


**Features :**

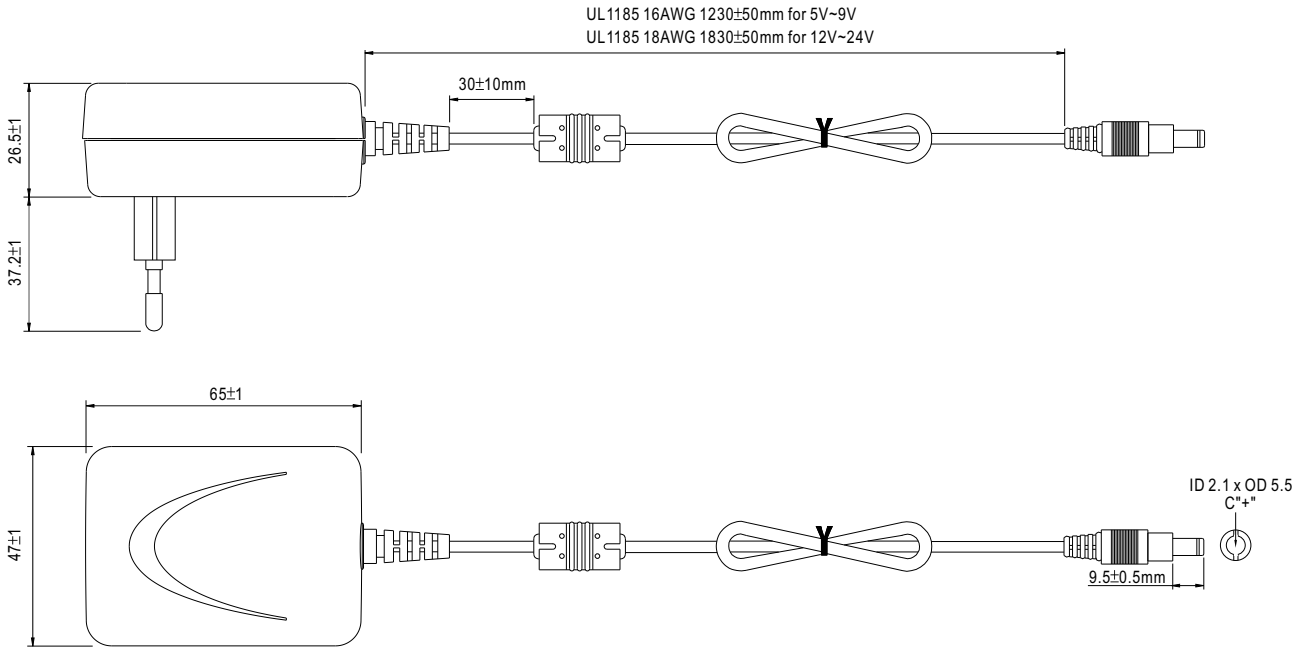
- Universal AC input / Full range
- No load power consumption < 0.3W
- ErP step2 compliant
- Meet EISA 2007 (Energy Independence and Security Act)
- 2 pole EURO plug
- Class II power (without earth pin)
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fully enclosed plastic case
- Approvals: TUV / CB / CE
- Pass LPS for full series
- 2 years warranty


