



■ Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.91
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fully enclosed plastic case
- Approvals: UL / CUL / TUV / BSMI / CB / FCC / CE
- Class I power ( with earth pin)
- Pass LPS
- LED indicator for power on
- No load power consumption<0.5W
- Meet EISA 2007(Energy Independence and Security Act)
- 2 years warranty

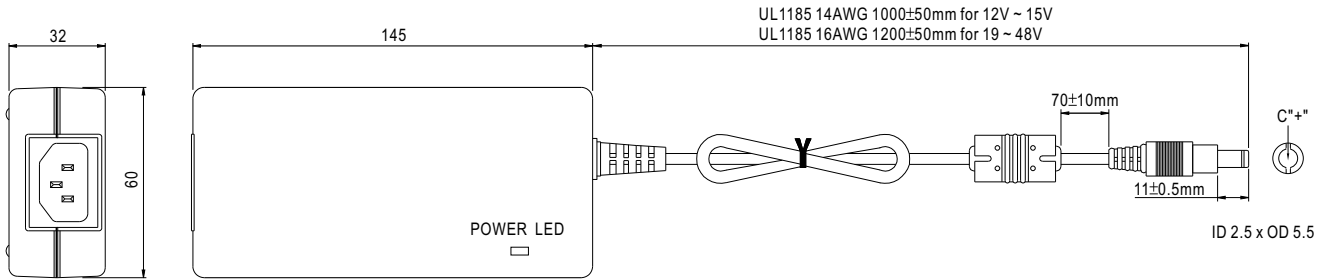


SPECIFICATION

| ORDER NO.              | GS90A12-P1M   | GS90A15-P1M   | GS90A19-P1M | GS90A24-P1M | GS90A48-P1M |           |
|------------------------|---|---|-------------|-------------|-------------|-----------|
| OUTPUT                 | SAFETY MODEL NO.  | GS90A12   | GS90A15     | GS90A19     | GS90A24     | GS90A48   |
|                        | DC VOLTAGE <small>Note.2</small>  | 12V   | 15V         | 19V         | 24V         | 48V       |
|                        | RATED CURRENT   | 6.67A   | 6A          | 4.74A       | 3.75A       | 1.87A     |
|                        | CURRENT RANGE   | 0 ~ 6.67A   | 0 ~ 6A      | 0 ~ 4.74A   | 0 ~ 3.75A   | 0 ~ 1.87A |
|                        | RATED POWER (max.)  | 80W   | 90W         | 90W         | 90W         | 90W       |
|                        | RIPPLE & NOISE (max.) <small>Note.3</small>   | 80mVp-p   | 100mVp-p    | 150mVp-p    | 180mVp-p    | 240mVp-p  |
|                        | VOLTAGE TOLERANCE <small>Note.4</small>   | ±5.0%   | ±5.0%       | ±4.0%       | ±3.0%       | ±2.0%     |
|                        | LINE REGULATION <small>Note.5</small>   | ±1.0%   | ±1.0%       | ±1.0%       | ±1.0%       | ±1.0%     |
|                        | LOAD REGULATION <small>Note.6</small>   | ±5.0%   | ±5.0%       | ±4.0%       | ±3.0%       | ±2.0%     |
|                        | SETUP, RISE TIME <small>Note.8</small>  | 1000ms, 20ms / 230VAC      1000ms, 20ms / 115VAC at full load   |             |             |             |           |
| HOLD UP TIME (Typ.)    | 20ms / 230VAC      20ms / 115VAC at full load   |   |             |             |             |           |
| INPUT                  | VOLTAGE RANGE <small>Note.9</small>   | 90 ~ 264VAC    127 ~ 370VDC   |             |             |             |           |
|                        | FREQUENCY RANGE   | 47 ~ 63Hz   |             |             |             |           |
|                        | POWER FACTOR (Typ.)   | PF>0.91 / 230VAC    PF>0.95 / 115VAC at full load   |             |             |             |           |
|                        | EFFICIENCY (Typ.)   | 88%   | 89%         | 89%         | 89.5%       | 91%       |
|                        | AC CURRENT (Typ.)   | 2A / 115VAC    1A / 230VAC  |             |             |             |           |
|                        | INRUSH CURRENT (max.)   | 70A / 230VAC  |             |             |             |           |
|                        | LEAKAGE CURRENT(max.)   | 1mA / 240VAC  |             |             |             |           |
| PROTECTION             | 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 : Shut down o/p voltage, re-power on to recover                              |             |             |             |           |
|                        | OVER TEMPERATURE  | RTH30 > 100°C<br>Protection type : Shut down o/p voltage, re-power on to recover  |             |             |             |           |
