



6W AC-DC Single Output Medical Adaptor

**GSM06U** series



### ■ Features

- Universal AC input / Full range
- 2 pole USA plug
- Low leakage current <math><50\mu\text{A}</math>
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Medical safety approved (2 x MOPP between primary to secondary)
- Class II power (without earth pin)
- No load power consumption <math><0.3\text{W}</math>
- ErP step2 compliant (level V)
- Meet EISA 2007 (Energy Independence and Security Act)
- Optional lock type DC plug
- 3 years warranty

### ■ Applications

- Blood glucose meter
- Blood pressure meter
- Nebulizer
- Inhaler
- Portable medical device

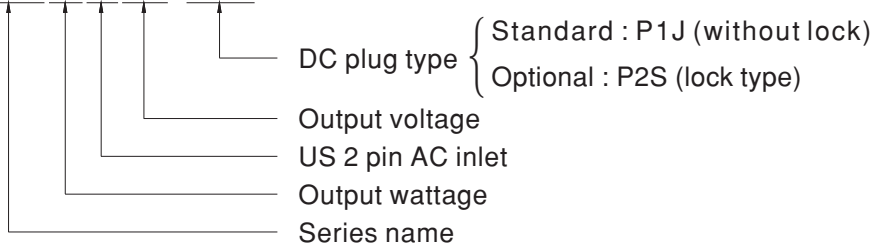
### ■ Description

GSM06U is a highly reliable, 6W single-output green medical adaptor series. This product is equipped with a 2-pin (no FG) standard US AC power plug, adopting the input range from 85VAC to 264VAC. The entire series supplies different output voltages between 5VDC and 24VDC that can satisfy the demands for various kinds of miniature medical devices. The circuitry design meets the international medical standards (2 x MOPP), having an ultra low leakage current (<math><50\mu\text{A}</math>), fitting the medical devices in direct electrical contact with the patients.

With the efficiency up to 82% and the extreme low no-load power consumption below 0.3W, the design of GSM06U observes the latest energy regulation (level V); the supreme feature allows the adaptor to save the energy when it is either under the operating mode or the standby mode. The entire series utilizes the 94V-0 flame retardant plastic case, providing the double insulation that effectively prevents electrical shock. GSM06U is approved with the international medical safety certificates.