**SPECIFICATION**

| ORDER NO.                 | GS12E05-P1I  | GS12E07-P1I   | GS12E09-P1I | GS12E12-P1I    | GS12E15-P1I | GS12E18-P1I | GS12E24-P1I |          |
|---------------------------|--|---|-------------|----------------|-------------|-------------|-------------|----------|
| OUTPUT                    | SAFETY MODEL NO.   | GS12E05   | GS12E07     | GS12E09        | GS12E12     | GS12E15     | GS12E18     | GS12E24  |
|                           | DC VOLTAGE   | 5V  | 7.5V        | 9V             | 12V         | 15V         | 18V         | 24V      |
|                           | RATED CURRENT  | 2.0A  | 1.6A        | 1.33A          | 1.0A        | 0.8A        | 0.67A       | 0.5A     |
|                           | CURRENT RANGE  | 0 ~ 2.0A  | 0 ~ 1.6A    | 0 ~ 1.33A      | 0 ~ 1.0A    | 0 ~ 0.8A    | 0 ~ 0.67A   | 0 ~ 0.5A |
|                           | RATED POWER  | 10W   | 12W         | 12W            | 12W         | 12W         | 12.06W      | 12W      |
|                           | RIPPLE & NOISE (max.) Note.2   | 75mVp-p   | 90mVp-p     | 90mVp-p        | 120mVp-p    | 150mVp-p    | 180mVp-p    | 200mVp-p |
|                           | VOLTAGE TOLERANCE Note.3   | ±5.0%   | ±4.0%       | ±4.0%          | ±3.0%       | ±3.0%       | ±3.0%       | ±3.0%    |
|                           | LINE REGULATION Note.4   | ±1.0%   | ±1.0%       | ±1.0%          | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%    |
|                           | LOAD REGULATION Note.5   | ±5.0%   | ±4.0%       | ±4.0%          | ±3.0%       | ±3.0%       | ±2.0%       | ±2.0%    |
| SETUP, RISE, HOLD UP TIME | 500ms, 20ms, 30ms/230VAC      500ms, 20ms, 10ms/115VAC at full load  |   |             |                |             |             |             |          |
| INPUT                     | VOLTAGE RANGE  | 90 ~ 264VAC   |             | 135 ~ 370VDC   |             |             |             |          |
|                           | FREQUENCY RANGE  | 47 ~ 63Hz   |             |                |             |             |             |          |
|                           | EFFICIENCY (Typ.)  | 74%   | 78%         | 78%            | 78%         | 79%         | 80%         | 80%      |
|                           | AC CURRENT   | 0.31A / 115VAC  |             | 0.16A / 230VAC |             |             |             |          |
|                           | INRUSH CURRENT (max.)  | COLD START 25A / 115VAC   |             | 45A / 230VAC   |             |             |             |          |
| LEAKAGE CURRENT (max.)    | 0.25mA / 240VAC  |   |             |                |             |             |             |          |
| PROTECTION                | OVERLOAD   | >105% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed                                  |             |                |             |             |             |          |
|                           | OVER VOLTAGE   | 115% ~ 135%<br>Protection type : Clamp by zener diode   |             |                |             |             |             |          |
|                           | OVER TEMPERATURE Note.6  | U1 Tj 140°C typically (U1) Detect on main control IC<br>Protection type : Shut down o/p voltage, recovers automatically after temperature goes down |             |                |             |             |             |          |
| ENVIRONMENT               | WORKING TEMP.  | 0 ~ +50°C (Refer to output load derating curve)   |             |                |             |             |             |          |
|                           | WORKING HUMIDITY   | 20% ~ 90% RH non-condensing   |             |                |             |             |             |          |
|                           | STORAGE TEMP., HUMIDITY  | -20 ~ +85°C, 10 ~ 95% RH  |             |                |             |             |             |          |
|                           | TEMP. COEFFICIENT  | ±0.03% / °C (0 ~ 40°C)  |             |                |             |             |             |          |
| VIBRATION                 | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes  |   |             |                |             |             |             |          |
| SAFETY & EMC              | SAFETY STANDARDS   | TUV EN60950 -1 approved   |             |                |             |             |             |          |
|                           | WITHSTAND VOLTAGE  | I/P-O/P:3KVAC   |             |                |             |             |             |          |
|                           | ISOLATION RESISTANCE   | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  |             |                |             |             |             |          |
|                           | EMI CONDUCTION & RADIATION   | Compliance to FCC part15 class B, EN55022, EN61204-3 class B  |             |                |             |             |             |          |
|                           | HARMONIC CURRENT   | Compliance to EN61000-3-2,3   |             |                |             |             |             |          |
| EMS IMMUNITY              | Compliance to EN61000-4-2,3,4,5,6,8,11, ENV50204, EN61204-3, light industry level, criteria A  |   |             |                |             |             |             |          |
| OTHERS                    | MTBF   | 1414.6Khrs min. MIL-HDBK-217F (25°C)  |             |                |             |             |             |          |
|                           | DIMENSION  | 65*47*26.5mm (L*W*H)  |             |                |             |             |             |          |
|                           | PACKING  | 0.15Kg ; 100pcs / 16Kg / CARTON   |             |                |             |             |             |          |
| CONNECTOR                 | PLUG   | Standard type P1I: 2.1φ * 5.5φ * 9.5mm turning fork type, center positive for stock ; Other type available by customer requested                    |             |                |             |             |             |          |
|                           | CABLE  | Standard type UL1185 6ft (4FT only for 5V output) for stock ; Other type available by customer requested  |             |                |             |             |             |          |
| NOTE                      | 1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.<br>2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.<br>3.Tolerance: includes set up tolerance, line regulation, load regulation.<br>4.Line regulation is measured from low line to high line at rated load.<br>5.Load regulation is measured from 10% to 100% rated load.<br>6.The over temperature protection (OTP) is the built-in function of the control IC (U1). The activating level described above is based on the specification provided by the IC manufacturer. |   |             |                |             |             |             |          |

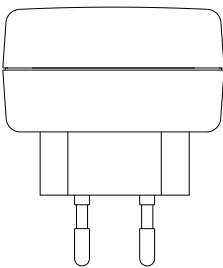
■ Mechanical Specification

Unit:mm



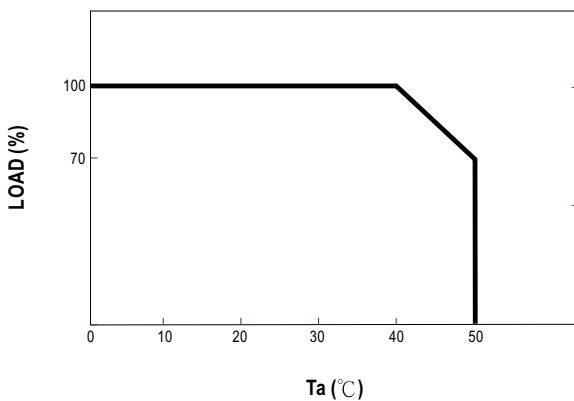
■ Plug Assignment

Standard plug: P1I (option)



| P1I    |        |
|--------|--------|
| P/N    | OUTPUT |
| CENTER | +      |

■ Derating Curve



■ Static Characteristics(24V)

