SPECIFICATION

120W Charger power supply
120-4CH02
Oct. 12 '04

P.E	R/D	APPROVED	REV.
	James Huang		00

Electrical Specification

History

REV.	Description	Date	Drawn	Mechanical	Electrical	Approved
S00	SPEC.ISSUE	Oct.12'04	-			

MODEL NO. **120-4CH02** **SHEET 1 OF 6**

Electrical Specification

Electrical Requirements

1 Input Characteristics — Measured the output voltage at the output connector

ITEM	CONDITION	SPECIFICATION
1.1 Rated Input Voltage	Selected Switch	100-120V/200-240V
1.2 Input Voltage Range	Selected Switch	90-132VAC/180- 264 VAC
1.3 Input Frequency Range	Continuously	47Hz to 63 Hz
1.4 Input Current	Maximal	3.5A
1.5 Efficiency:	115/230Vac @ full load	80%

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Electrical Specification

2 Output Characteristics

Measured the output voltage at the output connector

2.1 Output Rated Voltage

No.	Symbol	Output Current	Maintain.(V)	Fastcharger.(V)	Remark
1	12	10A	13.6	14.4	5%

2.2

Five Step Charging Mode	V	A	Time
-Deep Charging Mode	10V	2.5A	---
-Fast Charging Mode	14.4V	10A	10 hours
-Floating Charging Mode	13.6V	---	2 hours
-Maintain Charging Mode	0~28.8V*	-3A~10A*	40 hours
-Storage Charging Mode	0~28.8V*	0~10A*	---

Note1: -3A discharge & +10A Fast charging to recover. Battery & Turn off charger when charger waiting.

Note2:Turn off charger & 5 min. Fast charging per hour.

Electrical Specification

3 Protection Characteristics

ITEM	CONDITION	SPECIFICATION
3.1 Short Circuit Protection	When an internal fault occurs, or an external fault is applied to the power supply, such that short circuit is applied to the output, the power supply shall shut down. It will enter into normal condition if the fault condition is removed.	Shutdown and no damage.
3.2 Over-Voltage Protection:	When over voltage happened at output terminal that caused by internal fault. The output trip voltage will be less than 17V. It will enter into normal condition if the fault condition is removed.	No damage.
3.3 Over Current Protection:	Output current limit	Less than 11A (C. C. Mode)
3.4 Output Reverse Protection		Fuse off

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4 Environmental Characteristics

ITEM	CONDITION	SPECIFICATION
4.1 Electric Fast Transients: Refer to IEC1000-4-4 level 3	Impulse:±1KV applied to L, N, pulse duration 50nS period 5 min. Input voltage 230Vac and full load. Impulse: ±2KV applied to L-chassis an N-chassis, pulse duration 50nS period 5 min. Input voltage 230Vac and full load.	Normal operation shall be continued. Normal operation shall be continued
4.2 Lightning Surge: Refer to IEC1000-4-5 level 3	±1KV applied between L, N, pulse rise time1.2us and duty time 50uS, 10 times test each one. ±2KV applied between L-chassis an N-chassis, pulse rise time 1.2us and duty time 50uS, 10times test each one.	Normal operation shall be continued. Normal operation shall be continued
4.3 Electron Static Discharge: (Refer to IEC1000-4-2 Energy Storage Capacitor 150pF; Discharge Resistor 330Ù)	Air Discharge:±8KV. Contact Discharge:±4KV.	Normal operation shall be continued
4.4 Cooling	The power supply is cooled by 40mm 12VDC ball-bearing fans	
4.5 EMI: AC power Supply comply with the Following national standards: EMI Conducted Emission EMI Radiated Emission	150Vac / 230Vac The AC power supply internal filter to meet, combine with customer's system.	 FCC CLASS B CISPR 22 CLASS B VCCI LEVEL II
4.6 Safety conforming:	UL1012	
4.7 Leakage Current	240Vac / 50Hz	3.5mA
4.8 Dielectric Strength: (Hi-Pot)	Between AC input and secondary applied AC 1.5KV / test time 1 minute / cut off current shall be less than 10mA Between AC input and the grounding conductor. AC 1.5KV/ 1 minute/ 10mA	

Electrical Specification

TEM	CONDITION	SPECIFICATION
4.9 Temperature	Operating Storage	0 to 40 -20 to +85
4.10 Humidity:	Operating Storage	20%~90% 5%~95%

