



## ■ Features

- Interchangeable AC plugs (plug kit sold separately)
- Universal AC input / Full range
- No load power consumption < 0.075W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE and EU ErP
- Class II power (without earth pin)
- Protections: Short circuit / Overload / Over voltage
- Pass LPS
- Fully enclosed plastic case
- LED indicator for power on
- 2 years warranty

## ■ Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

## ■ Description

GE30 is a highly reliable, 30W wall-mounted style single-output green adaptor series, which is compact and convenient for carry. This product is equipped with an interchangeable AC plug (4 types, including European type, USA type, U.K. type and Australian type) that makes it very suitable for businessmen to use in the major countries around the globe. GE30 is a class II power unit (without FG), accepting the input range from 90VAC to 264VAC that it can satisfy the demands for various types of electrical devices.

With the working efficiency up to 87% and the extremely low no-load power consumption below 0.075W, GE30 is compliant with the latest USA energy regulation EISA 2007/DoE (Level VI) and EU ErP. The supreme feature allows the adaptor to save the energy when it is under either the operating mode or the standby mode. The entire series is approved for international safety regulations; moreover, it adopts the 94V-0 flame retardant plastic case that it can effectively prevent users from electric hazard.

## ■ Model Encoding

**GE3012-P1J**

- DC plug type { P1J: Plug for standard model, 2.1  $\psi$   $\times$  5.5  $\psi$   $\times$  11mm,  
C+ tuning fork type  
Optional plug type available per request
- Output voltage
- Output wattage
- Series name

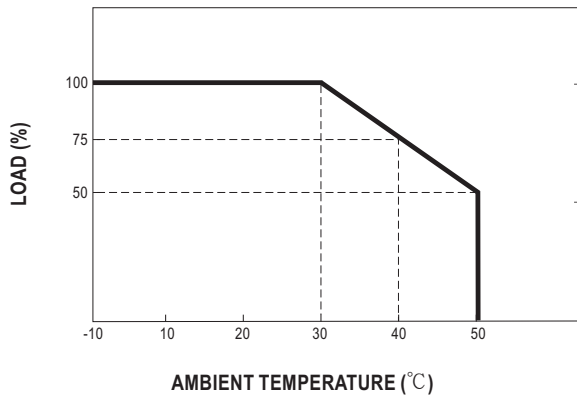
## Interchangeable AC plug specifically for GE series

| TYPE      |  |  |  |  |  |
|-----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|           | Australian type                                                                   | U.K type                                                                          | European type                                                                     | US type                                                                             | Mix four type                                                                       |
| ORDER NO. | AC plug-AU                                                                        | AC plug-UK                                                                        | AC plug-EU                                                                        | AC plug-US                                                                          | AC plug-MIX                                                                         |

