



Fuyuang®

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## 產 品 確 認 書

### PRODUCT FOR APPROVAL

客 戶  
CUSTOMER: \_\_\_\_\_

發 行 日 期  
ISSUE DATE: \_\_\_\_\_

品 名  
ARTICLE: \_\_\_\_\_ BATTERY CHARGER

規 格  
SIZE: \_\_\_\_\_ AC 100-240V / DC 16.8V 2A

標 準  
STANDARD: \_\_\_\_\_ UL CUL GS UKCA CE SAA PSE

產 品 型 號  
MODEL NO: \_\_\_\_\_ FY1682000

客 戶 料 號  
CUSTOMER NO: \_\_\_\_\_

本 廠 編 號  
OUR FILE NO: \_\_\_\_\_

顏 色  
COLOR: \_\_\_\_\_ 黑 色 BLACK

製 作 PREPARED BY	審 核 APPROVED BY	確 認 APPROVAL BY

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# SPECIFICATION 規格

1.0 THIS SPECIFICATION SUBJECT TO APPLICATION SAFETY STANDARD : J60335 UL1012 EN60335

CONDUCTED OF EMI CISPR22 CLASS OF INSULATION B

本規格追溯至安全標準 J60335 UL1012 EN60335 電磁兼容 CISPR22 絕緣等級 B

2.0 MECHANICAL CHARACTERISTICS 機械特性：

2.1 STRAIN RELIEF TEST : EACH TERMINAL OF THE PRODUCT SHALL BE CAPABLE OF

WITHSTANDING AN AXIAL PULL OF 6 KG APPLIED GRADUALLY AND MAINTAINED FOR ,  
60 SECONDS , WITHOUT LOOSENING , BREAKING OR OTHER DAMAGE .

應力測試：產品每個引線端子可以承受的軸向拉力為 6 千克,持續時間 60 秒,  
無松脫,阻斷,或其它損壞現象.

2.2 DROP TEST: AFTER DROPPING THE PRODUCT FROM A HEIGHT OF 90 CM ONTO A DRY PINE BOARD WITH A THICKNESS OF 1 CM FOR 3 TIMES, THE HOUSING IS FREE INSULATION RESISTANCE TEST RESULT IS 5 MEGOHMS MIN., AND THE WITHSTAND VOLTAGE TEST MEETS THE REQUIREMENTS OF 4.7.

跌落試驗：產品自高度為 90 CM，跌落在厚度為 1 CM松木板面 3 次后，外殼無裂縫，絕緣電阻測試，結果最小 5 兆歐姆，耐壓測試滿足4.7項要求

2.3 CORD BENDING TEST: THE CORD SHALL WITHSTAND A WEIGHT OF 1 KG, SWING LEFT TO RIGHT AT AN ANGLE OF 120 DEGREES (TOTAL) AND A FREQUENCY OF 40 TIMES/MINUTE FOR 300 TIMES , THE CORD SHOULD BE CONDUCTIBLE.

電線搖擺試驗：電線吊重 1 千克，左右擺動角度 120 度（總共），頻率 40 次/分鐘，300 回合后仍須導通。

3.0 GENERAL APPEARANCE : THE GENERAL APPEARANCE OF THE PRODUCT SHALL BY ACCEPTABLE WITHOUT DEFORMATION ,CRACKS OR CORROSION .

外觀：產品一般外觀為，摟受沒有變形,裂縫和鏽蝕.

