



SWITCHING

SWITCHING POWER SUPPLY SPECIFICATION

CP-40030

CLAYPOWER
C O M P A N Y

REV.00

TEL 626.303.8885 FAX 626.301.0588

727 Phillips Dr. City of Industry, CA 91748

www.claypowercompany.com

1.Input Characteristics

1.1 Input Voltage Range ----- -38Vdc To -72Vdc,

1.2 Input Dc Current (Max) ----- 11.0A Max. Full Load.

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.	+3.3 V	0.3 A	22.0 A		- 5 %	+ 5 %	50 mV	100 mV
2.	+5.0 V	2.5 A	30.0 A		- 5 %	+ 5 %	50 mV	100 mV
3.	+12.0 V	0.5 A	11.0 A		- 5 %	+ 5 %	100 mV	150 mV
4.	-5.0 V	0.0 A	1.0 A		- 10 %	+ 10 %	150 mV	200 mV
5.	-12.0 V	0.0 A	1.0 A		- 10 %	+ 10 %	150 mV	200 mV
6.	SB +5.0 V	0.0 A	1.5 A		- 5 %	+ 5 %	100 mV	100 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. Combined Total Power From +3.3V And +5V Rails Shall Not Exceed 160W
5. The Total Output Power Shall Not Exceed 300W..

2.2 Dynamic Output Characteristics:

2.2.1 Rise Time ---- 100 ms Max. At Nominal Line Full Load.

2.2.2 Turn-on Delay Time ----- 600mS Max. At Nominal Line Full Load.

2.2.3 Hold-up Time ----- 16 ms Min. For + 5V Output At Nominal Line Full Load.

2.2.4 Transient Overshoot ----- 10% Max. Of Delay State After Load Change Of 25% Within The Range Of 50% To 100% Of Full Load.

2.2.5 Temperature Coefficient ----- 0.03% Per °C Max.

3.Protections

- 3.1 Over Voltage Protection --- Standard On +3.3V Output Set At 4.10Vdc At +/-0.40Vdc.
+5.0V Output Set At 6.25Vdc At +/-0.75Vdc.
+12.0V Output Set At 14.6Vdc At +/-1.0Vdc.
- 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 +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 1800Vac For 1 Sec.
- 4.2 Primary to Safety Ground --- 1500Vac For 1 Minute. Or 1800Vac For 1 Sec.
- 4.3 Insulation Resistance --- Primary To Safety Ground - 500Vdc, 50M ohms Min.

5.Environment

- 5.1 Operation Temperature ----- Air Temperature 0 °C To 50 °C.
- 5.2 Operation Relative Humidity ----- 20% To 90%.
- 5.3 Storage Temperature ----- Air Temperature -20 °C To 60 °C.
- 5.4 Storage Relative Humidity ----- 5% To 95%.
- 5.5 Altitude ----- Operate Properly At Any Altitude Between 0 To 100,000 Feet. Storage 40,000 Feet.
- 5.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 Minutes Per Cycle; 30 Minutes For Each Axis (X,Y,Z).

6.Burn-In

- 6.1 Burn-In ----- At 45 °C, Max. Load, 4 Hours.

7.Mean Time Between Failure -----150 KHrs Minimum At Full Load For 25 °C Ambient Temperature.

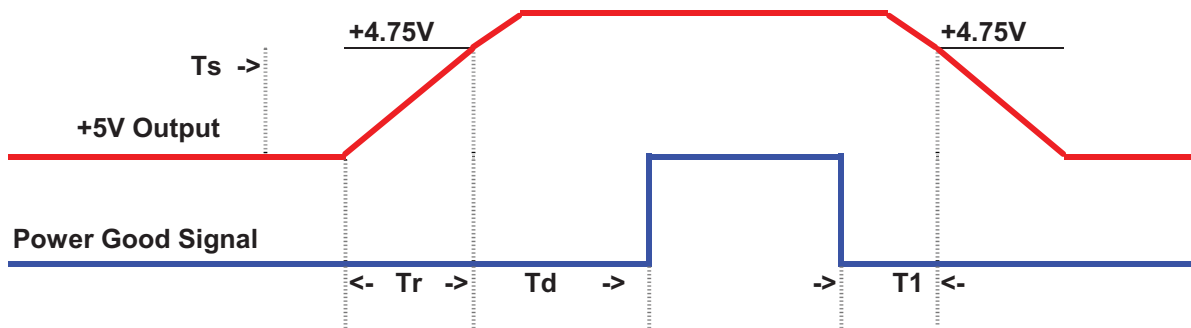
8. Product Safety:

This Power Supply Is Designed Can Meet The Following Spec.