| ENVIRONMENT            | WORKING TEMP.   | -30 ~ +50°C (Refer to "Derating Curve")   |             |             |             |           |
|                        | WORKING HUMIDITY  | 20% ~ 90% RH non-condensing   |             |             |             |           |
|                        | STORAGE TEMP., HUMIDITY   | -40 ~ +85°C, 10 ~ 95% RH  |             |             |             |           |
|                        | TEMP. COEFFICIENT   | ±0.03% / °C (0~50°C)  |             |             |             |           |
|                        | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |             |             |             |           |
| SAFETY & EMC (Note. 7) | SAFETY STANDARDS  | UL60950-1, TUV EN60950-1, BSMI CNS14336, J60950-1(except for 48V) approved  |             |             |             |           |
|                        | WITHSTAND VOLTAGE   | I/P-O/P: 3KVAC    I/P-FG:1.5KVAC    O/P-FG:0.5KVAC  |             |             |             |           |
|                        | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH  |             |             |             |           |
|                        | EMC EMISSION  | Compliance to EN55022 class B, EN61000-3-2,3, FCC PART 15 / CISPR22 class B, CNS13438 class B, GB17625.1                        |             |             |             |           |
|                        | EMC IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A  |             |             |             |           |
| OTHERS                 | MTBF  | 348.7Khrs min. MIL-HDBK-217F(25°C)  |             |             |             |           |
|                        | DIMENSION   | 145*60*32mm (L*W*H)   |             |             |             |           |
|                        | PACKING   | 0.45Kg; 30pcs/14.05Kg/1CUFT   |             |             |             |           |
| CONNECTOR              | PLUG  | Standard type P1M: 2.5φ * 5.5φ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested |             |             |             |           |
|                        | CABLE   | See page 2 ; Other type available by customer requested   |             |             |             |           |
| NOTE                   | <ol style="list-style-type: none"> <li>1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</li> <li>2. DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</li> <li>3. Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf &amp; 47uf capacitor.</li> <li>4. Tolerance: includes set up tolerance, line regulation, load regulation.</li> <li>5. Line regulation is measured from low line to high line at rated load.</li> <li>6. Load regulation is measured from 10% to 100% rated load</li> <li>7. 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.</li> <li>8. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.</li> <li>9. Derating may be needed under low input voltages. Pleas check the derating curve for more details.</li> </ol> |   |             |             |             |           |

■ Mechanical Specification

Case No. 978A Unit:mm

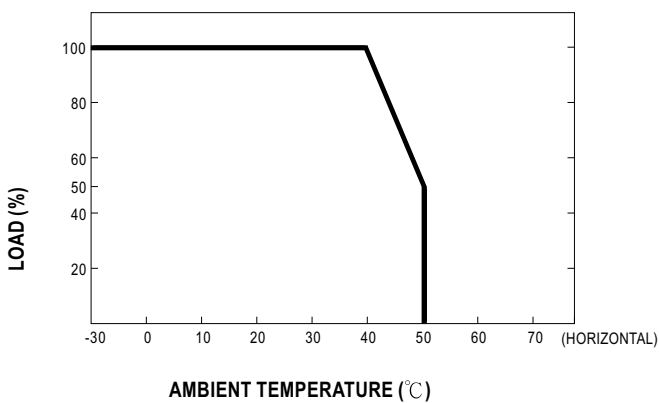


■ Plug Assignment

Standard plug: P1M

| P1M    |        |
|--------|--------|
| P/N    | OUTPUT |
| CENTER | +      |

■ Derating Curve



■ Static Characteristics

