

# GC30B Series

16.8 ~ 30W Power Adaptor with Charging Function



Case No: 8917HE  
108 x 67 x 36 mm

## Features

- Charger for lead-acid batteries (flooded, gel and AGM) and Li-ion batteries (lithium iron and lithium manganese)
- Universal AC input / Full range
- No load power consumption <1W
- 2 pole AC inlet IEC320-C8
- Constant Current and voltage (CC, CV mode)
- Cooling by free air convection
- Class II power (without earth pin)
- Suitable for continue load
- For high surge current equipment
- Protections: Short circuit/Overload/Over voltage/Over Temperature
- Fully enclosed plastic case
- 2 colour LED indicator for charging status
- High Reliability
- 2 years warranty



## Specification

INPUT	<b>Voltage</b>	90 ~ 264VAC		127 ~ 370VDC				
	<b>Frequency</b>	47 ~ 63Hz						
	<b>Efficiency</b>	55%	70%	74%	76%	78%	80%	
	<b>AC Current</b>	1A/100VAC						
	<b>Inrush Current</b>	40A / 230VAC						
	<b>Leakage Current</b>	0.25mA/240VAC						
	OUTPUT	<b>MODEL No.</b>	<b>GC30B-0P1J</b>	<b>GC30B-1P1J</b>	<b>GC30B-11P1J</b>	<b>GC30B-2P1J</b>	<b>GC30B-4P1J</b>	<b>GC30B-5P1J</b>
<b>DC Voltage</b>		4.2V	5.6V	7.2V	8.4V	14.3V	16.8V	28.6V
<b>Rated Current</b>		4A	3.99A	3A	3A	2.09A	1.6A	1.04A
<b>Current Range</b>		0 ~ 4A	0 ~ 3.99A	0 ~ 3A	0 ~ 3A	0 ~ 2.09A	0 ~ 1.6A	0 ~ 1.04A
<b>Rated Power</b>		16.8W	22.38W	21.6W	25.2W	30W	27W	30W
<b>Ripple &amp; Noise</b>		50mVp-p	50mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	150mVp-p
<b>Charging Voltage Range</b>		3.6 ~ 4.4V	5 ~ 5.8V	6.5 ~ 7.5V	7.7 ~ 8.8V	13.5 ~ 14.5V	16 ~ 17V	27.1 ~ 28.8V
<b>Line Regulation</b>		±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
<b>LED Indicator</b>		Green LED ON <150 ~ 200mA < Red LED ON						
<b>Set Up, Rise, Hold Up Time</b>		200ms, 50ms, 16ms at full load						
PROTECTION		<b>Over Load</b>	90 ~ 110% Constant current mode and over 300% pulsing mode Protection Type: Constant current limiting, recovers automatically after fault condition is removed					
		<b>Over Voltage</b>	110 ~ 135% rated output voltage Protection Type: Clamp by zener diode					
		<b>Over Temperature</b>	IC1Tj130°C Protection Type: Shut down o/p voltage, recovers automatically when temperature goes down					
	<b>Working Temp.</b>	0 ~ +50°C (Refer to output load derating curve)						
ENVIRONMENT	<b>Working Humidity.</b>	-20% ~ 90% RH non-condensing						
	<b>Storage Temp Humidity.</b>	-20 ~ +85°C, 10 ~ 95% RH						
	<b>Temp. Coefficient</b>	±0.03% / °C (0 ~ 50°C)						
	<b>Vibration</b>	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC	<b>Safety Standards</b>	UL60950-1, CSA22.2, EN60950-1 approved						
	<b>Withstand Voltage</b>	I/P-O/P: 3KVAC						
	<b>Isolation Resistance</b>	I/P-O-P:100M Ohms / 500VDC / 25°C / 70% RH						
	<b>EMI Conduction &amp; Radiation</b>	Compliance to EN55014-1 class B, FCC part 15 Class B						
	<b>Harmonic Current</b>	Compliance to EN61000-3-2, 3						
CONNECTOR	<b>EMS Immunity</b>	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A						
	<b>Plug</b>	Standard type P1J: 2.1φ *5.5φ *11mm, tuning fork centre positive for stock; Other types available by customers request						
	<b>Cable</b>	Standard type 18Awg UL1185 6ft and 4ft for 4.2V ~ 8.4V output for stock; Other type available by customer's request.						
OTHERS	<b>Packaging</b>	309g; 54pcs / 19Kg /carton						

