



SWITCHING POWER SUPPLY SPECIFICATION

# CP-81025-80

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

## 1. Input Characteristics:

1.1 Input Voltage Range --- 100~240Vac, full range with active power factor 90% min

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

1.3 Input Ac Current ( Max ) ---8.0A max, full load.

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

1.5 Efficiency ---70% min, at nominal line input full load.

1.6 Input Leakage Current --- Leakage current from line to ground will be less 10mA 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. +5.0 V	1 A	25.0 A	- 5 %	+ 5 %	50 mV	100 mV
2. +12.0 V	0.3 A	20.0 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. The total output power shall not exceed 250W.

### 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. for + 5V output 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 +5.0V output set at 5.7Vdc – 6.5Vdc.  
+12.0V output set at 13.5Vdc – 14.5Vdc.

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 +115% - 150% 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 VDE Requirement --- Class “ B “ ( General Operating Permit ) Requirements Of VFG 234/1991.

5.3 CISPR Requirement --- Class “ B “ Requirements Of CLSPR 22.

5.4 Harmonic Requirement --- IEC61000-3-2 & IEC61000-3-3 Class “ D “.

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

6.1 UL/CUL ----- UL60950-1

6.2 TUV ----- EN 60950-1

### 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.

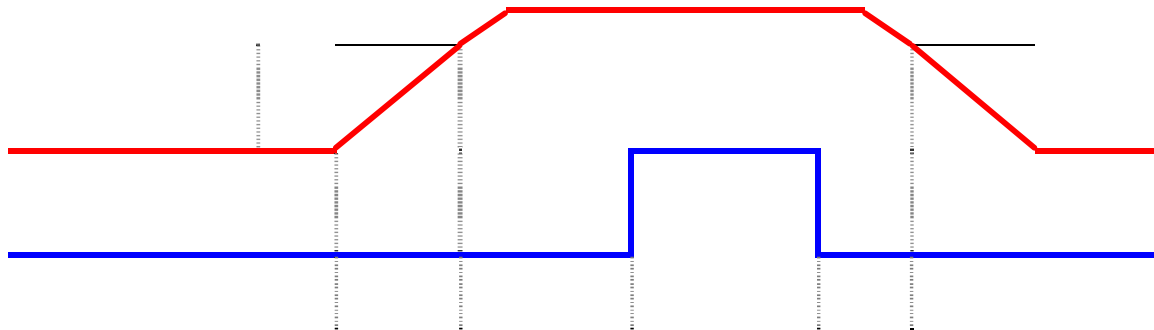
7.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 minutes per cycle; 30 minutes for each axis ( X,Y,Z ).

## 8. Burn-In

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

9. Mean Time Between Failure ----- 60KHrs minimum at 75% load for 25 °C ambient temperature.

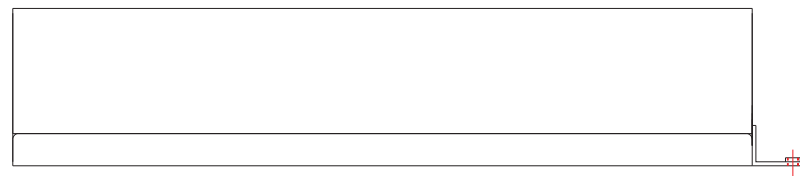
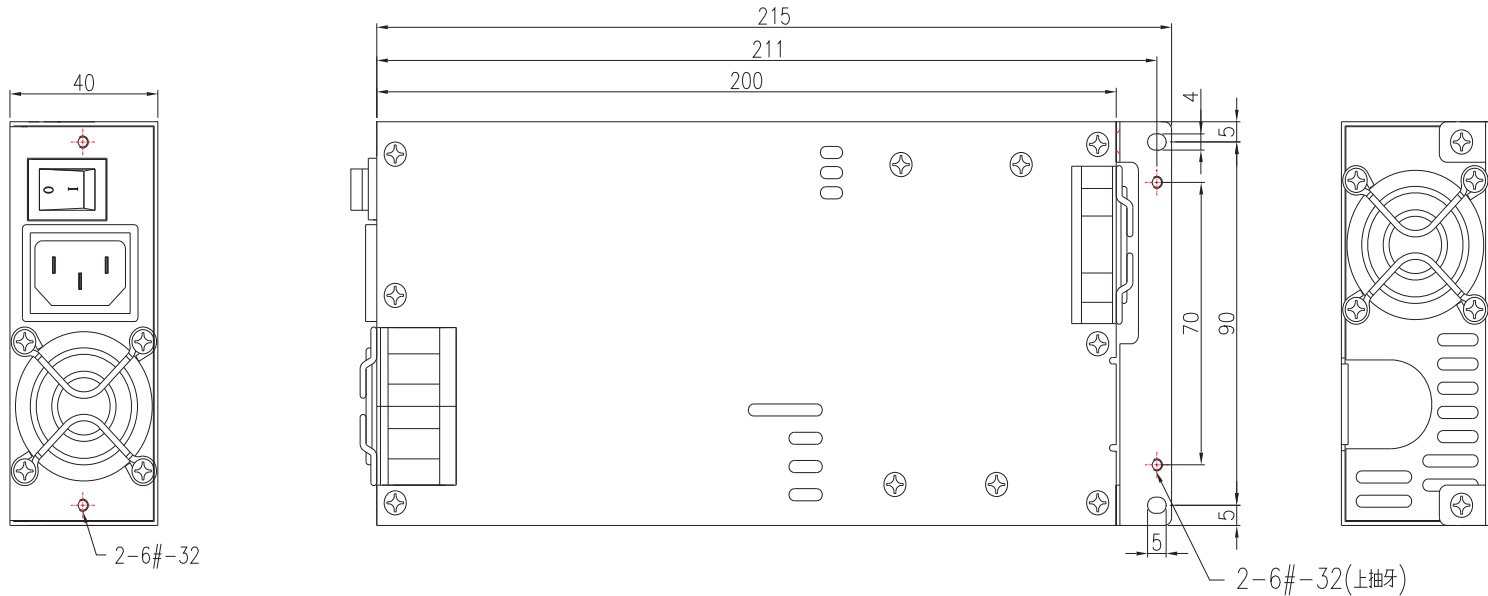
## 10. Power-Good Signal:



