



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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■ Features :

- Charger for lead-acid batteries (flooded, Gel and AGM) and Li-ion batteries (lithium iron and lithium manganese) (Note.1)
- 2 stage charging characteristic
- Universal AC input / Full range
- Built-in active PFC function, PF>0.94
- No load power consumption<1W
- 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: UL / TUV / EAC / CB / FCC / CE
- 2 years warranty



| ORDER NO. | OUTPUT CONNECTOR | SAFETY |
|------------------------------------|--------------------|--------------------------------|
| GC160Axx-R7B (standard model) | 4pin power din | TUV / CB / FCC / CE / EAC |
| GC160Axx-AD1 (optional model) | Anderson connector | UL / TUV / CB / FCC / CE / EAC |
| GC160Axx-□ xx=12,24,48 ; □=R7B,AD1 | | |

SPECIFICATION

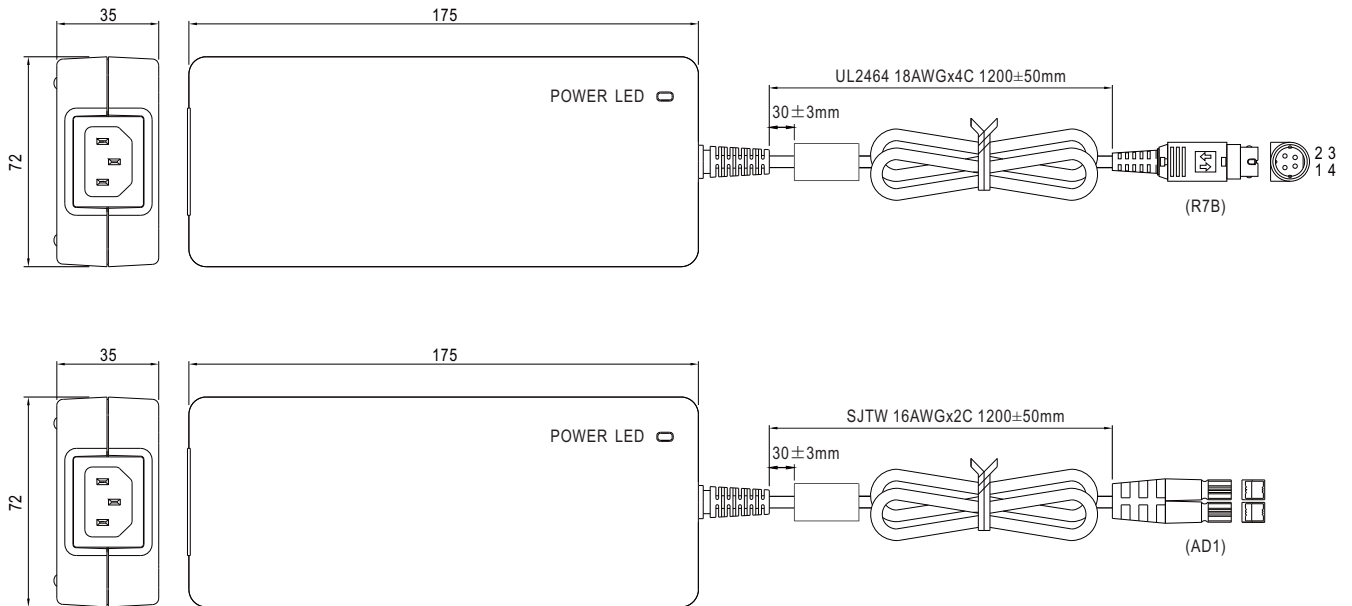
| ORDER NO. | GC160A12-□ | GC160A24-□ | GC160A48-□ | |
|--|---|---|------------|-----------|
| OUTPUT | SAFETY MODEL NO. | GC160A12 | GC160A24 | GC160A48 |
| | DC VOLTAGE (Typ.) | 13.6V | 27.2V | 54.4V |
| | RECOMMENDED BATTERY CAPACITY <small>Note.3</small> | 60 ~160Ah | 30 ~ 90Ah | 15 ~ 45Ah |
| | CONTINUOUS OUTPUT CURRENT (Typ.) | 10A | 5.89A | 2.95A |
| | RATED POWER | 136W | 160.2W | 160.5W |
| LED INDICATOR | | Charging(CC) : RED Floating charging(CV) : GREEN | | |
| INPUT | VOLTAGE RANGE <small>Note.4</small> | 85 ~ 264VAC 120 ~ 370VDC | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | |
| | POWER FACTOR (Typ.) | PF>0.94 / 230VAC PF>0.98 / 115VAC at full load | | |
| | EFFICIENCY (Typ.) | 89% | 92.5% | 94% |
| | AC CURRENT | 1.85A / 115VAC 1A / 230VAC | | |
| | INRUSH CURRENT (max.) | 120A / 230VAC | | |
| LEAKAGE CURRENT(max.) | 0.75mA / 240VAC | | | |
| PROTECTION | OVERLOAD <small>Note.5</small> | 90 ~ 110% rated output power 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 | 105 ~ 135% rated output voltage Protection type : Shut down o/p voltage, re-power on to recover | | |
| | OVER TEMPERATURE | 90°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 <small>(Note. 6)</small> | SAFETY STANDARDS | UL1012 (for GC160Axx-AD1 only), TUV EN60950-1, EAC TP TC 004 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 EN55032 class B, EN61000-3-2,3, FCC PART 15 / CISPR22 class B, CAN ICES-3(B)-NMB-(B), EAC TP TC 020 | | |
| OTHERS | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A, EAC TP TC 020 | | |
| | MTBF | 274.1Khrs min. MIL-HDBK-217F(25°C) | | |
| | DIMENSION | 175*72*35mm (L*W*H) | | |
| CONNECTOR | PACKING | 0.7Kg; 20pcs/15Kg/0.85CUFT(GC160Axx-R7B) 0.77Kg; 20pcs/16.4Kg/1.15CUFT(GC160Axx-AD1) | | |
| | PLUG | See page 2 ; Other type available by customer requested | | |
| | CABLE | See page 2 ; Other type available by customer requested | | |

