

# GC30E Series

16.8 ~ 30w Power Adaptor with Charging Function



## ■ 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
- With EURO type 6 FT power cord(2pin)
- 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 loading status
- Fully enclosed plastic case
- High reliability
- Approvals: TUV / EAC / CB / FCC / CE / UKCA
- 2 years warranty



## ■ GTIN CODE

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



BS EN/EN62368-1



TPTC004



IEC62368-1



CE



UKCA

## SPECIFICATION

| ORDER NO.                 | GC30E-0P1J  | GC30E-1P1J   | GC30E-11P1J | GC30E-2P1J | GC30E-4P1J | GC30E-5P1J   | GC30E-6P1J |              |
|---------------------------|---|--|-------------|------------|------------|--------------|------------|--------------|
| OUTPUT                    | SAFETY MODEL NO.  | GC30E-0  | GC30E-1     | GC30E-11   | GC30E-2    | GC30E-4      | GC30E-5    | GC30E-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<br>Protection type : Constant current limiting, recovers automatically after fault condition is removed |             |            |            |              |            |              |
|                           | OVER VOLTAGE  | 110 ~ 135% rated output voltage<br>Protection type : Clamp by zener diode  |             |            |            |              |            |              |
|                           | OVER TEMPERATURE  | IC1_Tj > 130°C<br>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  | 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/EN55014-1 class B, FCC part 15 Class B, EAC TP TC 020  |             |            |            |              |            |              |
|                           | EMC IMMUNITY  | Compliance to BS EN/EN61000-4-2,3,4,5,6,11, light industry level, criteria A, EAC TP TC 020  |             |            |            |              |            |              |
| OTHERS                    | DIMENSION   | 108*67*36mm (L*W*H)  |             |            |            |              |            |              |
|                           | PACKING   | 405g; 36pcs / 16.5kg / CARTON  |             |            |            |              |            |              |
| CONNECTOR                 | 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. Please contact battery vendor and MEAN WELL for details.<br>2.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.<br>3.DC voltage: The output voltage set at point measure by plug terminal & 0% load.<br>4.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.<br>5.Output charging voltage range is measured from 0% to 100% rated load.<br>6.Line regulation is measured from low line to high line at rated load.<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |  |             |            |            |              |            |              |

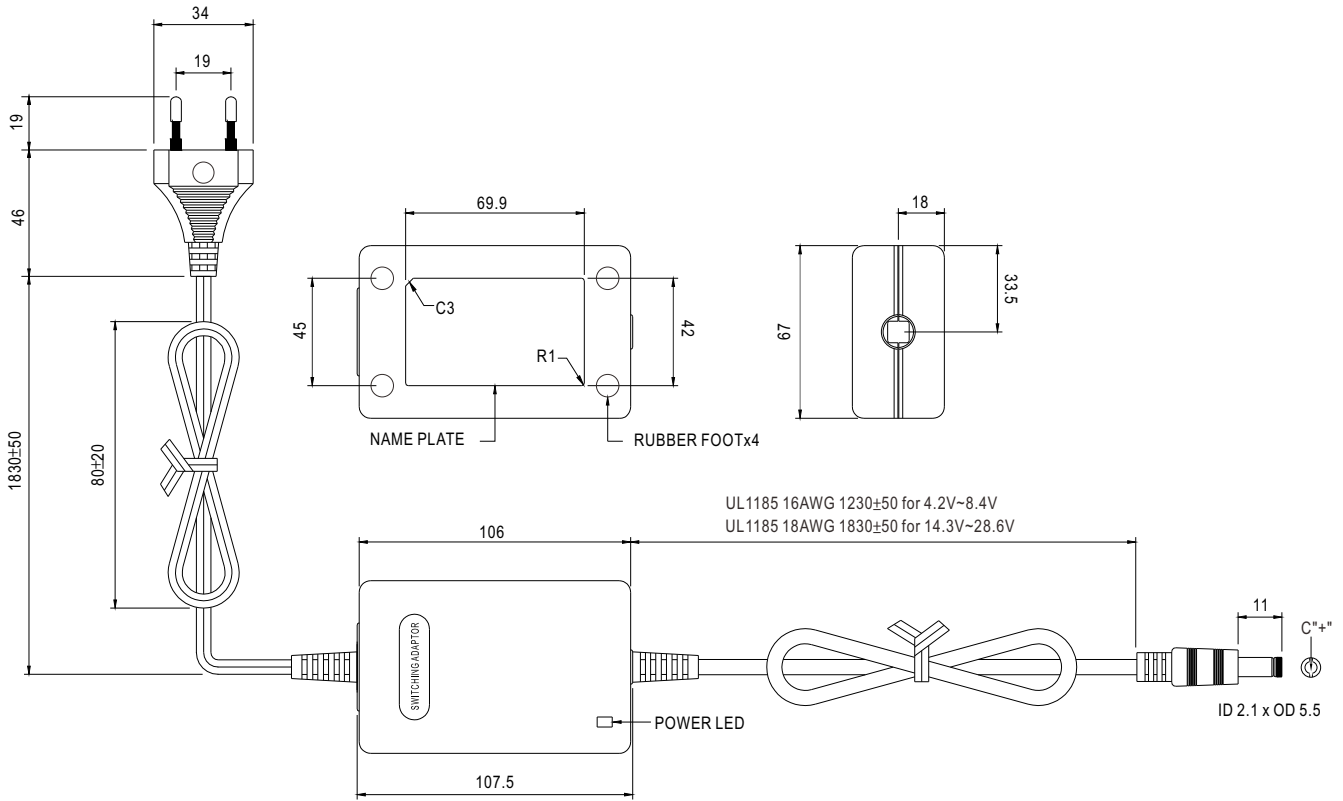
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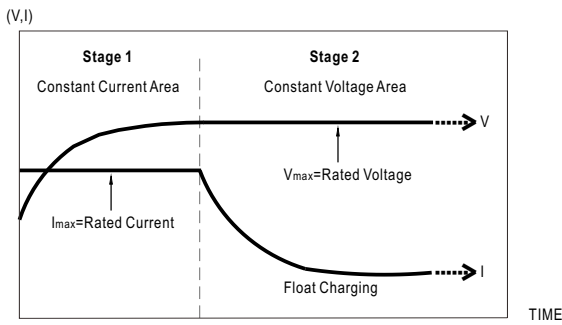


## Mechanical Specification

Unit:mm



## Charging Curve



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

## LED Display

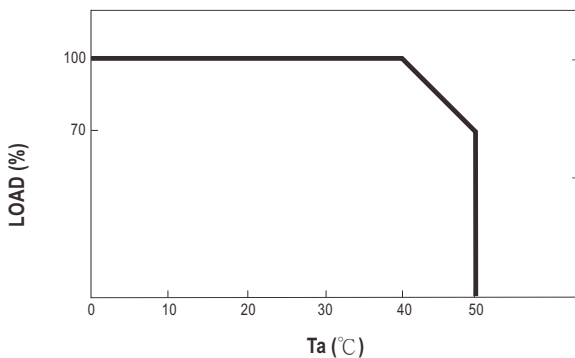
| LED Status | Load Condition |
|------------|----------------|
| Red        | Charging       |
| Green      | Float Charging |

## Plug Assignment

Standard plug: P1J (option)

| P1J    |        |
|--------|--------|
| P/N    | OUTPUT |
| CENTER | +      |

## Derating Curve



## Static Characteristics

