



昌 勃 股 份 有 限 公 司

Dr . POWER CORPORATION

零 件 規 格 書/承 認 書

SPECIFICATION FOR APPROVAL

CUSTOMER : \_\_\_\_\_

DESCRIPTION : \_\_\_\_\_ Gk jHW jbl 'AcXY'Dck Yf'Gi dd`m

MODEL : \_\_\_\_\_ G@%\$)' \$\$D%

CUSTOMER PART NO : \_\_\_\_\_

**APPROVED SIGNATURES**

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Rev	Date	Description	Designed	Checked	Approved
A	202) /&'%\$	Release		Dc`7\ Yb	

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### Important Notes (重要事項) :

(I) Unless otherwise specified , all above-listed items of tests are carried out by Electronic Load.

除非有例外說明,以上各項測試,皆使用電子負載執行.

(II) Unless otherwise specified , all tests are governed by the relevant clauses of the safety standards under which this model is designed and certified (Specification Contents item 4).

除非有例外說明,所有測試,皆按照此型號所屬的安規標準內的相關測試條款執行(規格書內容第四項).

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# 1. ELECTRICAL CHARACTERISTICS 電氣特性

僅供參考

Parameter 參數	Min 最低	Typical 額定	Max 最高	Unit 單位
INPUT VOLTAGE 輸入電壓	90	100-240	264	VAC
INPUT FREQUENCY 輸入頻率	-----	50-60	-----	Hz
INPUT CURRENT 輸入電流	-----	-----	2500	mA
UNLOAD OUTPUT VOLTAGE 空載輸出電壓	-----	-----	19.95	VDC
OUTPUT VOLTAGE 輸出電壓	18.05	19	19.95	VDC
OUTPUT CURRENT 輸出電流	-----	5300	-----	mA
OUTPUT RIPPLE 輸出紋波*	-----	-----	300	mV
AMBIENT TEMPERATURE 環境溫度	0	-----	40	°C
RELATIVE HUMIDITY 相對濕度	40	-----	93	%

\*Output ripple is measured peak to peak with a 10μF E-cap and 0.1μF ceramic cap in parallel on the output.

\*輸出紋波測試時在輸出端加 10μF 電解電容和 0.1μF 陶瓷電容。

## 2. PROTECTIONS 保護特性

### 2.1 Over Current Protection 電流過載保護

The power supply shall be protected when any output operating in overload condition.

當輸出有過載時，這電源供應器有過載保護。

### 2.2 Short Circuit Protection 短路保護

The power supply shall be protected and no damage occur when any output operating in a short circuit condition. 當輸出短路時，這電源供應器有短路保護及無危險現象。

## 3. ENERGY EFFICIENCY STANDARDS 能效標準

1. Energy Efficiency Marking 能效標: VI
2. No Load Power 空載功率 (Input 115V 60Hz/230V 50Hz): 0.21W or less 以下
3. Minimum Average Efficiency in Active Mode (Input 115V 60Hz/230V 50Hz): 88.00% or above (Rated output DC19V,5300mA 100.7VA)  
工作模式下最低平均能效 (輸入 115V 60Hz/230V 50Hz 時): 88.00%或以上 (額定輸出 DC19V,5300mA 100.7VA)

( Remarks: This power supply shall be operated at 100% of the rated output current for 30 minutes, the above energy test data will be measured at the warm-up period.)

( 注: 這電源須先按額定輸出電流負載 30 分鐘, 在加熱情況下測量上述能效數據.)

歐洲 ErP requirement 標準

澳洲 MEPS requirement 標準

美國/加拿大 DOE / CEC / NRCAN requirement 標準

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#### 4. SAFETY STANDARDS 安規標準

The power supply is designed to meet the following safety standards at 25°C ambient temperature:  
 在室溫 25°C 下這電源供應器設計合符以下安規標準:

Safety Standard 安規標準
BS/EN/IEC60950-1 <input type="checkbox"/> UL/CSA 60950-1 <input type="checkbox"/> AS/NZS60950-1 <input type="checkbox"/> J60950-1 <input type="checkbox"/> K60950-1 <input type="checkbox"/> GB4943.1 <input type="checkbox"/>
BS/EN/IEC60065 <input type="checkbox"/> UL/CSA 60065 <input type="checkbox"/> AS/NZS60065 <input type="checkbox"/> GB8898 <input type="checkbox"/> NOM-001 <input type="checkbox"/> NOM-029 <input type="checkbox"/>
BS/EN/IEC62368-1 <input checked="" type="checkbox"/> UL/CSA62368-1 <input checked="" type="checkbox"/> AS/NZS62368-1 <input type="checkbox"/> J62368-1 <input type="checkbox"/> IS13252 <input type="checkbox"/>
BS/EN/IEC61558-1+BS/EN/IEC61558-2-7 <input type="checkbox"/> BS/EN/IEC61558-1+BS/EN/IEC61558-2-16 <input type="checkbox"/> GB19212.1 <input type="checkbox"/>
AS/NZS61558-2-7 <input type="checkbox"/> AS/NZS61558-2-16 <input type="checkbox"/> AS/NZS60335-2-29 <input type="checkbox"/> AS/NZS60335-2-29 Annex AA <input type="checkbox"/>
BS/EN/IEC61347-1+BS/EN/IEC61347-2-13 <input type="checkbox"/> J61347-2-13 <input type="checkbox"/> J60335-2-29 <input type="checkbox"/> J60335-2-29 Annex AA <input type="checkbox"/>
BS/EN/IEC60335-1 <input type="checkbox"/> BS/EN/IEC60335-2-29 <input type="checkbox"/> BS/EN/IEC60335-2-29 Annex AA <input type="checkbox"/>
GB4706.1+GB4706.18 <input type="checkbox"/> GB4706-1 <input type="checkbox"/> GB19212.17 <input type="checkbox"/> CNS13438 <input type="checkbox"/> CNS14336-1 <input type="checkbox"/> CNS15663 <input type="checkbox"/>
UL1310 <input type="checkbox"/> CSA-C22.2 No. 223 <input type="checkbox"/> UL697 <input type="checkbox"/> CSA-C22.2 No. 173 <input type="checkbox"/>

