



30W Battery Charger Power supply > GC30B



■ Features :

- Charger for lead-acid batteries (flooded, Gel and AGM) and li-ion batteries (lithium iron and lithium manganese) (Note.1)
- Universal AC input / Full range
- 2 pole AC Inlet IEC320-C8
- Class II power (without earth pin)
- No load power consumption <1.0W
- Constant current and voltage(CC,CV mode)
- Suitable for continue load
- For high surge current equipment
- Protections: Short circuit / Overload / Over voltage / Over temp.
- 2 colors LED indicate for charging status
- Fully enclosed plastic case
- High reliability
- Approvals: UL / CUL / TUV / EAC / CB / FCC / CE
- 2 years warranty



SPECIFICATION

ORDER NO.		GC30B-0P1J	GC30B-1P1J	GC30B-11P1J	GC30B-2P1J	GC30B-4P1J	GC30B-5P1J	GC30B-6P1J	
OUTPUT	SAFETY MODEL NO.	GC30B-0	GC30B-1	GC30B-11	GC30B-2	GC30B-4	GC30B-5	GC30B-6	
	DC VOLTAGE SET AT <small>Note.3</small>	4.2V	5.6V	7.2V	8.4V	14.3V	16.8V	28.6V	
	RATED CURRENT	4A	3.99A	3A	3A	2.09A	1.6A	1.04A	
	CURRENT RANGE	0 ~ 4A	0 ~ 3.99A	0 ~ 3A	0 ~ 3A	0 ~ 2.09A	0 ~ 1.6A	0 ~ 1.04A	
	RATED POWER	16.8W	22.38W	21.6W	25.2W	30W	27W	30W	
	RIPPLE & NOISE (max.) <small>Note.4</small>	50mVp-p	50mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	150mVp-p	
	CHARGING VOLTAGE RANGE <small>Note.5</small>	3.6 ~ 4.4V	5 ~ 5.8V	6.5 ~ 7.5V	7.7 ~ 8.6V	13.5 ~ 14.5V	16 ~ 17V	27.1 ~ 28.8V	
	LINE REGULATION <small>Note.6</small>	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LED INDICATOR	Green LED ON < 100mA, Red LED ON > 250mA							
SETUP, RISE, HOLD UP TIME	200ms, 50ms, 16ms at full load								
INPUT	VOLTAGE RANGE	90 ~ 264VAC 127 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	55%	70%	74%	76%	78%	78%	80%	
	AC CURRENT	0.7A/100VAC; 0.35A/230VAC							
	INRUSH CURRENT (max.)	40A/230VAC							
	LEAKAGE CURRENT(max.)	0.25mA/240VAC							
PROTECTION	OVERLOAD	90 ~ 110% Constant current mode and over 300% pulsing mode Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	110 ~ 135% rated output voltage Protection type : Clamp by zener diode							
	OVER TEMPERATURE	IC1_Tj > 130°C Protection type : Shut down o/p voltage, recovers automatically after temperature goes down							
ENVIRONMENT	WORKING TEMP.	0 ~ +50°C (Refer to output load derating curve)							
	WORKING HUMIDITY	20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-20 ~ +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	UL62368-1, CSA22.2, 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 EN55014-1 class B, FCC part 15 Class B, EAC TP TC 020							
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,11, light industry level, criteria A, EAC TP TC 020							
	DIMENSION	108*67*36mm (L*W*H)							
CONNECTOR	PACKING	309g; 54pcs / 19kg / CARTON							
	PLUG	Standard type P1J: 2.1φ * 5.5φ * 11mm, tuning fork type center positive for stock ; Other type available by customer requested							
	CABLE	Standard type 18Awg UL1185 6ft and 4ft for 4.2V~8.4V output only for stock ; Other type available by customer requested							
NOTE	1.Modification for charger specification may be required for different battery specification. 2.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. 3.DC voltage: The output voltage set at point measure by plug terminal & 0% load. 4.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 5.Output charging voltage range is measured from 0% to 100% rated load. 6.Line regulation is measured from low line to high line at rated load.								



