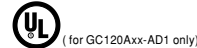




## Features :

- 2 stage charging characteristic
- Universal AC input / Full range
- Built-in active PFC function, PF>0.97
- No load power consumption<0.5W
- 3 pole AC inlet IEC320-C14
- Class I power ( with earth pin)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection
- Fully enclosed plastic case
- 2 color LED indicator for charging status
- Approvals: TUV / UL / CB / FCC / CE
- 2 years warranty



| ORDER NO.                          | OUTPUT CONNECTOR   | SAFETY                   |
|------------------------------------|--------------------|--------------------------|
| GC120Axx-R7B (standard model)      | 4pin power din     | TUV / CB / FCC / CE      |
| GC120Axx-AD1 (optional model)      | Anderson connector | UL / TUV / CB / FCC / CE |
| GC120Axx-□ xx=12,24,48 ; □=R7B,AD1 |                    |                          |

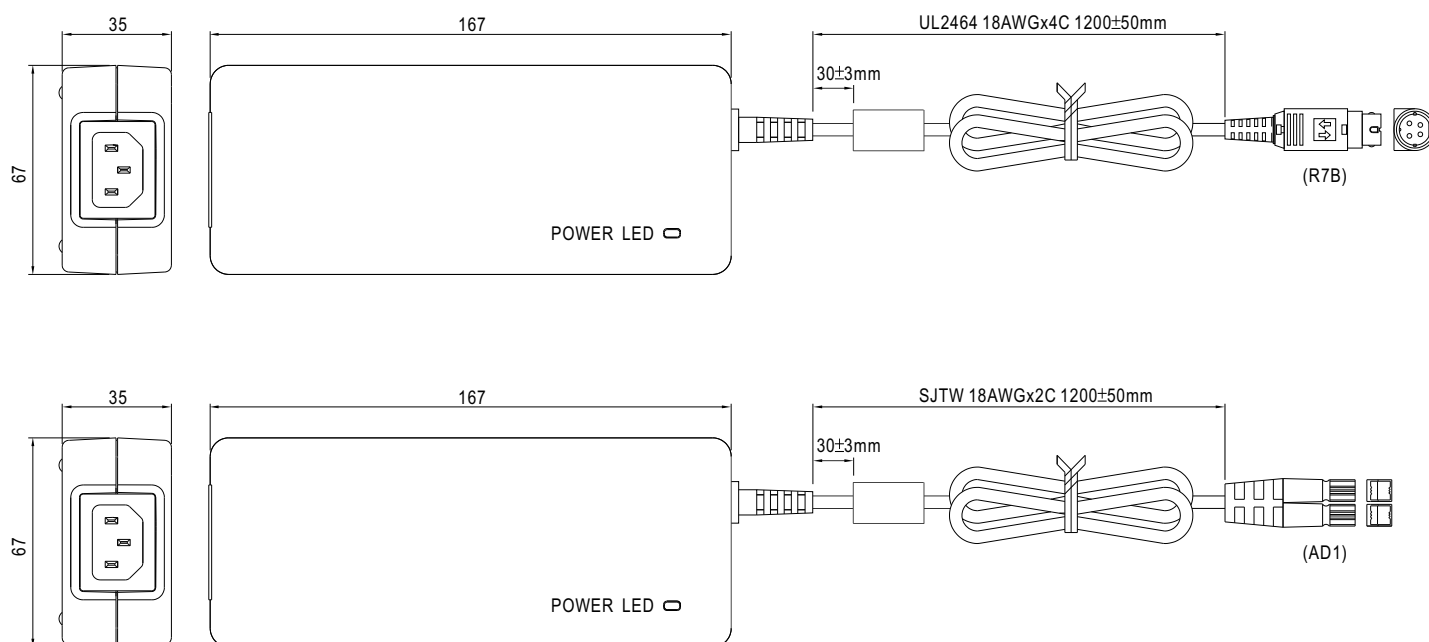
## SPECIFICATION

| ORDER NO.              |                                     | GC120A12-□                                                                                                                          | GC120A24-□ | GC120A48-□ |
|------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------|------------|
| OUTPUT                 | SAFETY MODEL NO.                    | GC120A12                                                                                                                            | GC120A24   | GC120A48   |
|                        | DC VOLTAGE (Typ.)                   | 13.6V                                                                                                                               | 27.2V      | 54.4V      |
|                        | RECOMMENDED BATTERY CAPACITY Note.2 | 40 ~ 100Ah                                                                                                                          | 20 ~ 65Ah  | 10 ~ 35Ah  |
|                        | CONTINUOUS OUTPUT CURRENT (Typ.)    | 7.5A                                                                                                                                | 4.42A      | 2.21A      |
|                        | RATED POWER                         | 102W                                                                                                                                | 120.2W     | 120.2W     |
|                        | LED INDICATOR                       | Charging(CC) : RED Floating charging(CV) : GREEN                                                                                    |            |            |
| INPUT                  | VOLTAGE RANGE Note.3                | 85 ~ 264VAC 120 ~ 370VDC                                                                                                            |            |            |
|                        | FREQUENCY RANGE                     | 47 ~ 63Hz                                                                                                                           |            |            |
|                        | POWER FACTOR (Typ.)                 | PF>0.97 / 230VAC PF>0.99 / 115VAC at full load                                                                                      |            |            |
|                        | EFFICIENCY (Typ.)                   | 86.5%                                                                                                                               | 90%        | 91%        |
|                        | AC CURRENT                          | 1.4A / 115VAC 0.7A / 230VAC                                                                                                         |            |            |
|                        | INRUSH CURRENT (max.)               | 70A / 230VAC                                                                                                                        |            |            |
| PROTECTION             | LEAKAGE CURRENT(max.)               | 0.75mA / 240VAC                                                                                                                     |            |            |
|                        | OVERLOAD Note.4                     | 90 ~ 110% rated output power<br>Protection type : Constant current limiting recovers automatically after fault condition is removed |            |            |
|                        | SHORT CIRCUIT                       | Protection type : Hiccup mode, recovers automatically after fault condition is removed                                              |            |            |
|                        | OVER VOLTAGE                        | 14 ~ 16.5V                                                                                                                          | 29 ~ 33V   | 59 ~ 69V   |
|                        | OVER TEMPERATURE                    | 100°C ±10°C (RTH2) detect on inside ambient temperature                                                                             |            |            |