5 LED Indicator

ITEM	CONDITION
5.1 Status LED	
5.1.1 Waiting Mode	LED (red) “ON” always
5.1.2 Deep Charging Mode	LED (red) Blink 2 times ,
5.1.3 Fast Charging Mode	LED (red) Blink 0.5 (S)
5.1.4 Floating Charging Mode	LED (red) Blink 2 (S)
5.1.5 Maintain Mode	LED (red) Blink 1(S), Flash 4 times ,
5.1.6 Storage Charging Mode	LED (red) Blink 5 (S)
5.1.7 Failure Mode	
5.1.7.1 Charger Fail	LED (red) “OFF” always
5.1.7.1 Battery Fail	LED (red) “ON” always
5.2 Indicator LED	
5.2.1 30%	When battery capacity below 30% the LED is on.
5.2.2 50%	When battery capacity above 50% the LED is on.
5.2.3 70%	When battery capacity above 70% the LED is on.
5.2.4 85%	When battery capacity above 85% the LED is on.
5.2.5 100%	When battery fully charger the LED is on.

6 Mechanical Characteristics

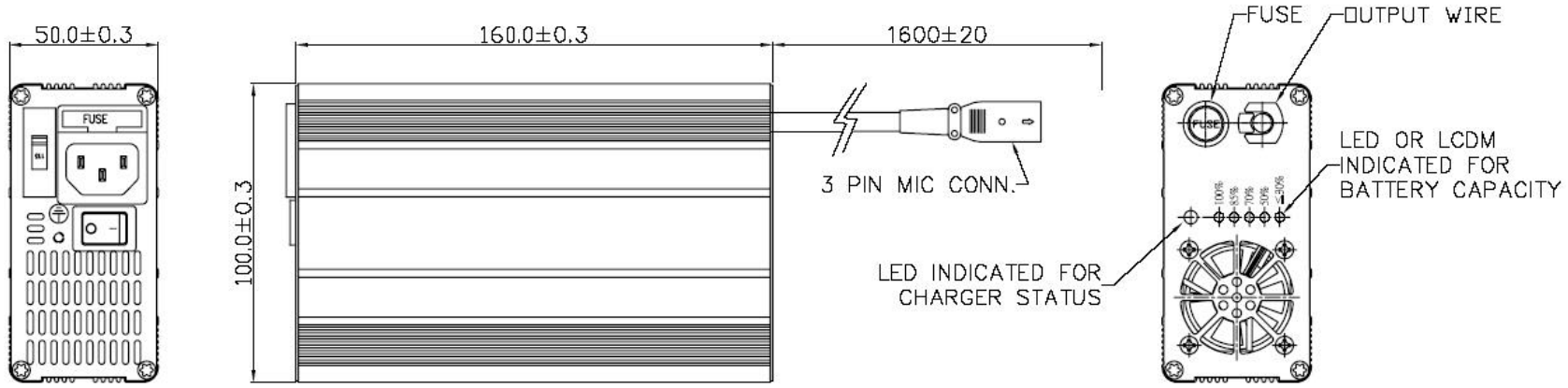
ITEM	CONDITION	SPECIFICATION
6.1 Dimension (Length x Width x Height)		160*100*50 mm
6.2 Input AC socket Type		IEC320 C14 Type
6.3 Output DC connector		

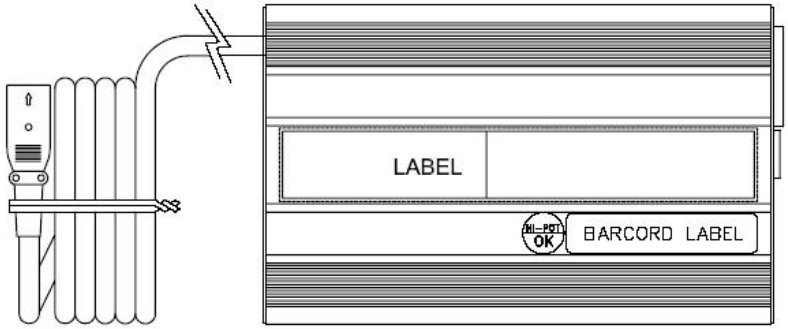
Pin assignment

Pin No.	1	2	3
Signal Name	12V	GND	GND

NOTES:

1. *UNIT : MM*
2. *OUTLINE DIMENSION : 160.0*100.0*50.0*
3. *TOLENANCE :*
   X.X : ±0.2 X.XX : ±0.15
4. *OUTPUT CONNECTOR : STANDARD MIC 3 PIN CONN.*





REV	DESCRIPTION	BY	DATA

MODEL NO	
PART NO.	4CH11M□01
REV.	01
TITLE	MECHANICAL
DESIGNER	ANDY 08/04/04'
CHECKED	
APPROVED	

SI Metric A4 | 0 mm 25 THIRD ANGLE PROJECTION | SCALE 1:1 | SHEET 1 OF 1