



## 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: TUV / UL / CB / FCC / Ce
- 2 years warranty



ORDER NO.	OUTPUT CONNECTOR	SAFETY
GC220Axx-R7B (standard model)	4pin power din	TUV / CB / FCC / CE
GC220Axx-AD1 (optional model)	Anderson connector	UL / TUV / CB / FCC / CE
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 <small>Note.3</small>	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 <small>Note.4</small>	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 <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	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 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		
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A		
	MTBF	190Khrs min. MIL-HDBK-217F(25°C)		
	DIMENSION	210*85*46mm (L*W*H)		
CONNECTOR	PACKING	1.1Kg; 12pcs/14.2Kg/0.73CUFT(GC220Axx-R7B) 1.2Kg; 12pcs/15.4Kg/1CUFT(GC220Axx-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 as an independent unit, but the final equipment still need to re-confirm that whole system complies with the EMC directives.		

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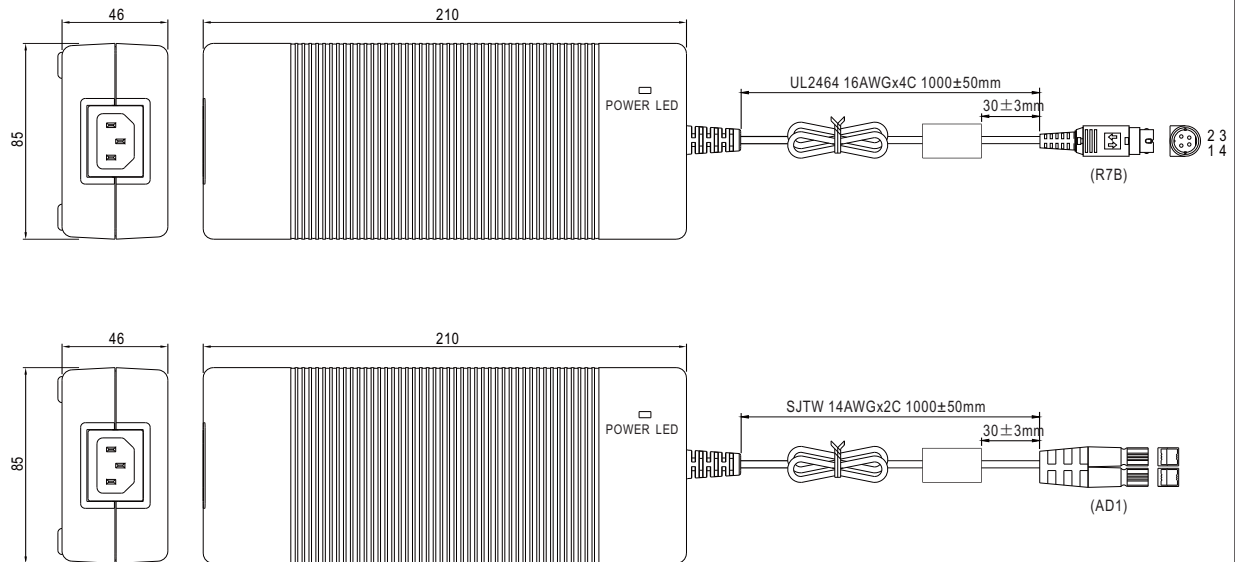


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### ■ Mechanical Specification

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

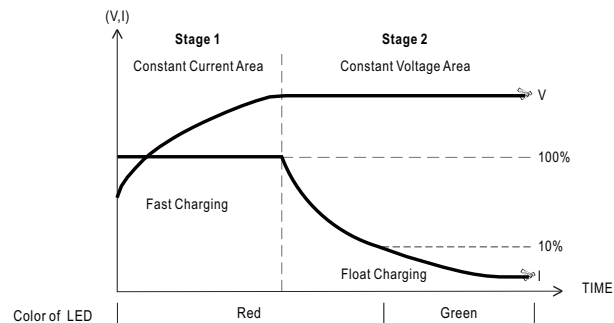
AC FG

-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)

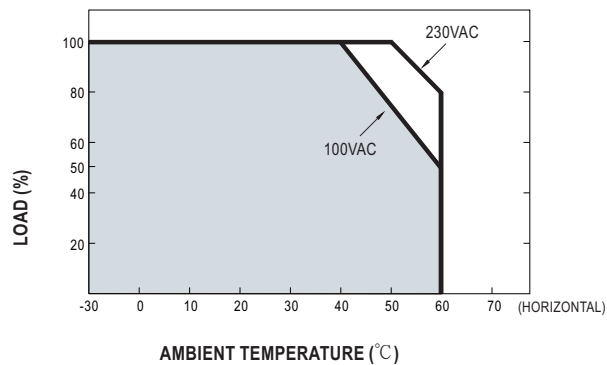
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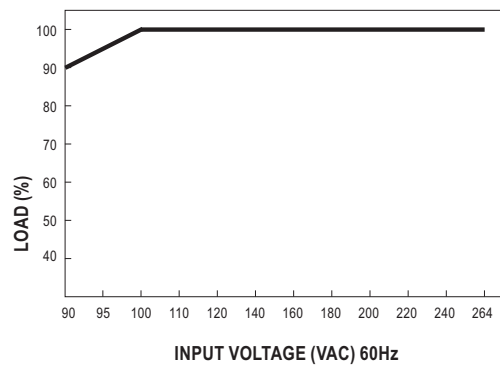
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■ Derating Curve



■ Static Characteristics



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