#### 5. EMC STANDARDS 電磁兼容標準

Refer to related safety standards. 參考相關安全標準

UL/CSA 60950-1, UL/CSA 60065, UL/CSA62368-1, UL1310, UL697, CSA-C22.2 No. 223, CSA-C22.2 No.173, UL8750	FCC Part 15 subpart B, ICES-003
BS/EN/IEC60950-1, AS/NZS60950-1, BS/EN/IEC62368-1, AS/NZS62368-1, J62368-1	BS/EN55032 (or BS/EN55022, BS/EN55013), BS/EN55035 (or BS/EN55020, BS/EN55024), BS/EN61000-3-2/3
BS/EN/IEC60065, AS/NZS60065, BS/EN/IEC62368-1, AS/NZS62368-1, J62368-1	BS/EN55032 (or BS/EN55022, BS/EN55013), BS/EN55035 (or BS/EN55020, BS/EN55024), BS/EN61000-3-2/3
BS/EN/IEC61558-1+ BS/EN/IEC61558-2-7 BS/EN/IEC61558-2-16, AS/NZS61558-2-16	BS/EN55014-1, BS/EN55014-2, BS/EN61000-3-2/3
BS/EN/IEC60335-1, AS/NZS60335-1 BS/EN/IEC60335-2-29, AS/NZS60335-2-29	BS/EN55014-1. BS/EN55014-2, BS/EN61000-3-2/3
BS/EN/IEC61347-2-13, AS/NZS61347-2-13	BS/EN55015, BS/EN61547, BS/EN61000-3-2/3

#### 6. HI-POT 耐高壓測試

Input to output 輸入對輸出 1500VAC at 1 sec (秒)

Cutoff current 截止電流 10mA

#### 7. MAX TOUCH CURRENT (MAX EARTH LEAKAGE CURRENT)

最大接觸電流(最大漏電電流測試)

250µA max. at 250Vrms

#### 8. MTBF STANDARD 平均無故障時間標準

Minimum 50,000 hours MTBF at max rated load & 25°C ambient temperature

在室溫 25°C 下及最大額定負載下，平均無故障時間為最少 50,000 小時。

#### 9. INSULATION RESISTANCE 絕緣阻抗

Input to Enclosure / Output ( 初對殼 / 次 ) :  $\geq 7M \text{ ohm}$  ( DC 500V , 1 minute )

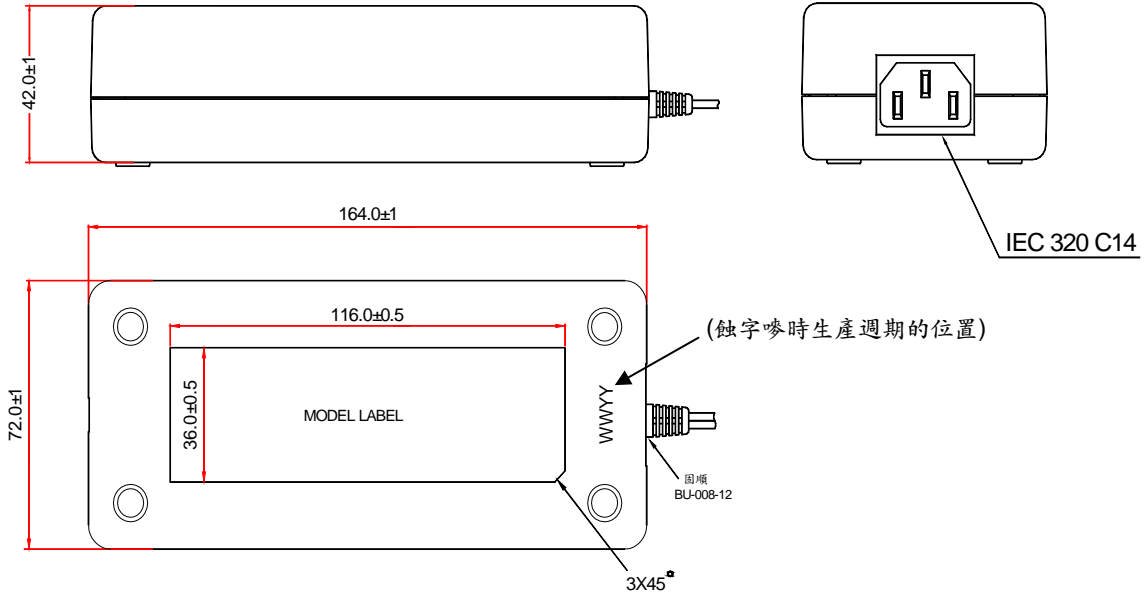
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# 10. MECHANICAL CHARACTERISTIC 機械規格

