



## ■ Features :

- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage / Over temperature
- High power density 5w/in<sup>3</sup>
- Fully enclosed plastic case
- Approvals: UL / CUL / TUV / CCC / CB/ CE
- No load power consumption<0.5W
- Pass energy star level IV(CEC) for 12~48V(except for 15V)
- Meet EISA 2007(Energy Independence and Security Act)
- ZCS/ZVS technology to reduce power dissipation
- 2 years warranty



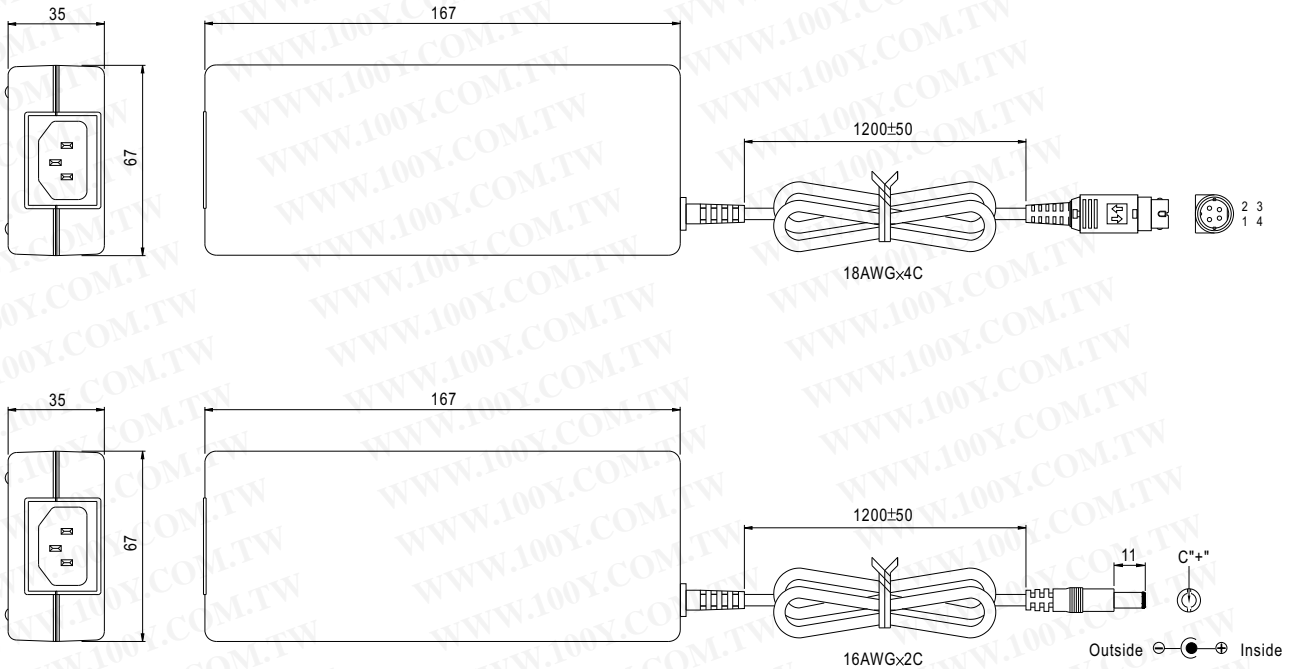
## SPECIFICATION

| MODEL                                       | AS-120P-12   | AS-120P-15  | AS-120P-20  | AS-120P-24  | AS-120P-48   |
|---|--|-------------|-------------|-------------|--------------|
| ORDER NO.                                   | AS120P12R7B  | AS120P15R7B | AS120P20P1M | AS120P24P1M | AS120P48P1M  |
| DC VOLTAGE <small>Note.2</small>            | 12V  | 15V         | 20V         | 24V         | 48V          |
| RATED CURRENT                               | 8.4A   | 6.7A        | 6A          | 5A          | 2.5A         |
| CURRENT RANGE                               | 0~ 8.4A  | 0 ~ 6.7A    | 0 ~ 6A      | 0 ~ 5A      | 0 ~ 2.5A     |
| RATED POWER                                 | 100W   | 100W        | 120W        | 120W        | 120W         |
| OUTPUT                                      |  |             |             |             |              |
| RIPPLE & NOISE (max.) <small>Note.3</small> | 100mVp-p   | 100mVp-p    | 200mVp-p    | 200mVp-p    | 240mVp-p     |
| VOLTAGE TOLERANCE <small>Note.4</small>     | ±4.0%  | ±4.0%       | ±3.0%       | ±2.0%       | ±2.0%        |
| LINE REGULATION <small>Note.5</small>       | ±1.0%  | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%        |
| LOAD REGULATION <small>Note.6</small>       | ±3.5%  | ±3.0%       | ±2.5%       | ±2.0%       | ±2.0%        |
| SETUP, RISE TIME                            | 3000ms, 80ms at full load  |             |             |             |              |
| HOLD UP TIME (Typ.)                         | 50ms/230VAC 16ms/115VAC at full load   |             |             |             |              |
| INPUT                                       |  |             |             |             |              |
| VOLTAGE RANGE                               | 90 ~ 264VAC 127 ~ 370VDC   |             |             |             |              |
| FREQUENCY RANGE                             | 47 ~ 63Hz  |             |             |             |              |
| POWER FACTOR (Typ.)                         | PF ≥ 0.95/230VAC PF ≥ 0.98/115VAC at full load   |             |             |             |              |
| EFFICIENCY (Typ.)                           | 85.5%  | 87.5%       | 89%         | 90%         | 89%          |
| AC CURRENT (Typ.)                           | 1.4A/115VAC 0.7A/230VAC  |             |             |             |              |
| INRUSH CURRENT (Typ.)                       | 120A/230VAC  |             |             |             |              |
| LEAKAGE CURRENT (max.)                      | <1mA / 240VAC  |             |             |             |              |
| PROTECTION                                  |  |             |             |             |              |
| OVERLOAD                                    | 105 ~ 135% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed  |             |             |             |              |
| OVER VOLTAGE                                | 14 ~ 16.8V   | 17 ~ 21V    | 22.5 ~ 28V  | 27 ~ 33.6V  | 53.3 ~ 67.2V |
|   | Protection type : Shut down o/p voltage, re-power on to recover  |             |             |             |              |
| OVER TEMPERATURE                            | 90℃ ±15℃ (RTH2) detect on heatsink of power transistor<br>Protection type : Shut down o/p voltage, re-power on to recover  |             |             |             |              |
| ENVIRONMENT                                 |  |             |             |             |              |