NOTE

1. Modification for charger specification may be required for different battery specification. Please contact battery vendor and MEAN WELL for details.
2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
3. This is MeanWell's suggested range, please consult your battery manufacturer for their suggestions about maximum charging current limitation.
4. Derating may be needed under low input voltage. Please check the derating curve for more details.
5. Constant current operation region is within 50~100% rated output voltage.
6. 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.
7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

■ Mechanical Specification

Case No.997A Unit:mm



■ Plug Assignment

DC output connector (standard)

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

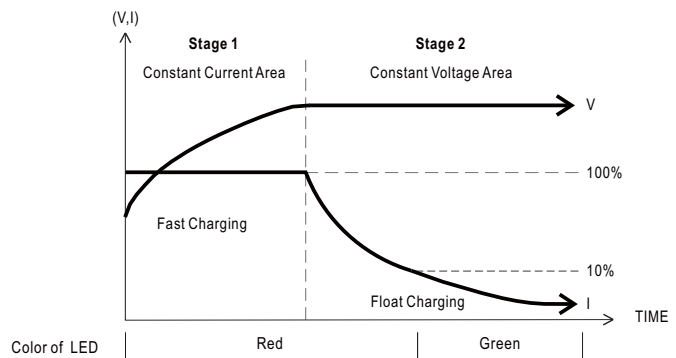
AC FG

-V connected to AC FG

DC output connector (optional)

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

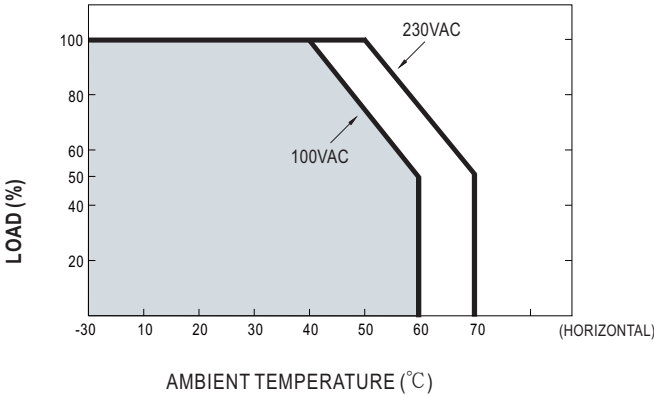
■ Charging Curve



| Model | Suggested Battery capacity |
|----------|----------------------------|
| GC160A12 | 60-160Ah |
| GC160A24 | 30-90Ah |
| GC160A48 | 15-45Ah |

Suitable for lead-acid batteries (flooded, Gel and AGM) and Li-ion batteries (lithium iron and lithium manganese)

■ Derating Curve



■ Static Characteristics