E-Star Power Development Co., Ltd. (E-STAR)

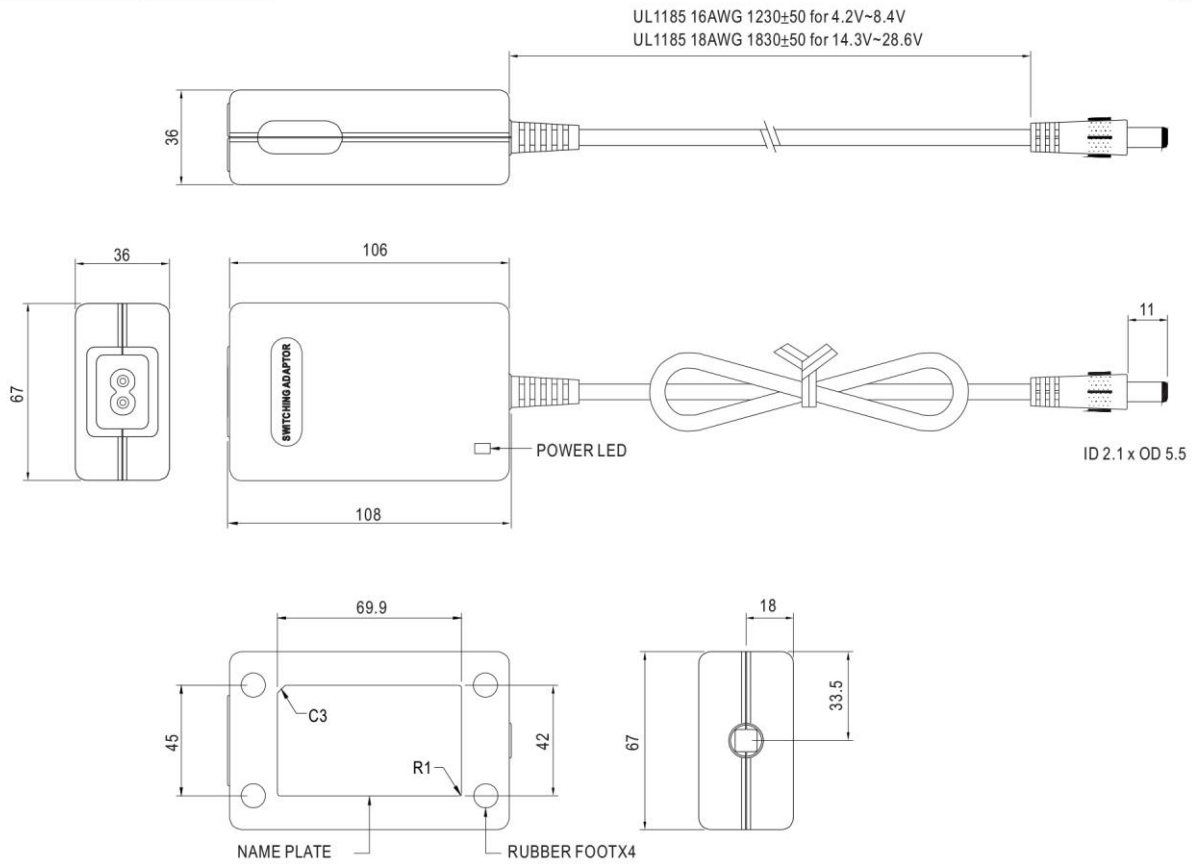
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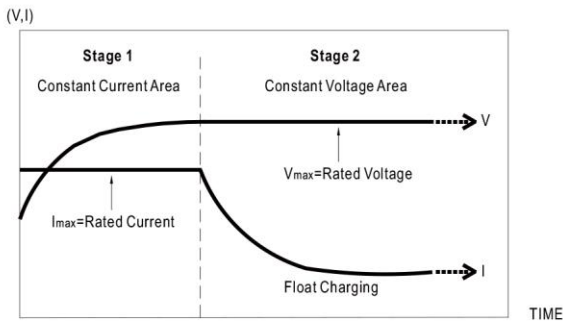
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Mechanical Specification

Unit:mm



Charging Curve



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

LED Display

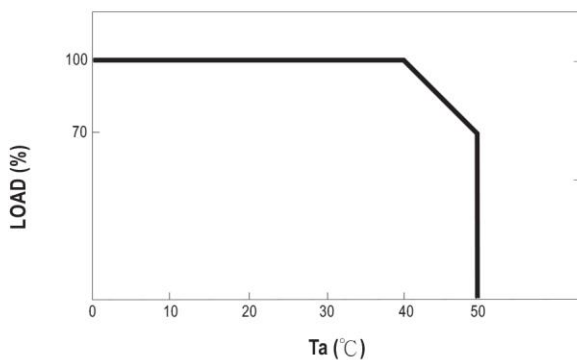
LED Status	Load Condition
Red	Charging
Green	Float Charging

Plug Assignment

Standard plug: P1J (option)

P1J	
P/N	OUTPUT
CENTER	+

Derating Curve



Static Characteristics

