



## ■ 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>0.95
- 3 pole AC inlet IEC320-C14
- Class I power ( with earth pin)
- Protections: Short circuit / Over voltage / Over temperature
- Fanless design, cooling by free air convection
- Fully enclosed plastic case
- No load power consumption<1W
- 2 color LED indicator for charging status
- Approvals : UL / CUL / TUV / EAC / CB / FCC / CE
- 2 years warranty

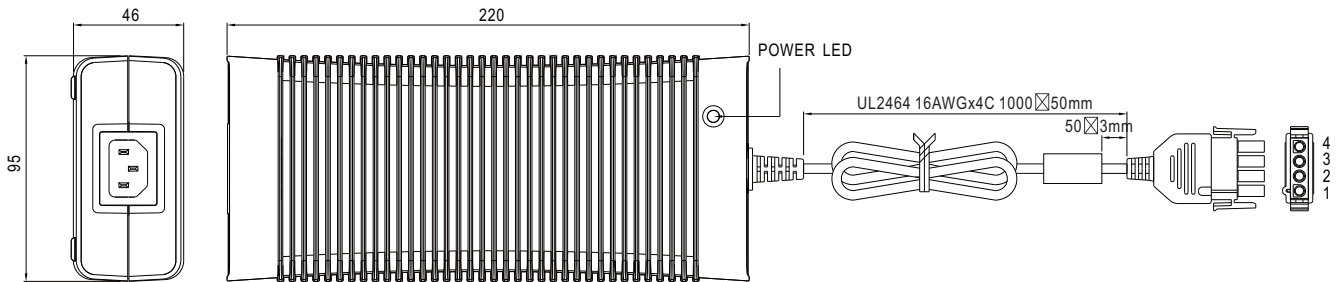


## SPECIFICATION

| ORDER NO.                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | GC330A36-C4P                                                                                                      | GC330A48-C4P   |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------|
| OUTPUT                    | SAFETY MODEL NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | GC330A36                                                                                                          | GC330A48       |
|                           | DC VOLTAGE (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 40.8V                                                                                                             | 54.4V          |
|                           | RECOMMENDED BATTERY CAPACITY<br><div>Note.3</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 20 ~ 65Ah                                                                                                         | 20 ~ 65Ah      |
|                           | PEAK CURRENT(Typ.)<br><div>Note 5</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8A                                                                                                                | 6A             |
|                           | CONTINUOUS OUTPUT CURRENT (Typ.)<br><div>Note 6</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 6.4A                                                                                                              | 4.8A           |
|                           | OUTPUT POWER RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 261.1 ~ 326.4W                                                                                                    | 261.1 ~ 326.4W |
|                           | LED INDICATOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Charging(CC) : RED      Floating charging(CV) : GREEN                                                             |                |
| INPUT                     | VOLTAGE RANGE<br><div>Note.4</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 90 ~ 264VAC    127 ~ 370VDC                                                                                       |                |
|                           | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 47 ~ 63Hz                                                                                                         |                |
|                           | POWER FACTOR (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | PF>0.95 / 230VAC      PF>0.98 / 115VAC at full load                                                               |                |
|                           | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 93.5%                                                                                                             | 93.5%          |
|                           | AC CURRENT (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4A / 115VAC      2A / 230VAC                                                                                      |                |
|                           | INRUSH CURRENT (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 120A / 230VAC                                                                                                     |                |
|                           | LEAKAGE CURRENT(max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1.5mA / 240VAC                                                                                                    |                |
| PROTECTION                | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 100℃ ± 10℃ (RTH2)                                                                                                 |                |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Protection type : Shut down o/p voltage, re-power on to recover                                                   |                |
| ENVIRONMENT               | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | -30 ~ +60℃ (Refer to "Derating Curve")                                                                            |                |
|                           | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20% ~ 90% RH non-condensing                                                                                       |                |
|                           | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -40 ~ +85℃, 10 ~ 95% RH                                                                                           |                |
|                           | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ± 0.03% / °C (0~40℃)                                                                                              |                |
|                           | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                           |                |
| SAFETY & EMC<br>(Note. 7) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | UL60950-1, TUV EN60950-1, EAC TP TC 004 approved                                                                  |                |
|                           | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | I/P-O/P: 3KVAC                                                                                                    |                |
|                           | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | I/P-O/P: 100M Ohms / 500VDC / 25℃ / 70% RH                                                                        |                |
|                           | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Compliance to EN55032 class B, EN61000-3-2,3, FCC PART 15 / CISPR22 class B, CAN ICES-3(B)-NMB-(B), EAC TP TC 020 |                |
|                           | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A, EAC TP TC 020                           |                |
| OTHERS                    | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 209.4Khrs min. MIL-HDBK-217F(25℃)                                                                                 |                |
|                           | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 220*95*46mm (L*W*H)                                                                                               |                |
|                           | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.25Kg; 12pcs/16Kg/1.27CUFT                                                                                       |                |
| CONNECTOR                 | PLUG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | See page 2                                                                                                        |                |
|                           | CABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | See page 2                                                                                                        |                |
| 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 NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.<br>3. This is MeanWell's suggested range, please consult your battery manufacturer for their suggestions about maximum charging current limitation.<br>4. Derating may be needed under low input voltage. Please check the derating curve for more details.<br>5. Test condition is at 25℃ the charging current vary with the ambient and components temperature. The lower temperature, the higher charging current.<br>6. Maximum charging current will be in the range of 85~110% rated output current.<br>7. The power supply is considered as an independent unit, but the final equipment still need to re-confirm that whole system complies with the EMC directives.<br>8. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft). |                                                                                                                   |                |