8.1 UL/CUL ----- UL1950

8.2 TUV ----- EN 60950

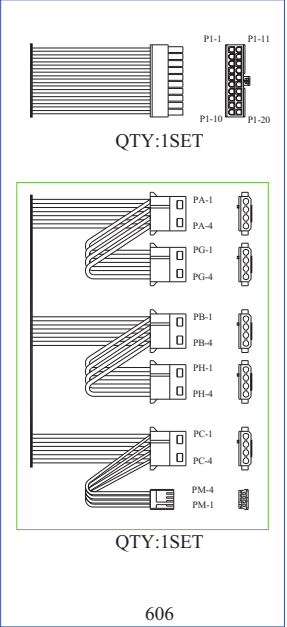
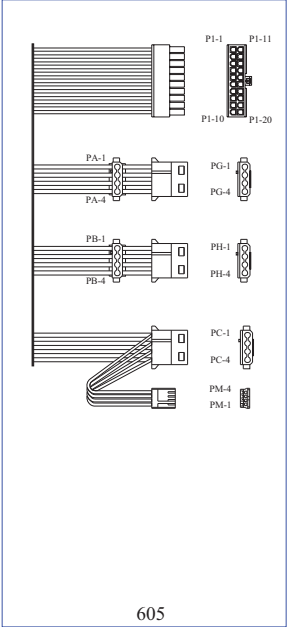
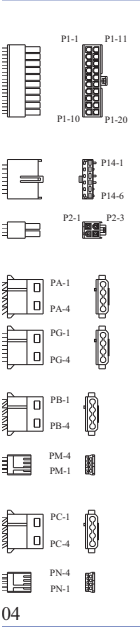
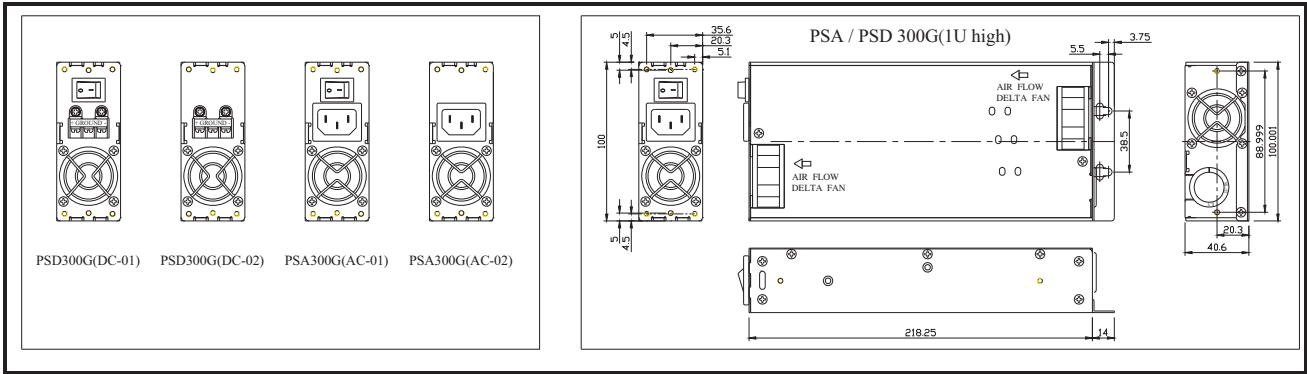
9.Power-Good Signal



Note: $Tr \leq 100\text{ ms}$, $T1 \geq 1\text{ ms}$, $Td = 100 - 500\text{ ms}$.

10.Dimension

10.1 W x H x D ----- 100.0 x 40.6 x 218.25 (mm)



CONN	PIN	COLOR	OUTPUT	LENGTH
P1	1	BROWN	+3.3V,S+	508.0(20.0) +50.8(2.0) -25.4(1.0)
	2	BROWN	+3.3V	
	3	BLACK	G,3.3V,S-	
	4	RED	+5V	
	5	BLACK	GND	
	6	RED	+5V	
	7	BLACK	G,+5V,S-	
	8	ORANGE	PG	
	9	PURPLE	+5VSB	
	10	YELLOW	+12V,S+	
	11	BROWN	+3.3V	
	12	BLUE	-12V	
	13	BLACK	GND	
	14	GREEN	PS-ON	
	15	BLACK	GND	NOTE 1
	16	BLACK	GND	
	17	BLACK	GND	
	18	WHITE	-5V	
	19	RED	+5V	
	20	RED	+5V,S+	
P2	1	BLACK	GND	508.0(20.0) +50.8(2.0) -25.4(1.0)
	2	BLACK	GND	
	3	YELLOW	+12V	
	4	YELLOW	+12V	
P14	1	BLACK	GND	508.0(20.0) +50.8(2.0) -25.4(1.0)
	2	BLACK	GND	
	3	BLACK	GND	
	4	BROWN	+3.3V	
	5	BROWN	+3.3V	
	6	RED	+5V	
PA,PB PC	1	YELLOW	+12V	508.0(20.0) +50.8(2.0) -25.4(1.0)
	2	BLACK	GND	
	3	BLACK	GND	
	4	RED	+5V	
PG,PH	1	YELLOW	+12V	152.4(6.0) ±12.7(0.5)
	2	BLACK	GND	
	3	BLACK	GND	
PM,PN	4	RED	+5V	152.4(6.0) ±12.7(0.5)
	1	RED	+12V	
	2	BLACK	GND	
	3	BLACK	GND	

P1
HOUSING MOLEX 39-01-2200
SOCKET MOLEX 39-00-0039

P14
HOUSING MOLEX 39-01-2040
SOCKET MOLEX 39-00-0039

P14
HOUSING MOLEX 90331
SOCKET MOLEX 08-50-0276

PA,PB,PC,PG,PH
HOUSING AMP 1-480424-0
SOCKET AMP 60619-1

PM,PN
HOUSING AMP 171822-4
SOCKET AMP 170204-1

NOTE:
1.POWER ON: TTL ACTIVE LOW.
2.+5V (S+,S-),+12V(S+) FOR
REDUNDANT SYSTEM ONLY.