4.0 INPUT VOLTAGE 輸入電壓:

PLUG	MINIMUM	NORMAL	MAXIMUM
	100VAC 50/60Hz	230VAC 50/60Hz	264VAC 50/60Hz

4.1 OUTPUT VOLTAGE 輸出電壓:

PLUG	CHARGING CHARACTERISTICS	RATING
<p>狀態指示燈 紅 RED 綠 GREEN</p> <p>VOLTAGE 16.8V 16V 14.8V 10V</p> <p>CURRENT 2A 1.5A 1A 0.5A 0.2A 0.1A 0A</p>		1.CHARGING VOLTAGE MAX. 最高充電電壓 :16.8±0.2VDC
		2. CHARGING HOLD VOLTAGE 充電保持電壓 :16.8±0.2VDC
		3. CHARGING VOLTAGE MIN. 最低充電電壓 :10VDC
		4. CHARGING CURRENT 充電電流 :2A±0.2A
		5. LOADING 負載:4.2VX4S LI-ION BATTERY
		6.WHEN CHARGING CURRENT ≤ 0.2A,THE LED LIGHT TURN TO GREEN. 綠色狀態發光二極管點亮,充電電流 ≤ 0.2A.
		7.WHEN A SINGLE COMPONENT FAILS, THE CHARGING VOLTAGE <18V 單一零件故障時,充電電壓小于18V.

4.2. INPUT CURRENT 輸入電流:

NO LOAD	AC 100V 50/60Hz	AC 230V 50/60Hz	AC 264V 50/60Hz
		50mA Max	
LOADING	1.5A Max		

4.3 INPUT POWER :NO LOAD 0.5 W MAX , AT INPUT 100-240 VAC 50/60 Hz.  
LOADING 70 W MAX , AT RATED OUTPUT .

輸入功率：空載 0.5 W 最大，在輸入電壓 100-240 VAC 50/60 ，  
負載 70 W最大，在額定輸出下。

4.4 EFFICIENCY 效率： 85 % MIN. AT RATED INPUT AND OUTPUT.

4.5 TEMPERATURE RISING溫升：CASE 65 °C MAX. FOR RATED OUTPUT

4.6 INSULATION RESISTANCE 絕緣電阻： 500 VDC 10 MΩ MIN .

4.7 DIELECTRIC WITHSTAND TEST： 5mA 3000 VAC FOR 1 MINUTE BETWEEN INPUT AND OUTPUT  
INPUT AND HOUSING. WHEN CHOOSING TO INCREASE THE WITHSTAND VOLTAGE BY 5%, THE  
APPLICATION TIME SHOULD BE 3 SECONDS.

耐壓測試： 5mA 3000 時間一分鐘，在輸入和輸出，輸入和外殼之間。  
在選擇提高耐壓 5% 時，應用時間應為 3 秒。

4.8 INRUSH CURRENT: PEAK INRUSH CURRENT SHALL BE LIMITED 50 A FOR A COLD START  
衝擊電流：冷態下，峰值衝擊電流應該小於 50 A。

4.9 POWER FACTOR 功率因數： 0.6 MIN.

5.0 ENVIRONMENTAL 環境：

5.1 OPERATING AMBIENT TEMPERATURE RANGE 工作環境溫度範圍： -29°C TO +35 °C

5.2 STORAGE AMBIENT TEMPERATURE RANGE 儲存環境溫度範圍： -40°C TO +75 °C

5.3 STORAGE HUMIDITY 儲存濕度範圍： 20% TO 65% RH .

5.4 RESISTANCE TO HEAT: WHEN TESTED WITHIN 10 MINUTES AFTER PRODUCT HAS BEEN PLACED IN  
A TEST CHAMBER MAINTAINED AT 105 °C± 3°C FOR 16 HOURS, THE PRODUCT SHALL COMPLY  
WITH THE REQUIREMENTS OF 4.7, DIELECTRIC WITHSTAND TEST, SHALL HAVE INSULATION  
RESISTANCS NOT LESS THAN STATED BELOW AS MEASURED AT 500VDC 5 MEGOHMS MINIMUM  
BETWEEN INPUT AND OUTPUT, INPUT AND CASE TOGETHER.

耐熱性：產品放置在 105 °C± 3°C 高溫箱內16小時，取出10分鐘內進行測試，產品必須符合4.7項  
耐壓測試要求，絕緣電阻：在500VDC條件下不小於 5 兆歐姆，在輸入和輸出，輸入和外殼之間。

5.5 RESISTANCE TO MOISTURE : THE PRODUCT SHALL BY PLACED IN A TEST CHAMBER MAINTAINED  
AT 40 °C ± 2 °C AT 90% ~ 95% RELATIVE HUMIDITY FOR 6 HOURS . THEN, WHEN  
TESTING 10 MINUTES AFTER THE PRODUCT IS TAKEN OUT FROM THE TEST CHAMBER AND WIPED  
DRY , THE PRODUCT SHALL COMPLY WITH THE REQUIREMENTS OF 4.7 DIELECTRIC WITHSTAND  
TEST , AND SHALL HAVE INSULATION RESISTANCE NOT LESS THAN STATED BELOW AS MEASURED  
AT 500VDC 5 MEGOHMS MINIMUM BETWEEN THE PRIMARY AND THE SECONDARY TOGETHER.

