



\_\_\_\_\_ SINGLE SWITCHING POWER SUPPLY SPECIFICATION

# CP-65015-06

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

REV.00

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## 1. Input Characteristics:

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 ) --- 3.0A 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 mV P-P	Ripple & Noise Max. mV P-P
	Min.	Max.	Min.	Max.		
1. +12.0 V	0.0 A	12.5 A	- 5 %	+ 5 %	100 mV	150 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. Provided with fan rating 20 CFM air flow min.
5. The total output power shall not exceed 150W.

### 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 +12V output set at 13.2Vdc – 16Vdc.**

**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 fo safety ground - 500Vdc, 100M ohms min.**

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

**5.1 FCC Requirement --- Part15, SUB-Part J, Computing Devices “ Class B “ Limits.**

**5.2 CISPR Requirement --- Class “ B “ Requirements Of CISPR 22.**

**5.3 VCCI Class “ 2 “.**

### **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.

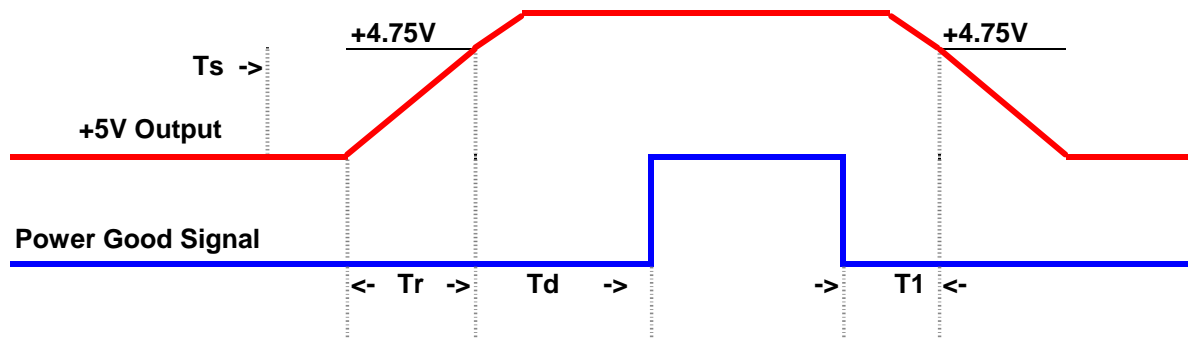
7.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 minutes per cycle; 30 minutes for each axis ( X,Y,Z ).

## 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:

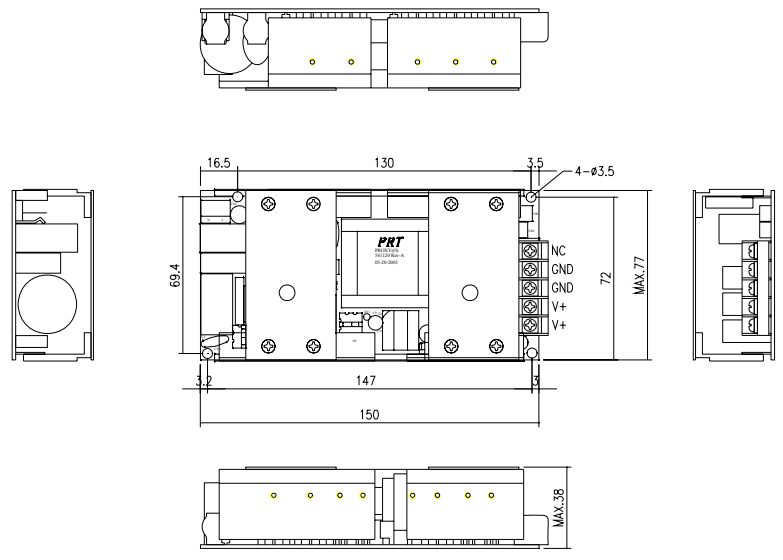


Note:  $T_r \leq 100$  ms,  $T_1 \geq 1$  ms,  $T_d = 100 - 500$  ms.

## 11. Dimension

11.1 W x H x D ----- 76.0 x 38.0 x 150.0 ( mm )  
80.0 x 40.0 x 152.0 ( mm )

REVISIONS			
NO	DESCRIPTION	DATE	APPROVED



**CLAY POWER COMPANY**

APPROVED	DATE	TITLE	CP-65015-06	
CHECKED	DATE	DRAWING NO.	PART NO.	REV. A
DESIGNED	DATE	SCALE: MM(INCHES)	TOLERANCES: XX $\pm$ 0.10 XXX $\pm$ 0.010	MODEL NO. Single SHEET 1 of 1

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