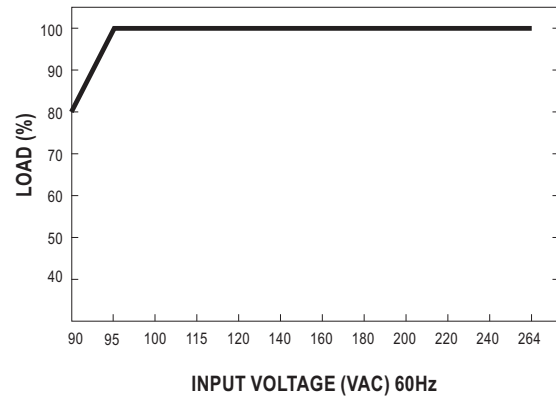
## SPECIFICATION

| POWER SUPPLY MAIN BODY ORDER NO.         |                                             | GE30I12-P1J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | GE30I15-P1J | GE30I18-P1J | GE30I24-P1J |
|------------------------------------------|---------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|
| OUTPUT                                   | SAFETY MODEL NO.                            | GE30I12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | GE30I15     | GE30I18     | GE30I24     |
|                                          | DC VOLTAGE <small>Note.2</small>            | 12V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 15V         | 18V         | 24V         |
|                                          | RATED CURRENT                               | 2.5A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2A          | 1.66A       | 1.25A       |
|                                          | CURRENT RANGE                               | 0 ~ 2.5A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0 ~ 2A      | 0 ~ 1.66A   | 0 ~ 1.25A   |
|                                          | RATED POWER (max.)                          | 30W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 30W         | 30W         | 30W         |
|                                          | RIPPLE & NOISE (max.) <small>Note.3</small> | 120mVp-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 150mVp-p    | 180mVp-p    | 240mVp-p    |
|                                          | VOLTAGE TOLERANCE <small>Note.4</small>     | ±3.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ±3.0%       | ±3.0%       | ±3.0%       |
|                                          | LINE REGULATION <small>Note.5</small>       | ±1.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ±1.0%       | ±1.0%       | ±1.0%       |
|                                          | LOAD REGULATION <small>Note.6</small>       | ±3.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ±3.0%       | ±3.0%       | ±3.0%       |
| SETUP, RISE, HOLD UP TIME                |                                             | 4000ms, 100ms, 30ms / 230VAC      4000ms, 100ms, 10ms / 115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |             |
| INPUT                                    | VOLTAGE RANGE <small>Note.7</small>         | 90 ~ 264VAC      135 ~ 370VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |             |             |
|                                          | FREQUENCY RANGE                             | 47 ~ 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |             |             |
|                                          | EFFICIENCY (Typ.)                           | 84%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 86%         | 87%         | 87%         |
|                                          | AC CURRENT                                  | 0.7A / 100VAC      0.4A / 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |             |             |             |
|                                          | INRUSH CURRENT (max.)                       | COLD START 40A / 100VAC      80A / 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |             |             |
|                                          | LEAKAGE CURRENT (max.)                      | 0.25mA / 240VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |             |             |
| PROTECTION                               | OVERLOAD                                    | 110% ~ 200% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |             |
|                                          | OVER VOLTAGE                                | 115% ~ 135% rated output voltage<br>Protection type : Clamp by zener diode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |             |             |
|                                          |                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |             |             |
| ENVIRONMENT                              | WORKING TEMP.                               | -10 ~ +50℃ (Refer to "Derating Curve")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |             |             |
|                                          | WORKING HUMIDITY                            | 20% ~ 90% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |             |
|                                          | STORAGE TEMP., HUMIDITY                     | -20 ~ +85℃, 10 ~ 95% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |
|                                          | TEMP. COEFFICIENT                           | ±0.03% / ℃ (0 ~ 30℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             |             |             |
|                                          | VIBRATION                                   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |
| SAFETY & EMC<br><small>(Note. 8)</small> | SAFETY STANDARDS                            | UL60950-1, CSA C22.2, TUV EN60950 -1, AS/NZS 60950.1, CCC GB4943 approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |             |             |
|                                          | WITHSTAND VOLTAGE                           | I/P-O/P:4242VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |             |             |
|                                          | ISOLATION RESISTANCE                        | I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |             |             |
|                                          | EMC EMISSION                                | Compliance to EN55022, EN61000-3-2,3, FCC part15, GB9254 class B, GB17625.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |             |
|                                          | EMC IMMUNITY                                | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |             |
| OTHERS                                   | LIFE                                        | 2 years : 100% load 30℃, 8 hours / day                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |             |             |             |
|                                          | MTBF                                        | 100Khrs min.      MIL-HDBK-217F (25℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |             |             |
|                                          | DIMENSION                                   | 81*43*40.5mm (L*W*H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             |             |             |
|                                          | PACKING                                     | 134g ; 50pcs / 8.4kg / CARTON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |             |             |
| DC OUTPUT CONNECTOR                      | PLUG                                        | See page 3 ; Other type available by customer requested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |
|                                          | CABLE                                       | See page 3 ; Other type available by customer requested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |
| NOTE                                     |                                             | 1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.<br>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.<br>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.<br>4.Tolerance: includes set up tolerance, line regulation, load regulation.<br>5.Line regulation is measured from low line to high line at rated load.<br>6.Load regulation is measured from 10% to 100% rated load<br>7.Derating may be needed under low input voltage. Please check the derating curve for more details.<br>8.The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."<br>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )<br>9.Main body unit and AC inlet plug should be ordered separately ; it needs to be used along with any of the AC inlet plug. |             |             |             |

### Derating Curve

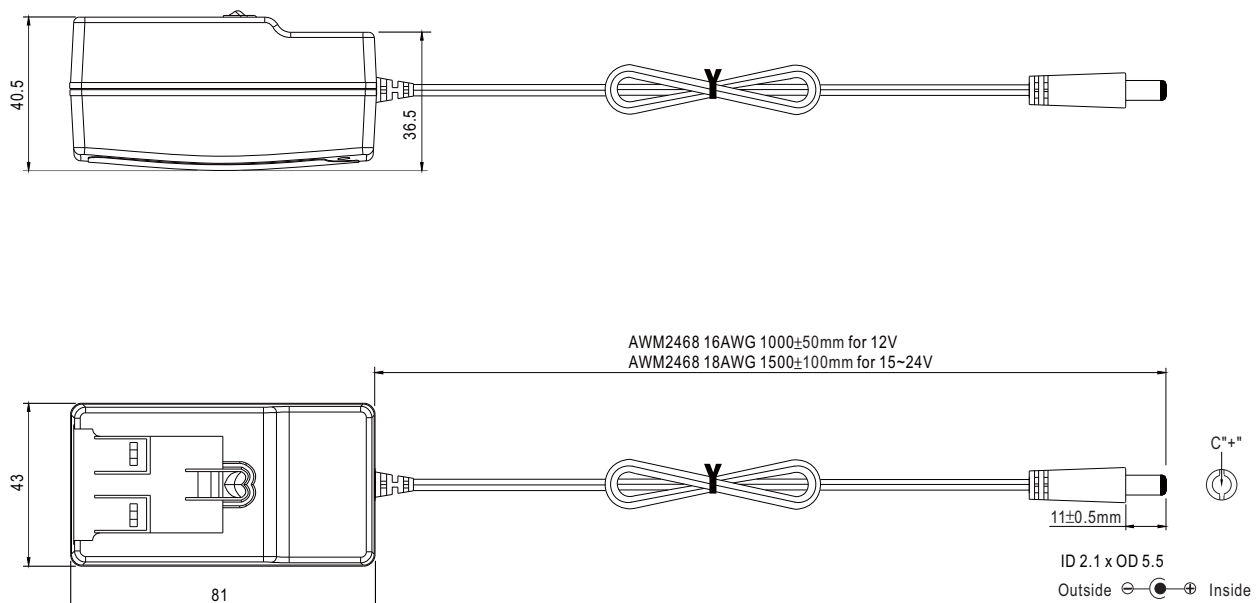


### Static Characteristics



### Mechanical Specification

Unit:mm



### Plug Assignment

Standard plug: P1J

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

### Installation Manual

Please refer to : <http://www.meanwell.com/webnet/search/InstallationSearch.html>