120W Single Output Battery Charger — GC120 series



■ Features :

- 2 stage charging characteristic
- Universal AC input / Full range
- Built-in active PFC function, PF>0.97
- No load power consumption<0.5W
- 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

(for GC120Axx-AD1 only)

ORDER NO.	OUTPUT CONNECTOR	SAFETY
GC120Axx-R7B (standard model)	4pin power din	TUV / CB / FCC / CE
GC120Axx-AD1 (optional model)	Anderson connector	UL / TUV / CB / FCC / CE
GC120Axx-□ xx=12,24,48 ; □=R7B,AD1		

SPECIFICATION

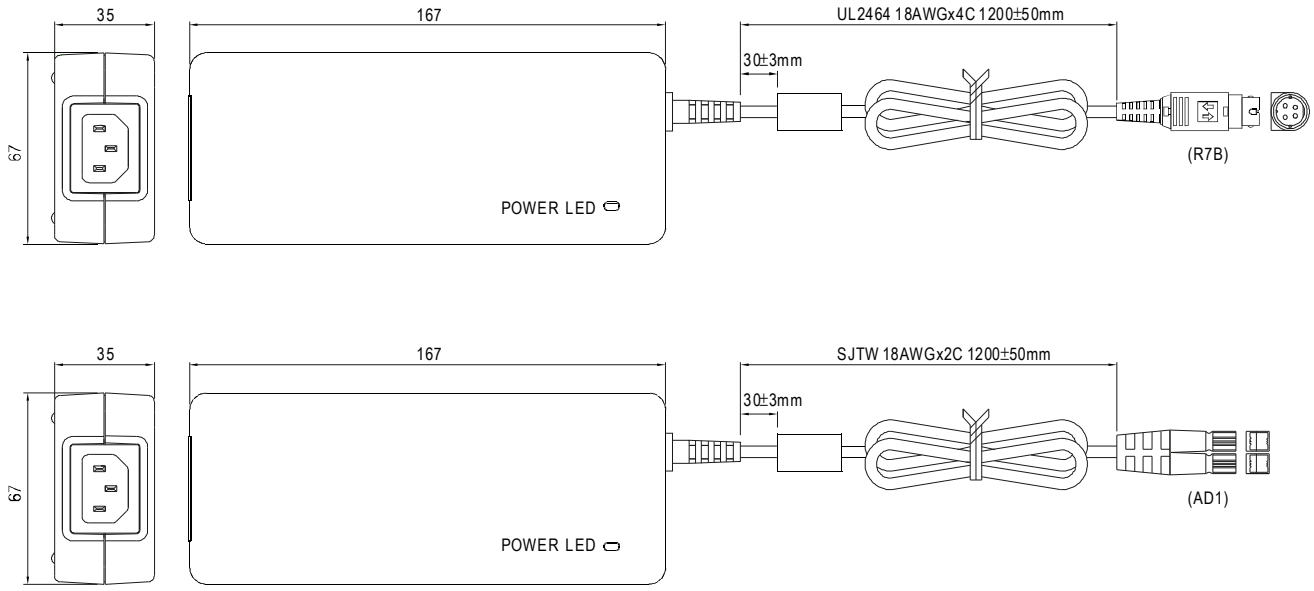
ORDER NO.		GC120A12-□	GC120A24-□	GC120A48-□
OUTPUT	SAFETY MODEL NO.	GC120A12	GC120A24	GC120A48
	DC VOLTAGE (Typ.)	13.6V	27.2V	54.4V
	RECOMMENDED BATTERY CAPACITY Note.2	40 ~ 100Ah	20 ~ 65Ah	10 ~ 35Ah
	CONTINUOS OUTPUT CURRENT (Typ.)	7.5A	4.42A	2.21A
	RATED POWER	102W	120.2W	120.2W
	LED INDICATOR	Charging(CC) : RED Floating charging(CV) : GREEN		
INPUT	VOLTAGE RANGE Note.3	85 ~ 264VAC 120 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF>0.97 / 230VAC PF>0.99 / 115VAC at full load		
	EFFICIENCY (Typ.)	86.5%	90%	91%
	AC CURRENT	1.4A / 115VAC 0.7A / 230VAC		
	INRUSH CURRENT (max.)	70A / 230VAC		
	LEAKAGE CURRENT(max.)	0.75mA / 240VAC		
PROTECTION	OVERLOAD Note.4	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	14 ~ 16.5V	29 ~ 33V	59 ~ 69V
		Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	100℃ ±10℃ (RTH2) detect on inside ambient temperature		
		Protection type : Shut down o/p voltage, re-power on to recover		
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (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. 5)	SAFETY STANDARDS	UL1012 (for GC120Axx-AD1 only), TUV EN60950-1 approved		
	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC		
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH		
	EMC EMISSION	Compliance to EN55022 class B, FCC PART 15 class B / CISPR22 class B, EN61000-3-2,3		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A		
OTHERS	MTBF	400.7K hrs min. MIL-HDBK-217F(25℃)		
	DIMENSION	167*67*35mm (L*W*H)		
	PACKING	0.62Kg; 20pcs/13.4Kg/0.9CUFT		
CONNECTOR	PLUG	See page 2 ; Other type available by customer requested		
	CABLE	See page 2 ; Other type available by customer requested		

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
2. This is MeanWell's suggested range, please consult your battery manufacturer for their suggestions about maximum charging current limitation.
3. Derating may be needed under low input voltage. Please check the derating curve for more details.
4. Constant current operation region is within 50~100% rated output voltage.
5. 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.

■ Mechanical Specification

Case No.GS120A 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

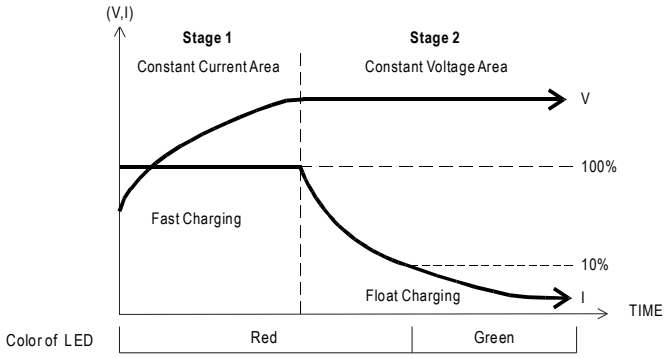
-V connected to AC FG

DC output connector (optional)

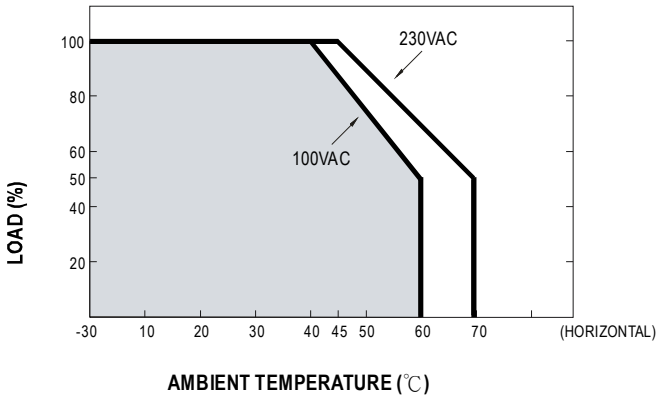
AD1
[housing: Anderson 1327FP(red), 1327G6FP(black)
contacts: Anderson 261G2 (45A) or equivalent]

Red(+V) Black(-V)

■ Charging Curve



■ Derating Curve



■ Static Characteristics

