



## 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"> <li>1. Modification for charger specification may be required for different battery specification. Please contact battery vendor and MEAN WELL for details.</li> <li>2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>3. This is MeanWell's suggested range, please consult your battery manufacturer for their suggestions about maximum charging current limitation.</li> <li>4. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>5. Constant current operation region is within 50~100% rated output voltage.</li> <li>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.</li> <li>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).</li> </ol>			

File Name:GC220-SPEC 2020-01-04

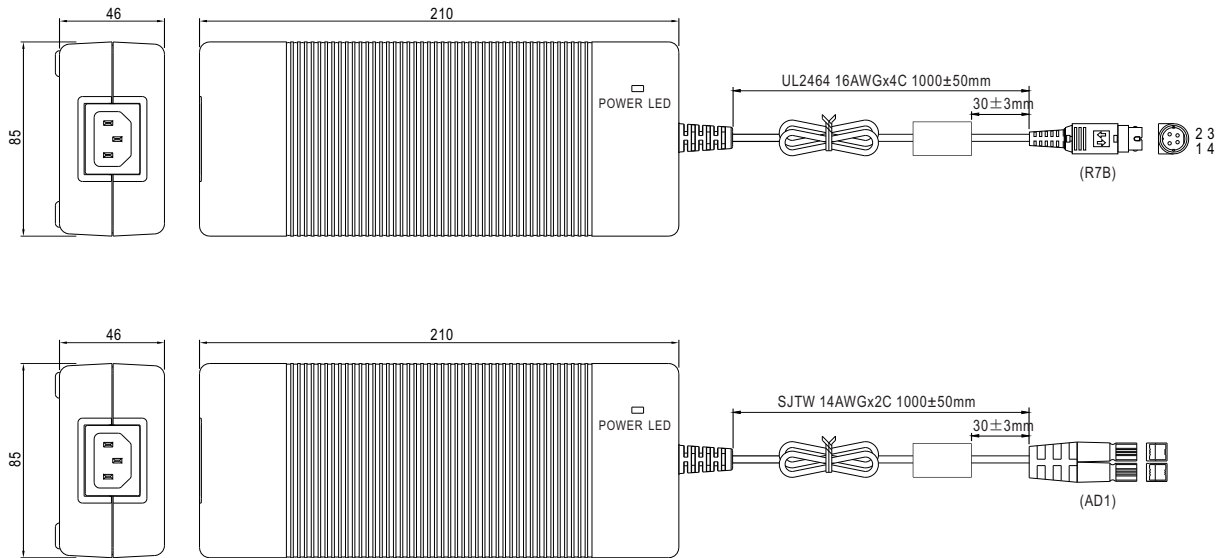


220W Single Output Battery Charger

GC220 series

■ Mechanical Specification

Case No.961A Unit:mm



■ Plug Assignment

DC output connector (standard)

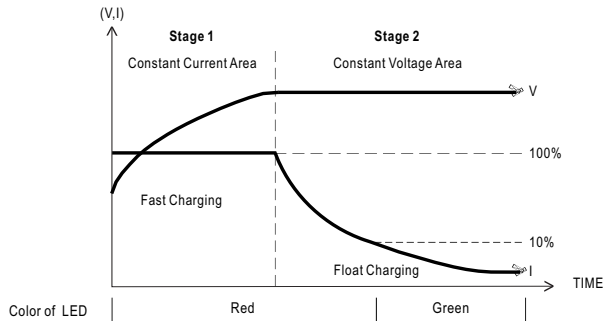
R7B (KYCON KPP-4S or equivalent)		
<b>PIN NO.</b>	<b>OUTPUT</b>	
1,4	+V	
2,3	-V	

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

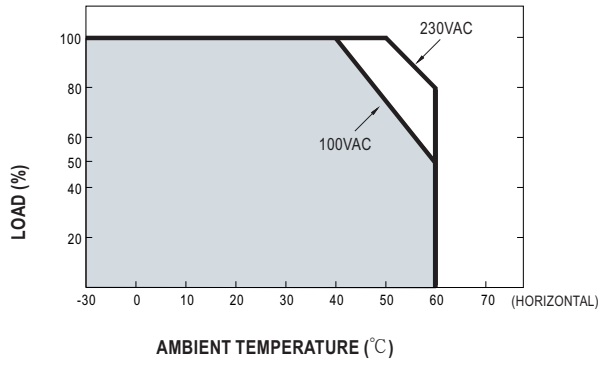
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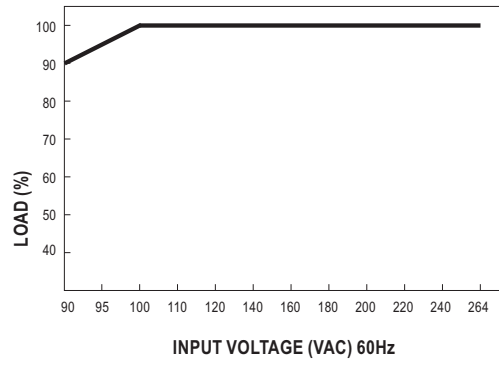
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**GC220** series

■ Derating Curve



■ Static Characteristics



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