



220W Single Output Battery Charger

GC220 series



■ 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>0.90
- 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



(for GC220Axx-AD1 only)



EN62368-1 TPTC004 IEC62368-1

| ORDER NO. | OUTPUT CONNECTOR | SAFETY |
|------------------------------------|--------------------|--------------------------------|
| GC220Axx-R7B (standard model) | 4pin power din | TUV / CB / FCC / CE / EAC |
| GC220Axx-AD1 (optional model) | Anderson connector | UL / TUV / CB / FCC / CE / EAC |
| GC220Axx-□ xx=12,24,48 ; □=R7B,AD1 | | |

SPECIFICATION

| ORDER NO. | GC220A12-□ | GC220A24-□ | GC220A48-□ | |
|---------------------------|---|--|------------|-----------|
| OUTPUT | SAFETY MODEL NO. | GC220A12 | GC220A24 | GC220A48 |
| | DC VOLTAGE (Typ.) | 13.6V | 27.2V | 54.4V |
| | RECOMMENDED BATTERY CAPACITY Note.3 | 80 ~ 200Ah | 40 ~ 125Ah | 20 ~ 65Ah |
| | CONTINUOUS OUTPUT CURRENT (Typ.) | 13.5A | 8A | 4A |
| | RATED POWER | 183.6W | 217.6W | 217.6W |
| | LED INDICATOR | Charging(CC) : RED Floating charging(CV) : GREEN | | |
| INPUT | VOLTAGE RANGE Note.4 | 90 ~ 264VAC 127 ~ 370VDC | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | |
| | POWER FACTOR (Typ.) | PF>0.90 / 230VAC PF>0.98 / 115VAC at full load | | |
| | EFFICIENCY (Typ.) | 89% | 92.5% | 93% |
| | AC CURRENT | 4A / 115VAC 2A / 230VAC | | |
| | INRUSH CURRENT (max.) | 120A / 230VAC | | |
| | LEAKAGE CURRENT(max.) | 1.5mA / 240VAC | | |
| PROTECTION | OVERLOAD Note.5 | 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 | 95°C ± 10°C (TSW1) detect on heatsink of power transistor Protection type : Shut down o/p voltage, recovers automatically after temperature goes down | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +60°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. 6) | SAFETY STANDARDS | UL1012 (for GC220Axx-AD1 only), TUV EN62368-1, 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 | 190Khrs min. MIL-HDBK-217F(25°C) | | |
| | DIMENSION | 210*85*46mm (L*W*H) | | |
| | PACKING | 1.1Kg; 12pcs/14.2Kg/0.73CUFT(GC220Axx-R7B) 1.2Kg; 12pcs/15.4Kg/1CUFT(GC220Axx-AD1) | | |
| 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"> 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 as an independent unit, but the final equipment still need to re-confirm that whole system complies with the 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). | | | |

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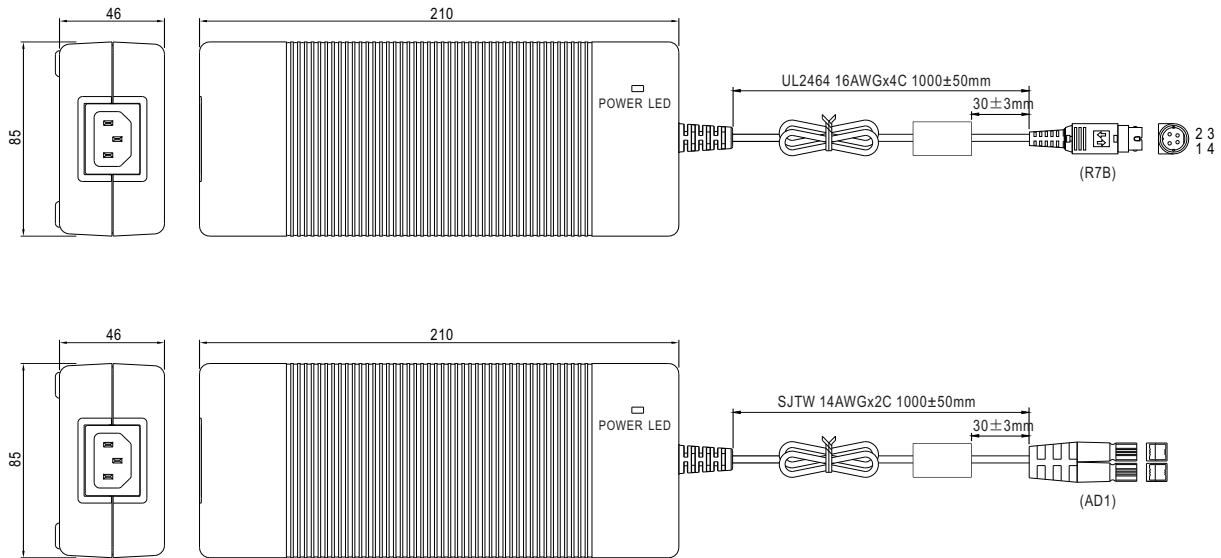