|                        |                                     | Protection type : Shut down o/p voltage, re-power on to recover                                                                     |            |            |
| ENVIRONMENT            | WORKING TEMP.                       | -30 ~ +70°C (Refer to "Derating Curve")                                                                                             |            |            |
|                        | WORKING HUMIDITY                    | 20% ~ 90% RH non-condensing                                                                                                         |            |            |
|                        | STORAGE TEMP., HUMIDITY             | -40 ~ +85°C, 10 ~ 95% RH                                                                                                            |            |            |
|                        | TEMP. COEFFICIENT                   | ±0.03% / °C (0~50°C)                                                                                                                |            |            |
|                        | VIBRATION                           | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                             |            |            |
| SAFETY & EMC (Note. 5) | SAFETY STANDARDS                    | UL1012 (for GC120Axx-AD1 only), TUV EN60950-1 approved                                                                              |            |            |
|                        | WITHSTAND VOLTAGE                   | I/P-O/P: 3KVAC                                                                                                                      |            |            |
|                        | ISOLATION RESISTANCE                | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH                                                                                          |            |            |
|                        | EMC EMISSION                        | Compliance to EN55022 class B, FCC PART 15 class B / CISPR22 class B, EN61000-3-2,3                                                 |            |            |
|                        | EMC IMMUNITY                        | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A                                                            |            |            |
| OTHERS                 | MTBF                                | 400.7Khrs min. MIL-HDBK-217F(25°C)                                                                                                  |            |            |
|                        | DIMENSION                           | 167*67*35mm (L*W*H)                                                                                                                 |            |            |
|                        | PACKING                             | 0.62Kg; 20pcs/13.4Kg/0.9CUFT                                                                                                        |            |            |
| CONNECTOR              | PLUG                                | See page 2 ; Other type available by customer requested                                                                             |            |            |
|                        | CABLE                               | See page 2 ; Other type available by customer requested                                                                             |            |            |

|      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NOTE | <ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. This is MeanWell's suggested range, please consult your battery manufacturer for their suggestions about maximum charging current limitation.</li> <li>3. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>4. Constant current operation region is within 50~100% rated output voltage.</li> <li>5. 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.</li> </ol> |
|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Mechanical Specification

Case No.947A Unit:mm



## Plug Assignment

DC output connector (standard)

| R7B<br>(KYCON KPP-4S or equivalent) |        |
|-------------------------------------|--------|
| PIN NO.                             | OUTPUT |
| 1,4                                 | +V     |
| 2,3                                 | -V     |

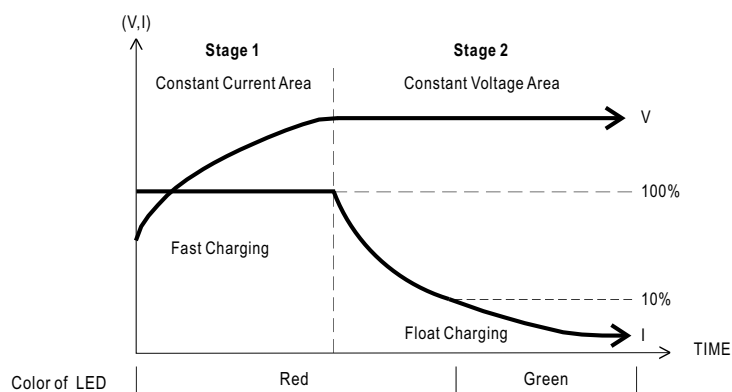
AC FG

-V connected to AC FG

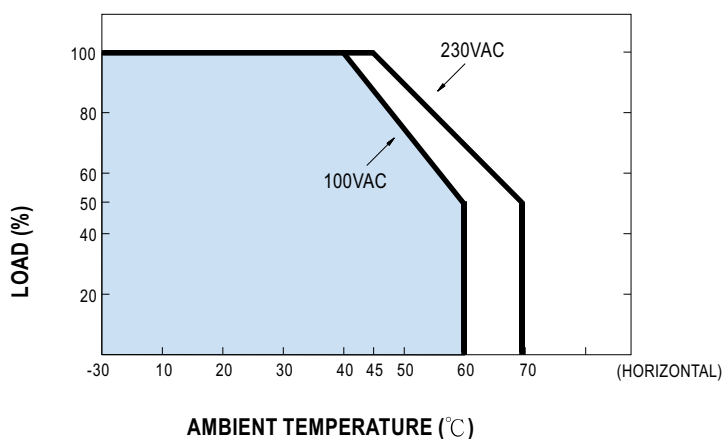
DC output connector (optional)

| AD1<br>[ housing: Anderson 1327FP(red), 1327G6FP(black)<br>contacts: Anderson 261G2 (45A) or equivalent ] |           |
|-----------------------------------------------------------------------------------------------------------|-----------|
| Red(+V)                                                                                                   | Black(-V) |

## Charging Curve



## Derating Curve



## Static Characteristics