## 11. Dimension

11.1 W x H x D ----- 100.0 x 40.0 x 200.0 ( mm )

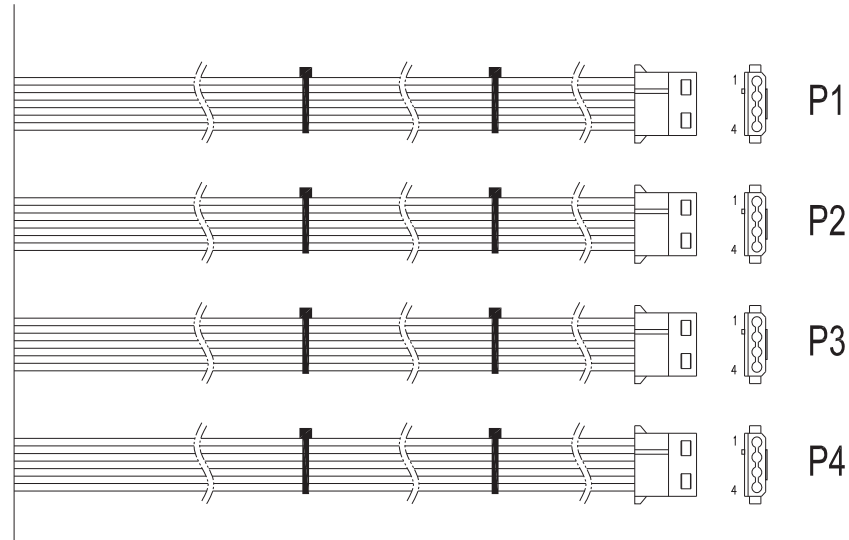
REVISIONS			
NO	DESCRIPTION	DATE	APPROVED



<b>CLAYPOWER</b> C O M P A N Y				
APPROVED	DATE	TITLE	PART NO.	
		CP-81025-RAID	PRX 1U	
CHECKED	DATE	SCALE : MM(INCHES)	DRAWING NO.	REV.
		1:1	PRX 1U	A0
DESIGNED	DATE	TOLERANCES:	MODEL NO.	SHEET
2008	03/06'08	.XX = ±.10 .XXX = ±.010	昱辰	1of1

第三角法 (Projection)	FINISH:		MATERIAL:		
	採購	生產		品管	

REVISIONS			
NO	DESCRIPTION	DATE	APPROVED



REF.ID	PIN NO.	SIGNAL	WIRE COLOR	GAUGE	CONNECTOR TYPE	LENGTH
P2 - P4	1	+12V	YELLOW	18	WST/P4-A10202 or equivalent	500 +50mm -25mm
	2	COM	BLACK	18		
	3	COM	BLACK	18		
	4	+5V	RED	18		

<b>CLAYPOWER</b> C O M P A N Y					
APPROVED	DATE	TITLE	PART NO.		
		CP-81025-80			
CHECKED	DATE	SCALE : MM(INCHES)	DRAWING NO.	REV.	
		1:1	PRX線材圖	A0	
DESIGNED	DATE	TOLERANCES:	MODEL NO.	SHEET	
2008	08/14'08	XX = ±.10 XXX = ±.010	昱辰	1 of 1	

第三角法 (Projection) 	FINISH:			MATERIAL:		
	採購	生產	品管			