耐濕性：在環境溫度為 40 °C ± 2 °C 相對濕度為 90% ~ 95% 條件下放置 6小時，取出10分鐘后進行測試，  
產品必須符合4.7項耐壓測試要求，絕緣電阻：初次對次級，在500VDC條件下不小於 5 兆歐姆。

**6.0 RELIABILITY:THEVDESIGN AND CONSTRUCTION OF THIS PRODUCT EXHIBIT A MINIMUM MEAN TIME BETWEEN FAILURE OF 30000 HOURS FULL RATED LOAD OPERATION AT 25 °C .**

可靠性：額定全負載，操作溫度 25 °C . 產品壽命最少在 30000 小時 .

**7.0 PROTECTION 保護：**

**7.1 THE PRODCT INCLUDES CURRENT FUSE TYPE 250V 3.15A LOCATED WITHIN INPUT CIRCUIT.**

電流保護：產品內置一個電流保險絲，類型為 250V 3.15A ，固定在輸入回路中 .

**7.2 SHORT CIRCUIT: CAPABLE OF WITHSTANDING CONTINUOUS SHORT CIRCUIT AND RECOVER AUTOMATICALLY**

短路保護：具有耐持續短路和自動恢復能力.

**8.0 INSPECTION 檢查：**

**8.1 100% INSPECTION ITEMS : THE ITEMS OF 100% INSPECTION SHALL BE : NO-LOAD VOLTAGE ;LOAD VOLTAGE ; RIPPLE VOLTAGE; PRIMARY CURRENT ; DIELECTRIC WITHSTAND TEST; AND GENERAL APPEARANCE .**

100%檢查項目：空載電壓，負載電壓，紋波電壓，初級電流，耐壓測試和普通外觀檢查.

**8.2 THE SAMPLING INSPECTION ITEMS :THE ITEMS OF SAMPLING INSPECTION SHALL IN ADDITION TO THE 100% INSPECTION ITEMS , INCLUDE : INSULATION RESISTANCE ; AND AUDIBLE SOUND CHECK .**

抽樣檢查除100%檢查項目外，還包括絕緣電阻和听得見的聲音檢查 .

**8.3 THE SAMPLING INSPECTION DATA ACCORDING TO 8.2 AND 100% DIELECTRIC WITHSTAND TEST DATA SHALL BE SUBMITTED FOR EACH LOT .**

遞交每批抽樣檢查報告和100%耐壓測試報告 .

**8.4 THE SAMPLING INSPECTION ITEMS LEVEL : MIL-STD-105E II AQL : CRI 0 ; MAJ 0.25 ; MIN 2.5**

抽樣檢查項目水平：MIL-STD-105E 致命缺點 0,主要缺點 0.25 ,次要缺點 2.5 .

**9.0 HSF REQUIREMENTS 無有害物質要求：**

ROHS 2.0  REACH  PAHs多環芳烴 .

**10.0 SYMBOL DESCRIPTION 符號說明：**

	ONLY SUITABLE FOR SAFE USE IN MON -TROPICAL CLIMATES 僅適用於非熱帶氣候條件下安全使用。
	ONLY SUITABLE FOR SAFE USE IN AREAS BELOW 2000 m ABOVE SEA LEVEL . 僅適用於海拔2000M以下安全使用。
	FOR INDOOR USE ONLY. 僅適用於室內使用。
	THE APPLIANCE MUST NOT BE DISPOSED OF TOGETHER WITH NORMAL HOUSEHOLD WASTE. IT NEEDS TO BE RECYCLED. 該產品不可與其它生活垃圾一同丟棄，它需要回收。

MECHANICAL DIMENSIONS

UNIT:MM

