



## 20~25W AC-DC Single Output Desktop

## GS25A series



### ■ Features :

- Universal AC input / Full range
- No load power consumption<0.5W
- Pass energy star(CEC) level IV regulation
- Meet EISA 2007 (Energy Independence and Security Act)
- 3 pole AC inlet IEC320-C14
- Class I power ( with earth pin)
- Full output 5~48V safety approval
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- LED indicator for power on
- Approvals: UL / CUL / TUV / BSMI / CB / FCC / CE
- Pass LPS for 9~48V output
- 2 years warranty

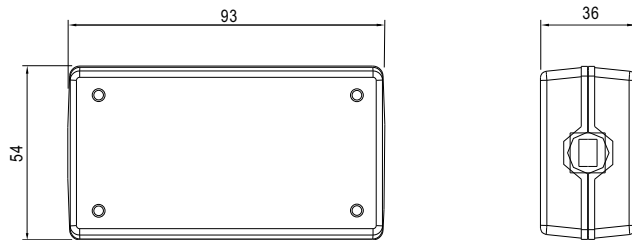
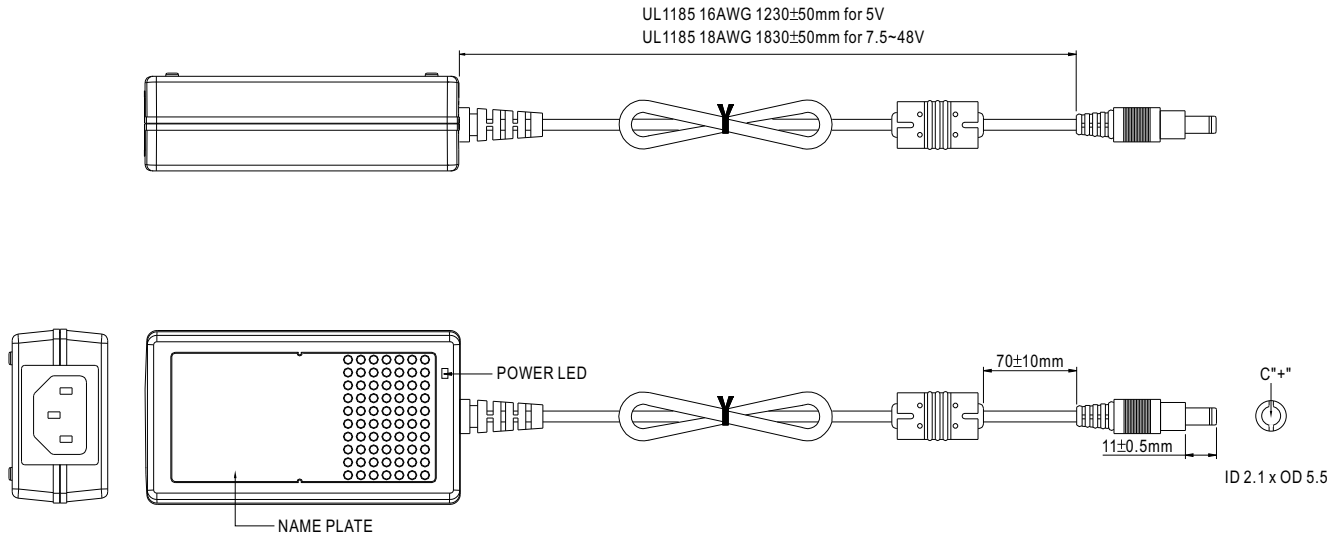


