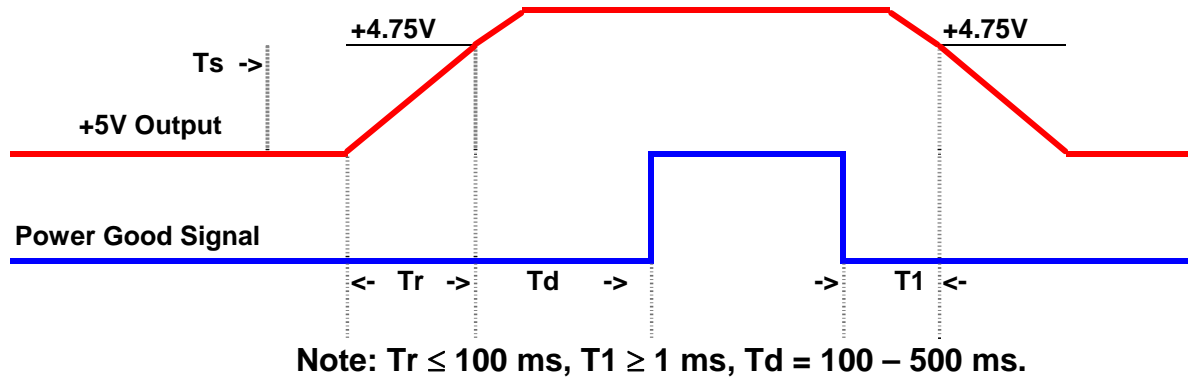
7.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 minutes per cycle; 30 minutes for each axis ( X,Y,Z ).

## 8. Burn-In

8.1 Burn-In ----- At 45 °C, max. load, 4 hours.

9. Mean Time Between Failure ----- 100 KHrs minimum at 75% load for 25 °C ambient temperature.

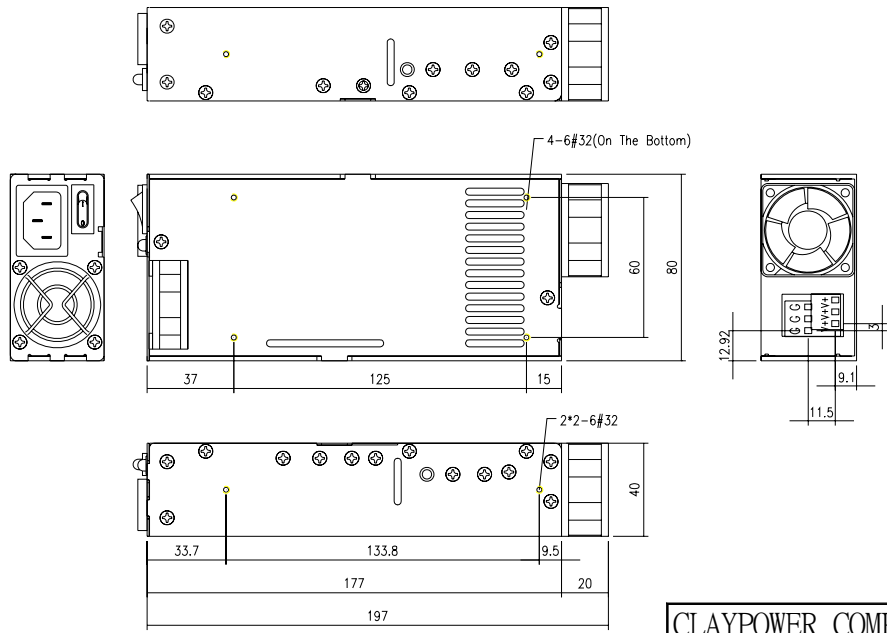
## 10. Power-Good Signal:



## 11. Dimension

11.1 W x H x D ----- 80.0 x 40.0 x 197.0( mm )

| REVISIONS |             |      |          |
|-----------|-------------|------|----------|
| NO        | DESCRIPTION | DATE | APPROVED |



|                   |      |                   |                          |               |
|-------------------|------|-------------------|--------------------------|---------------|
| CLAYPOWER COMPANY |      |                   |                          |               |
| APPROVED          | DATE | TITLE             |                          |               |
|                   |      | CP-67030-12       |                          |               |
| CHECKED           | DATE | DRAWING NO.       | PART NO.                 | REV.          |
|                   |      |                   |                          | A             |
| DESIGNED          | DATE | SCALE: MM(INCHES) | TOLERANCES:              | MODEL NO.     |
| <i>Yubo</i>       |      | 1:2               | XX = ±.10<br>XXX = ±.010 | Single Output |
|                   |      |                   |                          | SHEET         |
|                   |      |                   |                          | 1 of 1        |

|         |    |           |  |
|---------|----|-----------|--|
| FINISH: |    | MATERIAL: |  |
| 採購      | 生產 | 品管        |  |