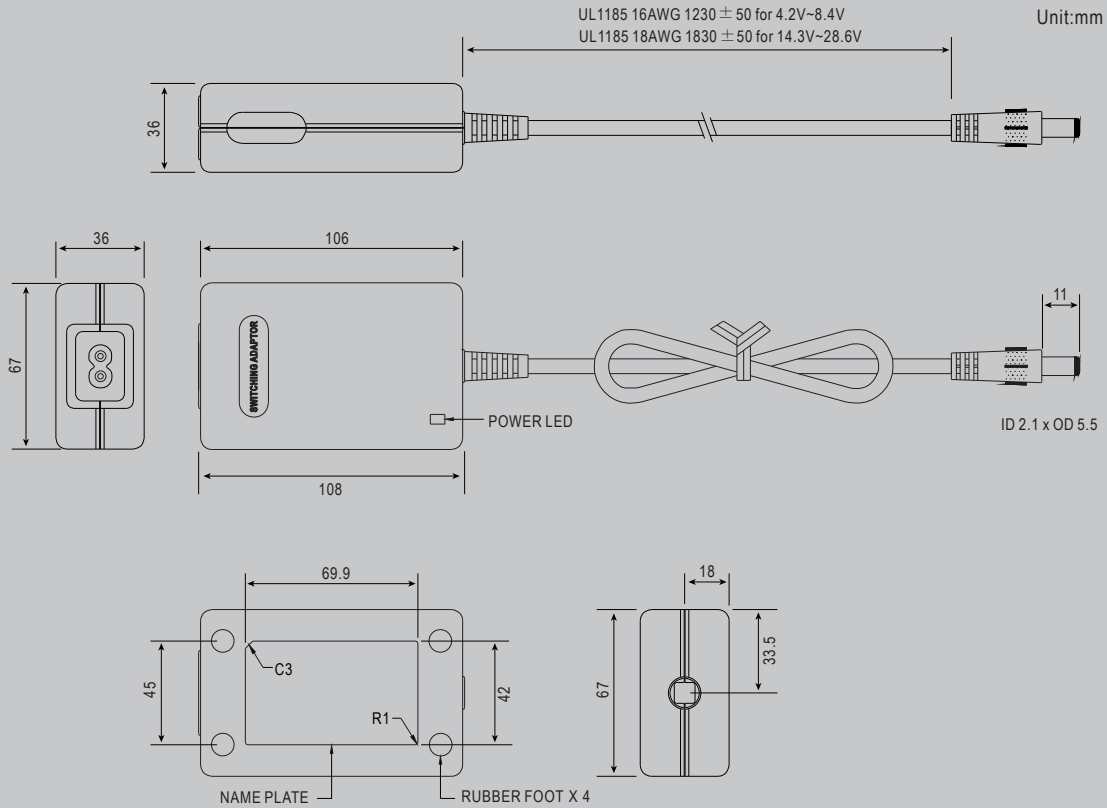
1. Modification for charger specification may be required for different battery specification. Please contact battery vendor for details.
2. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.
3. DC voltage: The output voltage set at point measure by plug terminal & 0% load.
4. Ripple & Noise are measured at 220MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
5. Constant charging voltage range is measured from 0% to 100% rated load.
6. Line regulation is measured from low line at rated load.

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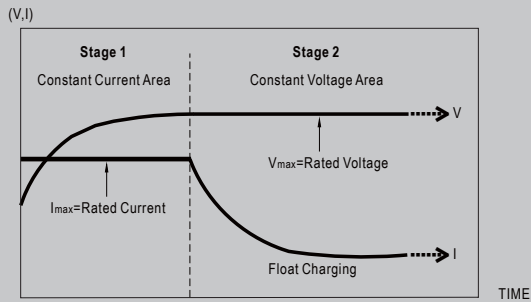
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## Mechanical Specification



## Charging Curve



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

## LED Display

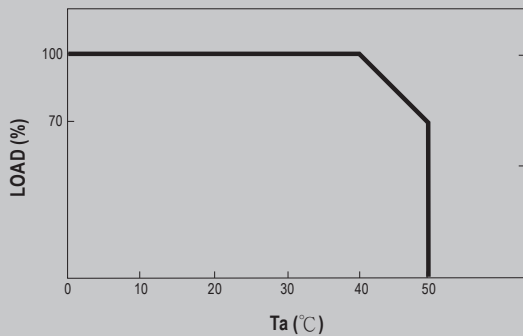
LED Status	Load Condition
Red	Charging
Green	Float Charging

## Plug Assignment

Standard plug: P1J (option)

P1J	
P/N	OUTPUT
CENTER	+

## Derating Curve



## Statistic Characteristics