## Mechanical Specification

Case No. GS280A Unit:mm



## Plug Assignment

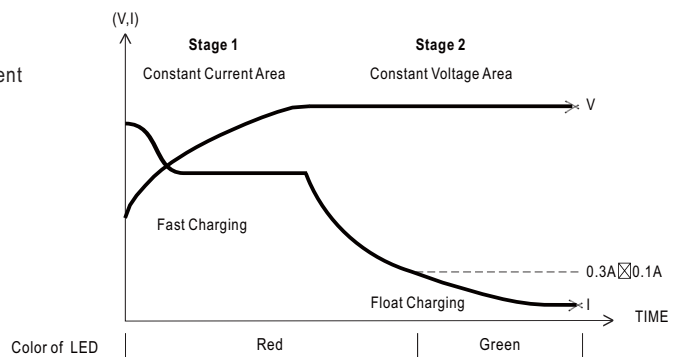
Standard male plug(power supply side): AMP 1-480702-0 equivalent

| C4P |         |        |
|-----|---------|--------|
|     | PIN NO. | OUTPUT |
| 4   | 1,2     | +V     |
| 3   | 3,4     | -V     |
| 2   |         |        |
| 1   |         |        |

-V connected to AC FG

Female plug(customer side, not provide with the power supply):  
AMP 1-480703-0 equivalent

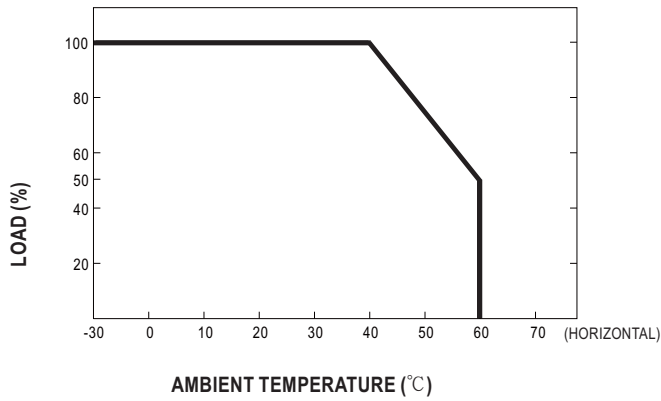
## Charging Curve



| Model    | Suggested Battery capacity |
|----------|----------------------------|
| GC330A36 | 20-65Ah                    |
| GC330A48 | 20-65Ah                    |

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

■ Derating Curve



■ Static Characteristics

