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 / UKCA
- 2 years warranty

(for GC220Axx-AD1 only) UL1012 BS EN/EN62368-1 TPTC004 IEC62368-1

■ GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

ORDER NO.	OUTPUT CONNECTOR	SAFETY
GC220Axx-R7B (standard model)	4pin power din	TUV / CB / FCC / CE / UKCA / EAC
GC220Axx-AD1 (optional model)	Anderson connector	UL / TUV / CB / FCC / CE / UKCA / 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
	CONTINUOS 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℃ ±10℃(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℃ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20% ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03% / ℃ (0~50℃)		
	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 BS EN/EN62368-1, EAC TP TC 004 approved		
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH		
	EMC EMISSION	Compliance to BS EN/EN55032 class B, BS EN/EN61000-3-2,3, FCC PART 15 / CISPR22 class B, CAN ICES-3(B)-NMB-(B), EAC TP TC 020		
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, light industry level, EAC TP TC 020		
OTHERS	MTBF	1557.3K hrs min. Telcordia SR-332 (Bellcore) ; 170.2K hrs min. MIL-HDBK-217F (25℃)		
	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

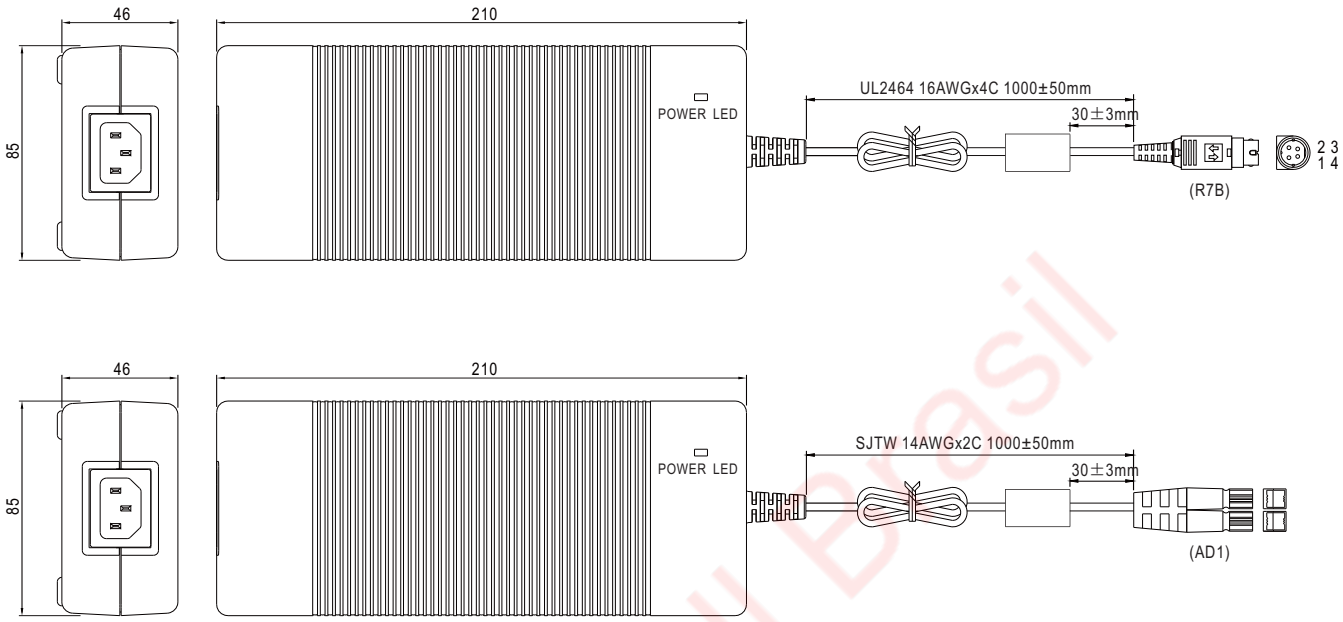
1. Modification for charger specification may be required for different battery specification. Please contact battery vendor and MEAN WELL for details.
2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
3. This is MeanWell's suggested range, 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. (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
7. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).

※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

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■ Mechanical Specification

Case No.961A 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

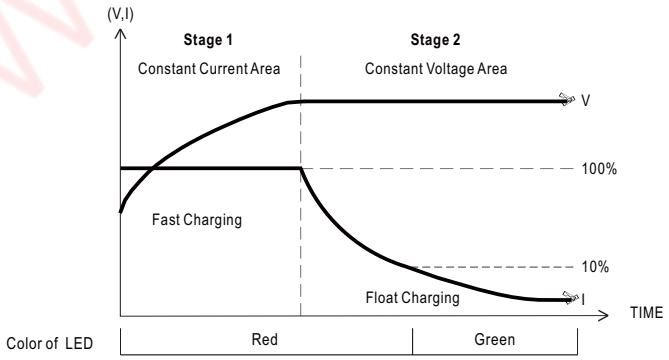
-V connected to AC FG

DC output connector (optional)

AD1
[housing: Anderson 1327FP(red), 1327G6FP(black)
contacts: Anderson 261G2 (45A) or equivalent]

Red(+V)  Black(-V)

■ Charging Curve

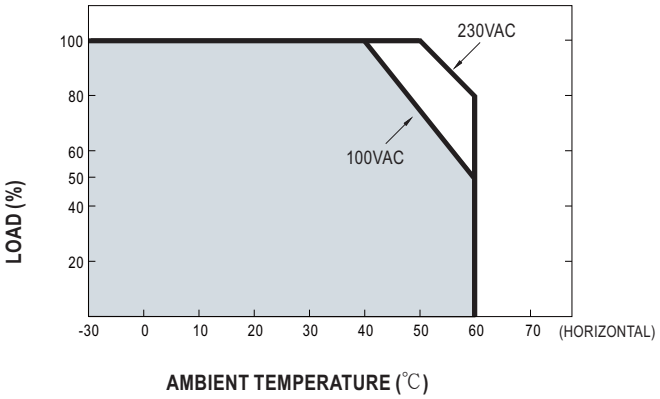


Model	Suggested Battery capacity
GC220A12	80-200Ah
GC220A24	40-125Ah
GC220A48	20-65Ah

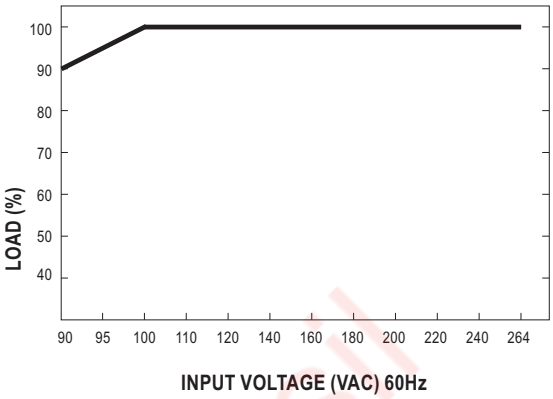
Suitable for lead-acid batteries (flooded,Gel and AGM) and Li-ion batteries (lithium iron and lithium manganese)

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■ Derating Curve



■ Static Characteristics



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