### SPECIFICATION

| ORDER NO.                 |                                             | GS25A05-P1J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | GS25A07-P1J | GS25A09-P1J | GS25A12-P1J | GS25A15-P1J | GS25A18-P1J | GS25A24-P1J | GS25A28-P1J | GS25A48-P1J |
|---------------------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| OUTPUT                    | SAFETY MODEL NO.                            | GS25A05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | GS25A07     | GS25A09     | GS25A12     | GS25A15     | GS25A18     | GS25A24     | GS25A28     | GS25A48     |
|                           | DC VOLTAGE <small>Note.2</small>            | 5V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 7.5V        | 9V          | 12V         | 15V         | 18V         | 24V         | 28V         | 48V         |
|                           | RATED CURRENT                               | 4.0A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2.93A       | 2.77A       | 2.08A       | 1.66A       | 1.38A       | 1.04A       | 0.89A       | 0.52A       |
|                           | CURRENT RANGE                               | 0 ~ 4.0A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0 ~ 2.93A   | 0 ~ 2.77A   | 0 ~ 2.08A   | 0 ~ 1.66A   | 0 ~ 1.38A   | 0 ~ 1.04A   | 0 ~ 0.89A   | 0 ~ 0.52A   |
|                           | RATED POWER (max.)                          | 20W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 22W         | 25W         | 25W         | 25W         | 25W         | 25W         | 25W         | 25W         |
|                           | RIPPLE & NOISE (max.) <small>Note.3</small> | 50mVp-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 80mVp-p     | 80mVp-p     | 80mVp-p     | 100mVp-p    | 150mVp-p    | 180mVp-p    | 240mVp-p    | 240mVp-p    |
|                           | VOLTAGE TOLERANCE <small>Note.4</small>     | ±5.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ±5.0%       | ±5.0%       | ±3.0%       | ±3.0%       | ±3.0%       | ±2.0%       | ±2.0%       | ±2.0%       |
|                           | LINE REGULATION <small>Note.5</small>       | ±1.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%       |
|                           | LOAD REGULATION <small>Note.6</small>       | ±5.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ±5.0%       | ±5.0%       | ±3.0%       | ±3.0%       | ±3.0%       | ±2.0%       | ±2.0%       | ±2.0%       |
| SETUP, RISE, HOLD UP TIME |                                             | 500ms, 20ms, 50ms/230VAC      500ms, 20ms, 15ms/115VAC at full load                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |             |             |             |             |             |             |             |
| INPUT                     | VOLTAGE RANGE                               | 90 ~ 264VAC    135 ~ 370VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |             |             |             |             |             |
|                           | FREQUENCY RANGE                             | 47 ~ 63Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |             |             |             |             |             |             |             |
|                           | EFFICIENCY (Typ.)                           | 74%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 78%         | 79%         | 81%         | 82%         | 82%         | 83%         | 83%         | 84%         |
|                           | AC CURRENT                                  | 0.7A / 100VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |             |             |             |             |             |             |             |             |
|                           | INRUSH CURRENT (max.)                       | 45A / 230VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |             |             |             |             |             |             |
| PROTECTION                | LEAKAGE CURRENT(max.)                       | 0.75mA / 240VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |             |             |             |             |             |             |
|                           | OVERLOAD                                    | 110 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |             |             |             |             |             |             |             |
|                           | OVER VOLTAGE                                | 105 ~ 135% rated output voltage<br>Protection type : Clamp by zener diode                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |             |             |             |             |             |             |             |             |
| ENVIRONMENT               | WORKING TEMP.                               | 0 ~ +50℃ (Refer to output load derating curve)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |             |             |             |             |             |             |             |
|                           | WORKING HUMIDITY                            | 20% ~ 90% RH non-condensing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |             |             |             |             |             |
|                           | STORAGE TEMP., HUMIDITY                     | -20 ~ +85℃, 10 ~ 95% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |             |             |             |             |             |             |             |
|                           | TEMP. COEFFICIENT                           | ±0.03% / °C (0~50℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |             |             |             |             |             |             |             |
|                           | VIBRATION                                   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |             |             |             |             |             |             |             |
| SAFETY & EMC<br>(Note. 7) | SAFETY STANDARDS                            | UL60950-1, CSA C22.2, TUV EN60950-1, BSMI CNS14336 approved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |             |             |             |             |             |
|                           | WITHSTAND VOLTAGE                           | I/P-O/P:4242VDC, I/P-FG:2121VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |             |             |             |             |             |             |
|                           | ISOLATION RESISTANCE                        | I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |             |             |             |             |             |             |             |             |
|                           | EMI CONDUCTION & RADIATION                  | Compliance to EN55022 class B, FCC PART 15 / CISPR22 class B, CNS13438 class B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |             |             |             |             |             |             |             |             |
|                           | HARMONIC CURRENT                            | Compliance to EN61000-3-2,3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |             |             |             |             |             |             |             |             |
|                           | EMS IMMUNITY                                | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |             |             |             |             |             |             |             |             |
| OTHERS                    | MTBF                                        | 500Khrs min. MIL-HDBK-217F(25℃)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |             |             |             |             |             |             |
|                           | DIMENSION                                   | 93*54*36mm (L*W*H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |             |             |             |             |             |             |             |             |
|                           | PACKING                                     | 230g ; 60pcs / 15kg / CARTON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |             |             |             |             |             |             |             |             |
| CONNECTOR                 | PLUG                                        | Standard type P1J: 2.1φ * 5.5φ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |             |             |             |             |             |             |             |             |
|                           | CABLE                                       | Standard type 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℃ 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 20% to 100% rated load<br>7.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. |             |             |             |             |             |             |             |             |

### ■ Mechanical Specification

Unit:mm

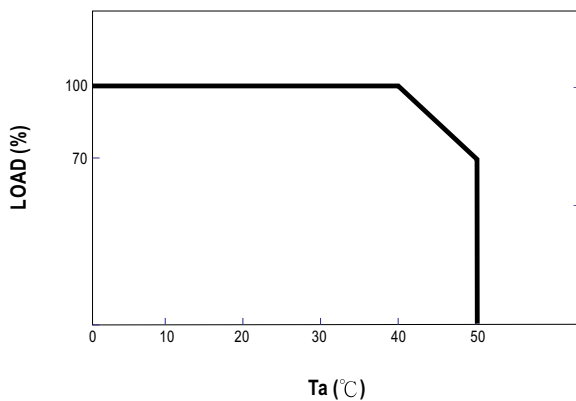


### ■ Plug Assignment

Standard plug: P1J (option)

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

### ■ Derating Curve



### ■ Static Characteristics