僅供參考

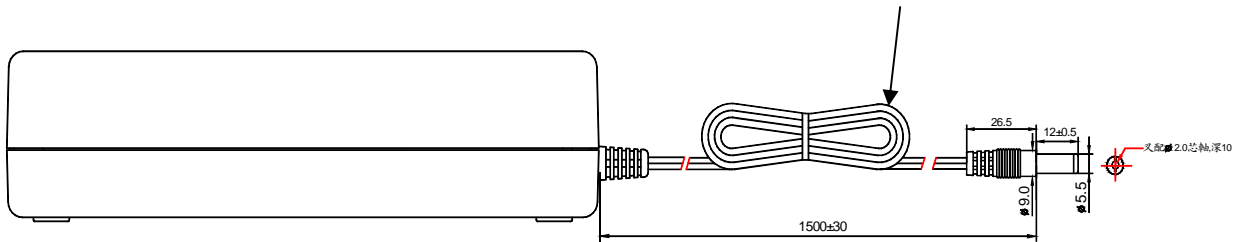
## 10.1 Mechanical Dimensions 外形尺寸( for Ref.only 參考用)

顏色 Colour: 黑色 Black colour.



### DC output cable & plug & polarity: 輸出電線連插頭及輸出極性

線身一邊有白色字嘜一邊有間斷性白色條紋



#### Polarity 極性



次級引線 UL2468 2/AWG#16 連音叉插 SS-552112/035

φ 5.5 × φ 2.1 × 12mm 1500mm ± 30 黑色

Secondary cord UL2468 2/AWG#16 with Solder Slice plug SS -552112/035

φ 5.5 × φ 2.1 × 12mm 1500mm ± 30 black colour.

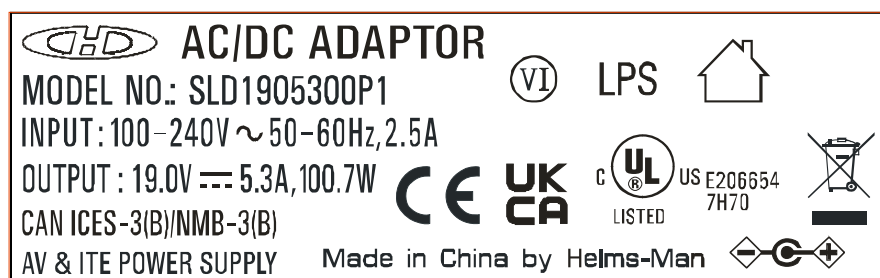
Date Code = WWYY  
 WW-Week  
 YY-Year

單位  
 Unit: mm

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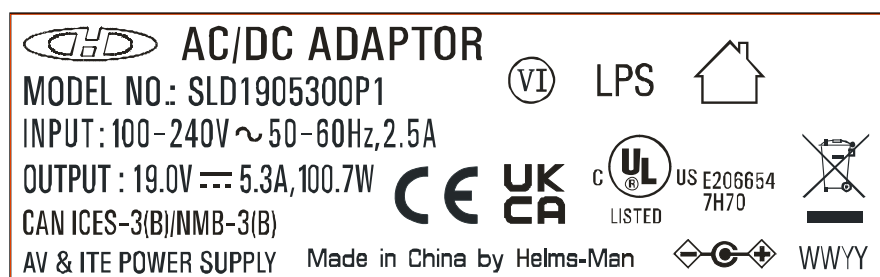
## 10.2 Model Labels 產品標籤

僅供參考



嚙頭表達方法: 蝕字嚙  
Marking method: Molded marking

注: 1:1 嚙頭 長 x 寬: 36x116mm  
1:1 scale 36x116mm (LxW)



嚙頭表達方法: 激光打印  
Marking method: laser printing

注: 1:1 嚙頭 長 x 寬: 36x116mm  
1:1 scale 36x116mm (LxW)

注: 嚙頭表達方式為激光打印時, 生產週期  
在嚙頭的右下角

Date Code = WWYY  
WW-Week  
YY-Year

## 11. PACKING 包裝規格

包裝規格: 標準紙格包裝

Packing Spec.: Standard packing with card tray

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Remark: Below instructions should be printed on the instruction manual of the end product use with power supply.

附注: 以下的句子, 可印在最終客戶產品的說明書上.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the device. This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the device into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help.

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