| WORKING TEMP.                               | 0 ~ + 50℃ (Refer to output load derating curve)  |             |             |             |              |
| WORKING HUMIDITY                            | 20% ~ 90% RH non-condensing  |             |             |             |              |
| STORAGE TEMP., HUMIDITY                     | -20 ~ +85℃, 10 ~ 95% RH  |             |             |             |              |
| TEMP. COEFFICIENT                           | ±0.03% / °C (0 ~ 50℃)  |             |             |             |              |
| VIBRATION                                   | 10 ~ 500Hz, 2G 3AXES 10min./1cycle, period for 60min. each along X, Y, Z axes  |             |             |             |              |
| SAFETY & EMC <small>(Note. 7)</small>       |  |             |             |             |              |
| SAFETY STANDARDS                            | UL60950-1, TUV EN60950-1, CCC GB4943 approved  |             |             |             |              |
| WITHSTAND VOLTAGE                           | I/P-O/P:4.25KVDC   |             |             |             |              |
| ISOLATION RESISTANCE                        | I/P-O/P:100M Ohms / 25℃ / 70% RH   |             |             |             |              |
| EMI CONDUCTION & RADIATION                  | Compliance to EN55022(CISPR22) class B, FCC part 15J class B   |             |             |             |              |
| HARMONIC CURRENT                            | Compliance to EN61000-3-2,3  |             |             |             |              |
| EMS IMMUNITY                                | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A   |             |             |             |              |
| OTHERS                                      |  |             |             |             |              |
| LIFE  | Average life expectancy of 6 years (12 hours / day, 70% load, 115VAC)  |             |             |             |              |
| MTBF  | 308.9K hrs min. MIL-HDBK-217F (25℃)  |             |             |             |              |
| DIMENSION                                   | 167*67*35mm (L*W*H)  |             |             |             |              |
| PACKING                                     | 0.52Kg; 30pcs/16.6Kg/1.1CUFT   |             |             |             |              |
| CONNECTOR                                   |  |             |             |             |              |
| PLUG  | Standard type R7B,P1M: 2.5φ * 5.5φ * 11mm, center positive for stock ; Other type available by customer requested  |             |             |             |              |
| CABLE                                       | Standard type 120cm of SPT-1, 18Awg*4c for stock ; Other type available by customer requested  |             |             |             |              |
| NOTE  | 1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH. Ambient.<br>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.<br>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.<br>4.Tolerance: includes set up tolerance, line regulation, load regulation.<br>5.Line regulation is measured from low line to high line at rated load.<br>6.Load regulation is measured from 0% to 100% rated load.<br>7.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. |             |             |             |              |

**勝特力材料 886-3-5753170**  
**勝特力电子(上海) 86-21-54151736**  
**勝特力电子(深圳) 86-755-83298787**  
[Http://www.100y.com.tw](http://www.100y.com.tw)

Case No.947A Unit:mm

## Mechanical Specification



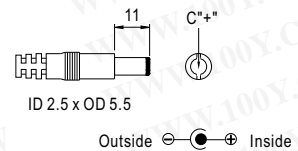
## Plug Assignment

Standard plug (For 12V, 15V only)

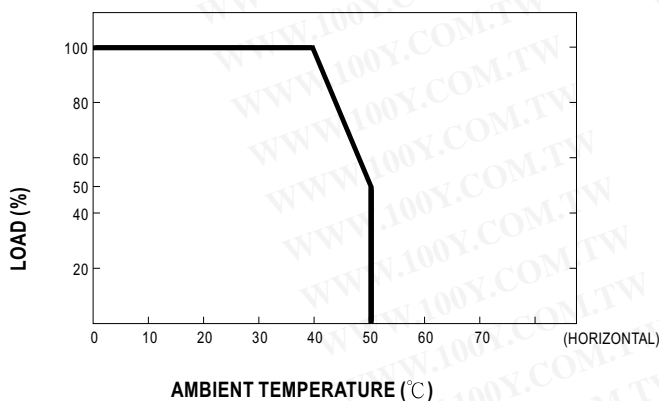
| R7B    |        |  |
|--------|--------|--|
| PIN NO | OUTPUT |  |
| 1,4    | +V     |  |
| 2,3    | -V     |  |

Standard plug (For 20V, 24V, 48V only)

| P1M    |        |
|--------|--------|
| P/N    | OUTPUT |
| CENTER | +      |



## Derating Curve



## Static Characteristics

