

GC120 Series

120W Single Output Battery Charger



Case No: 8918JM
167 x 67 x 35 mm

Features

- Charger for lead-acid batteries (flooded, gel and AGM) and Li-ion batteries (lithium iron and lithium manganese)
- 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
- Cooling by free air convection
- Class I power (with earth pin)
- Protections: Short circuit/Overload/Over voltage/ Over Temperature
- Fully enclosed plastic case
- 2 colour LED indicator for charging status
- 2 years warranty



(For GC120Axx-AD1 only)

Specification

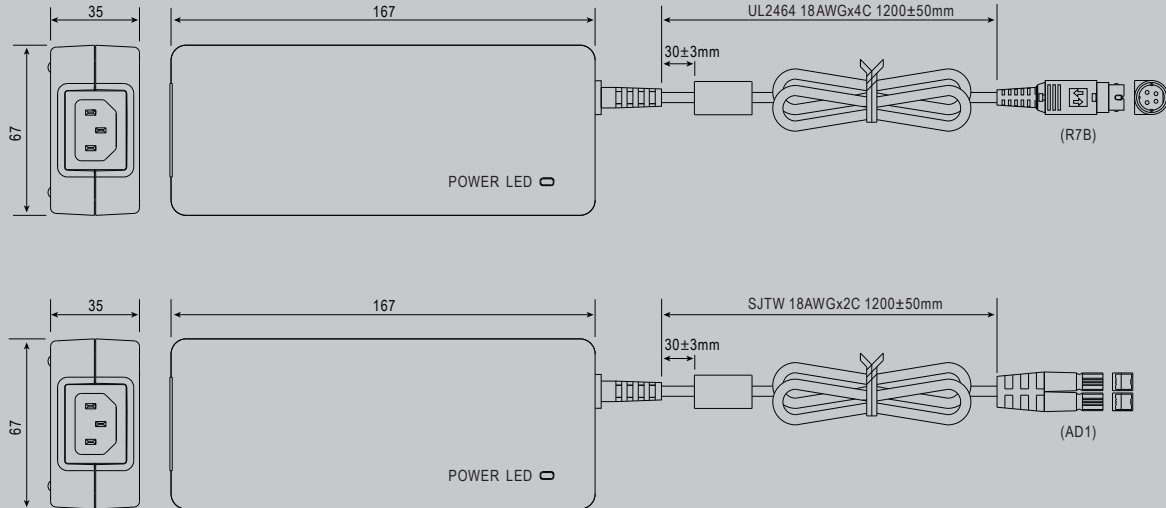
GC120Axx-R7B (standard model) 4pin power din / GC120Axx-AD1 (optional model) Anderson connector GC120Axx-□xx=12, 24, 48; □=R7B, AD1

INPUT	Voltage	85 ~ 264VAC	120 ~ 370VDC	
	Frequency	47 ~ 63Hz		
	Power Factor	PF>0.98/230VAC	PF>0.99/115VAC at full load	
	Efficiency	86.5%	90% 91%	
	AC Current	1.4A/115VAC	0.7A/230VAC	
	Inrush Current	70A / 230VAC		
	Leakage Current	0.75mA/240VAC		
	OUTPUT	MODEL No.	GC120A12- □	GC120A24- □
DC Voltage		13.6V	27.2V	54.4V
Recommended Battery Capacity		40~160Ah	20~65Ah	10~35Ah
Continuous Output Current		7.5A	4.42A	2.21A
Rated Power		102W	120.2W	120.2W
LED Indicator		Charging (CC): Red Floating charging (CV): Green		
PROTECTION		Over Load	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°C± 10°C (RTH2) detect on inside ambient temperature Protection Type: Shut down o/p voltage, re-power on to recover		
ENVIRONMENT	Working Temp.	-30 ~ +70°C (Refer to derating curve)		
	Working Humidity.	-20 ~ +90°C 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	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°C / 70% RH		
EMC Emission		Compliance to EN55032 class B, FCC PART 15 class B / CISPR32 class B, EN61000-3-2,3		
EMC Immunity		Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A		
CONNECTOR	Plug	See page 2; Other type available by customer's request.		
	Cable	See page 2; Other type available by customer's request.		
OTHERS	MTBF	400.7Khrs min. MIL-HDBK-217F (25°C)		
	Packaging	0.62Kg; 20pcs/13.4Kg/0.9CUFT		

1. Modification for charger specification may be required for different battery specification. Please contact battery vendor 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 a component that will be operated in combination with final equipment. The final equipment must be re-confirmed that it still meets EMC directives

Mechanical Specification

Case No.947A Unit:mm



Plug Assignment

DC output connector (standard)

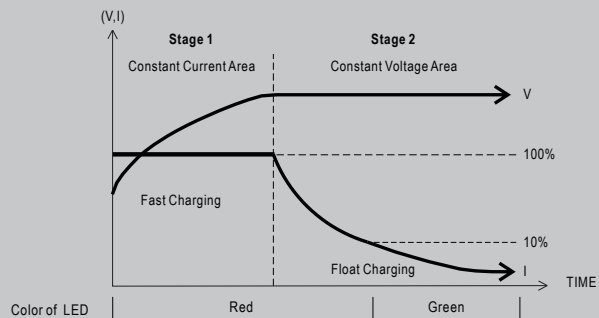
R7B (KYCON KPP-4S or equivalent)		
PIN NO.	OUTPUT	
1,4	+V	
2,3	-V	

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)

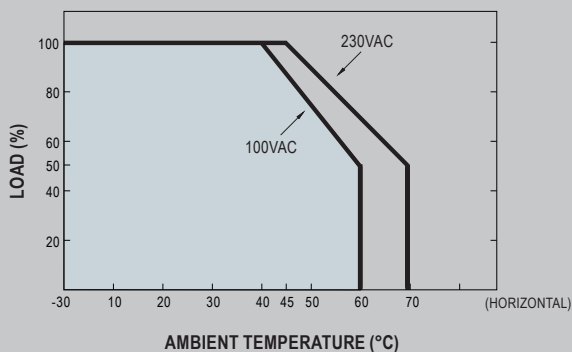
Charging Curve



Model	Suggested Battery capacity
GC120A12	40-100Ah
GC120A24	20-65Ah
GC120A48	10-35Ah

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

Derating Curve



Statistic Characteristics

