



### ■ 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>0.94
- 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



### ■ GTIN CODE

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



( for GC160Axx-AD1 only)



BS EN/EN62368-1 TPTC004 IEC62368-1



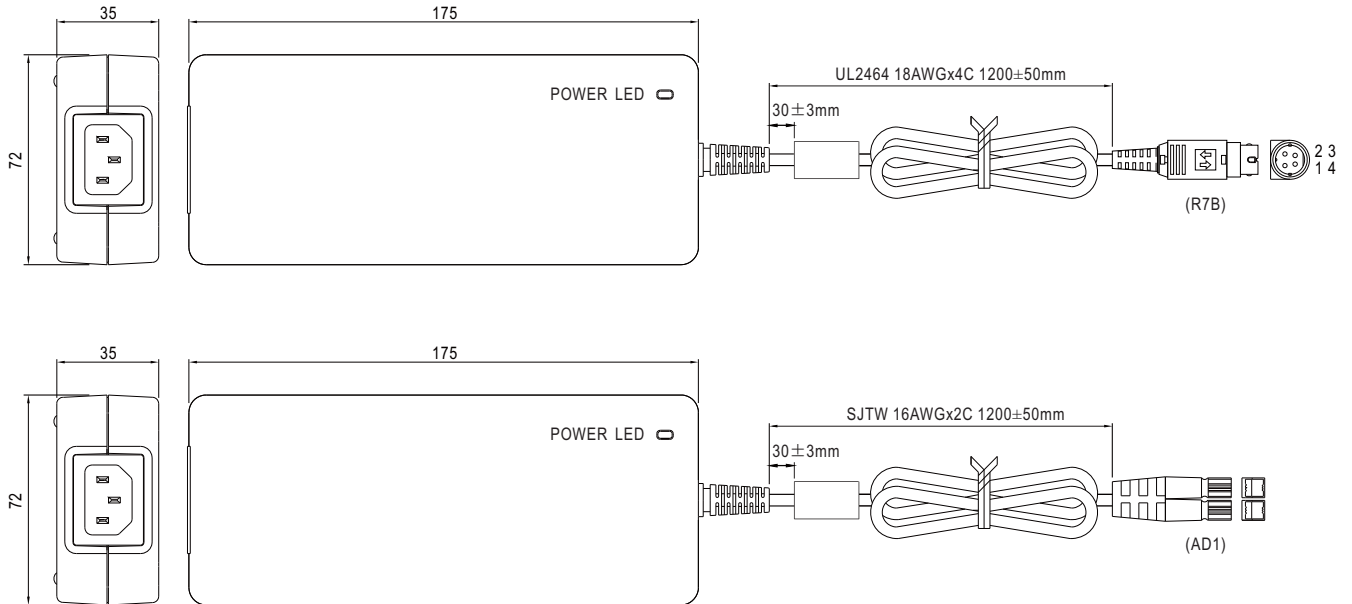
ORDER NO.	OUTPUT CONNECTOR	SAFETY
GC160Axx-R7B (standard model)	4pin power din	TUV / CB / FCC / CE / UKCA / EAC
GC160Axx-AD1 (standard model)	Anderson connector	UL / TUV / CB / FCC / CE / UKCA / EAC
GC160Axx-□ xx=12,24,48 ; □=R7B,AD1		

### SPECIFICATION

ORDER NO.	GC160A12-□	GC160A24-□	GC160A48-□	
OUTPUT	SAFETY MODEL NO.	GC160A12	GC160A24	GC160A48
	DC VOLTAGE (Typ.)	13.6V	27.2V	54.4V
	RECOMMENDED BATTERY CAPACITY <small>Note.3</small>	60 ~160Ah	30 ~ 90Ah	15 ~ 45Ah
	CONTINUOUS OUTPUT CURRENT (Typ.)	10A	5.89A	2.95A
	RATED POWER	136W	160.2W	160.5W
	LED INDICATOR	Charging(CC) : RED Floating charging(CV) : GREEN		
INPUT	VOLTAGE RANGE <small>Note.4</small>	85 ~ 264VAC 120 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF>0.94 / 230VAC PF>0.98 / 115VAC at full load		
	EFFICIENCY (Typ.)	89%	92.5%	94%
	AC CURRENT	1.85A / 115VAC 1A / 230VAC		
	INRUSH CURRENT (max.)	120A / 230VAC		
	LEAKAGE CURRENT(max.)	0.75mA / 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	90°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% 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 <small>(Note. 6)</small>	SAFETY STANDARDS	UL1012 (for GC160Axx-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°C / 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		
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020		
	MTBF	2197.9K hrs min. Telcordia SR-332 (Bellcore) ; 274.1K hrs min. MIL-HDBK-217F (25°C)		
	DIMENSION	175*72*35mm (L*W*H)		
CONNECTOR	PACKING	0.7Kg; 20pcs/15Kg/0.95CUFT(GC160Axx-R7B) 0.77Kg; 20pcs/16.4Kg/1.15CUFT(GC160Axx-AD1)		
	PLUG	See page 2 ; Other type available by customer requested		
NOTE	CABLE	See page 2 ; Other type available by customer requested		
	<p>1. Modification for charger specification may be required for different battery specification. Please contact battery vendor and MEAN WELL for details.</p> <p>2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>3. This is MeanWell's suggested range, please consult your battery manufacturer for their suggestions about maximum charging current limitation.</p> <p>4. Derating may be needed under low input voltage. Please check the derating curve for more details.</p> <p>5. Constant current operation region is within 50~100% rated output voltage.</p> <p>6. 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.</p> <p>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).</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>			

■ Mechanical Specification

Case No.997A Unit:mm



■ Plug Assignment

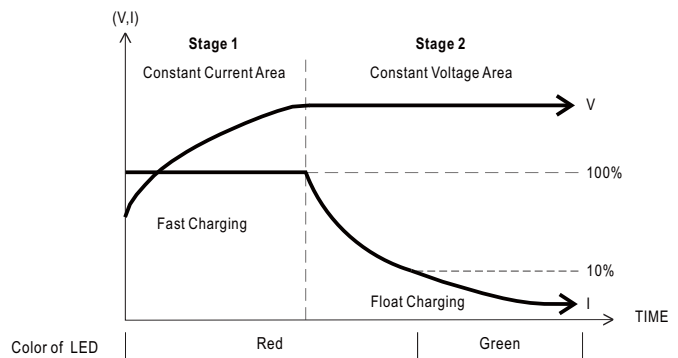
DC output connector

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

AC FG  
-V connected to AC FG

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

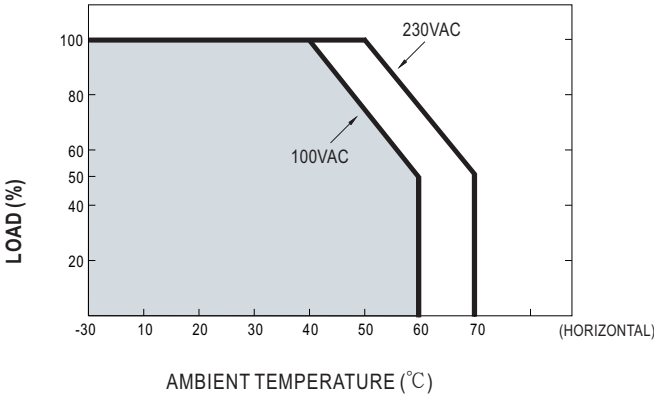
■ Charging Curve



Model	Suggested Battery capacity
GC160A12	60-160Ah
GC160A24	30-90Ah
GC160A48	15-45Ah

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

■ Derating Curve



■ Static Characteristics