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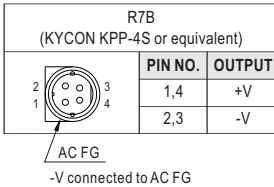
■ Mechanical Specification

Case No.961A Unit:mm

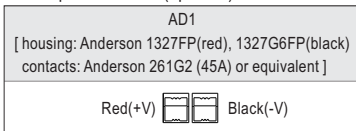


■ Plug Assignment

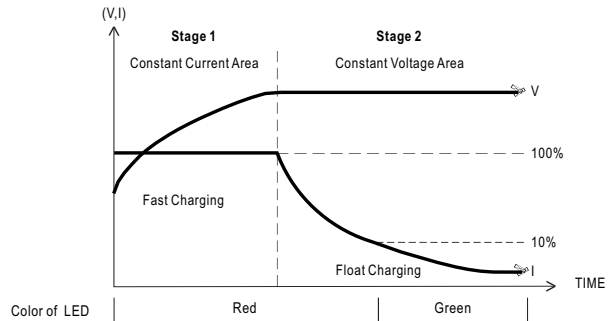
DC output connector (standard)



DC output connector (optional)



■ Charging Curve



| Model | Suggested Battery capacity |
|----------|----------------------------|
| GC220A12 | 80-200Ah |
| GC220A24 | 40-125Ah |
| GC220A48 | 20-65Ah |

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

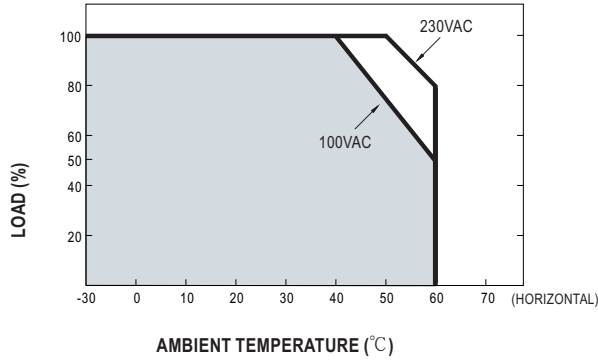
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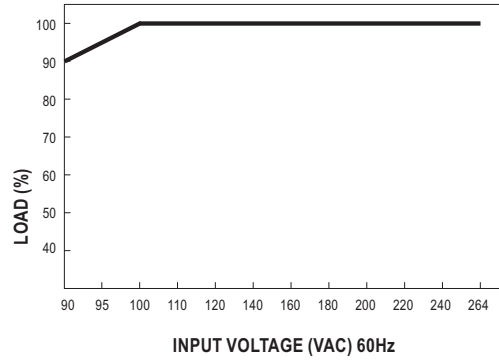
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■ Derating Curve



■ Static Characteristics



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We are here for you. Addresses and Contacts.

Headquarter Switzerland:

Angst+Pfister Sensors and Power AG
Thurgauerstrasse 66
CH-8050 Zurich
Phone +41 44 877 35 00
sensorsandpower@angst-pfister.com

Office Germany:

Angst+Pfister Sensors and Power Deutschland GmbH
Edisonstraße 16
D-85716 Unterschleißheim
Phone +49 89 374 288 87 00
sensorsandpower.de@angst-pfister.com

Scan here and get an overview of personal contacts!



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