### ■ Model Encoding

**GSM06U 05 -P1J**





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**SPECIFICATION**

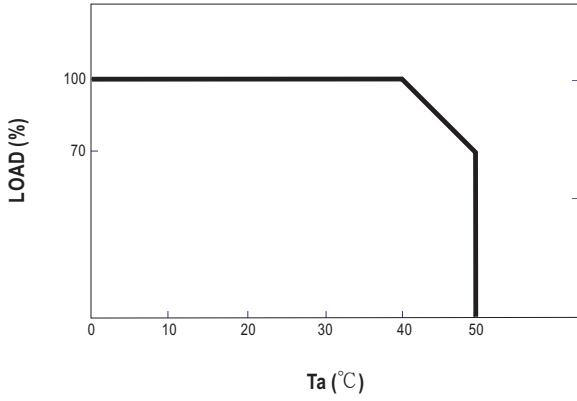
| ORDER NO.                 | GSM06U05-P1J  | GSM06U06-P1J  | GSM06U07-P1J | GSM06U09-P1J | GSM06U12-P1J | GSM06U15-P1J | GSM06U18-P1J | GSM06U24-P1J |           |
|---------------------------|---|---|--------------|--------------|--------------|--------------|--------------|--------------|-----------|
| OUTPUT                    | SAFETY MODEL NO.  | GSM06U05  | GSM06U06     | GSM06U07     | GSM06U09     | GSM06U12     | GSM06U15     | GSM06U18     | GSM06U24  |
|                           | DC VOLTAGE <span style="float:right">Note.2</span>  | 5V  | 6V           | 7.5V         | 9V           | 12V          | 15V          | 18V          | 24V       |
|                           | RATED CURRENT   | 1.2A  | 1.0A         | 0.8A         | 0.66A        | 0.5A         | 0.4A         | 0.33A        | 0.25A     |
|                           | CURRENT RANGE   | 0 ~ 1.2A  | 0 ~ 1.0A     | 0 ~ 0.8A     | 0 ~ 0.66A    | 0 ~ 0.5A     | 0 ~ 0.4A     | 0 ~ 0.33A    | 0 ~ 0.25A |
|                           | RATED POWER   | 6W  | 6W           | 6W           | 6W           | 6W           | 6W           | 6W           | 6W        |
|                           | RIPPLE & NOISE (max.) <span style="float:right">Note.3</span>   | 50mVp-p   | 50mVp-p      | 80mVp-p      | 80mVp-p      | 100mVp-p     | 120mVp-p     | 150mVp-p     | 180mVp-p  |
|                           | VOLTAGE TOLERANCE <span style="float:right">Note.4</span>   | ±5.0%   | ±5.0%        | ±5.0%        | ±5.0%        | ±5.0%        | ±5.0%        | ±5.0%        | ±4.0%     |
|                           | LINE REGULATION <span style="float:right">Note.5</span>   | ±0.5%   | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%        | ±0.5%     |
|                           | LOAD REGULATION <span style="float:right">Note.6</span>   | ±5.0%   | ±5.0%        | ±5.0%        | ±5.0%        | ±3.0%        | ±3.0%        | ±3.0%        | ±2.0%     |
| SETUP, RISE, HOLD UP TIME | 1000ms, 50ms, 12ms at full load   |   |              |              |              |              |              |              |           |
| INPUT                     | VOLTAGE RANGE   | 85 ~ 264VAC 120 ~ 370VDC  |              |              |              |              |              |              |           |
|                           | FREQUENCY RANGE   | 47 ~ 63Hz   |              |              |              |              |              |              |           |
|                           | EFFICIENCY (Typ.)   | 68%   | 74%          | 74%          | 76%          | 77%          | 79%          | 80%          | 82%       |
|                           | AC CURRENT  | 0.18A / 100VAC  |              |              |              |              |              |              |           |
|                           | INRUSH CURRENT (max.)   | 30A / 230VAC  |              |              |              |              |              |              |           |
|                           | LEAKAGE CURRENT(max.)   | Touch current < 50µA/264VAC   |              |              |              |              |              |              |           |
| PROTECTION                | OVERLOAD  | >105% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed              |              |              |              |              |              |              |           |
|                           | OVER VOLTAGE  | >120% rated output voltage<br>Protection type : Clamp by zener diode  |              |              |              |              |              |              |           |
| ENVIRONMENT               | WORKING TEMP.   | 0 ~ +40°C (Refer to "Derating Curve")   |              |              |              |              |              |              |           |
|                           | WORKING HUMIDITY  | 20% ~ 90% RH non-condensing   |              |              |              |              |              |              |           |
|                           | STORAGE TEMP., HUMIDITY   | -20 ~ +85°C, 10 ~ 95% RH  |              |              |              |              |              |              |           |
|                           | TEMP. COEFFICIENT   | ±0.04% / °C (0 ~ 40°C)  |              |              |              |              |              |              |           |
|                           | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |              |              |              |              |              |              |           |
| SAFETY & EMC (Note. 8)    | SAFETY STANDARDS  | IEC60950-1, ANSI/AAMI ES60601-1-11 approved   |              |              |              |              |              |              |           |
|                           | WITHSTAND VOLTAGE   | I/P-O/P:5656VDC   |              |              |              |              |              |              |           |
|                           | ISOLATION RESISTANCE  | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  |              |              |              |              |              |              |           |
|                           | EMC EMISSION  | Compliance to FCC part 15 Class B   |              |              |              |              |              |              |           |
| OTHERS                    | MTBF  | 500Khrs min. MIL-HDBK-217F(25°C)  |              |              |              |              |              |              |           |
|                           | DIMENSION   | 32*66*42.5mm (L*W*H)  |              |              |              |              |              |              |           |
|                           | PACKING   | 100g ; 110pcs / 12Kg / CARTON   |              |              |              |              |              |              |           |
| CONNECTOR                 | PLUG  | Standard type P1J: 2.1ψ * 5.5ψ * 11mm, turning fork type center positive for stock ; Other type available by customer requested |              |              |              |              |              |              |           |
|                           | CABLE   | See page3 ; Other type available by customer requested  |              |              |              |              |              |              |           |
| NOTE                      | 1.All parameters are specified at 115VAC input, rated load, 25°C 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 0% to 100% rated load<br>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. |   |              |              |              |              |              |              |           |



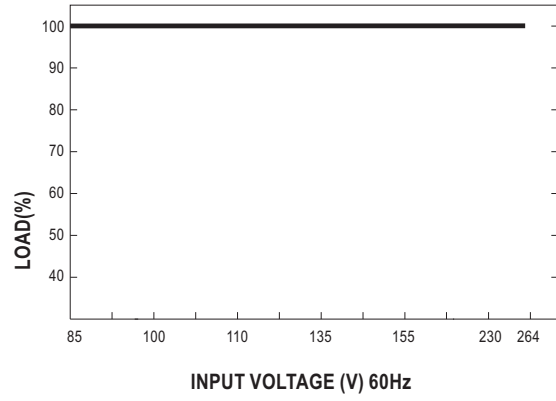
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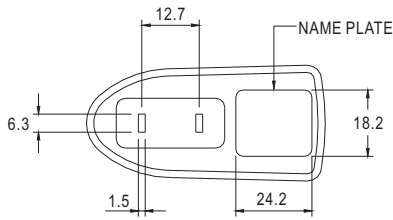
■ Derating Curve



■ Static Characteristics



■ Mechanical Specification



■ Plug Assignment

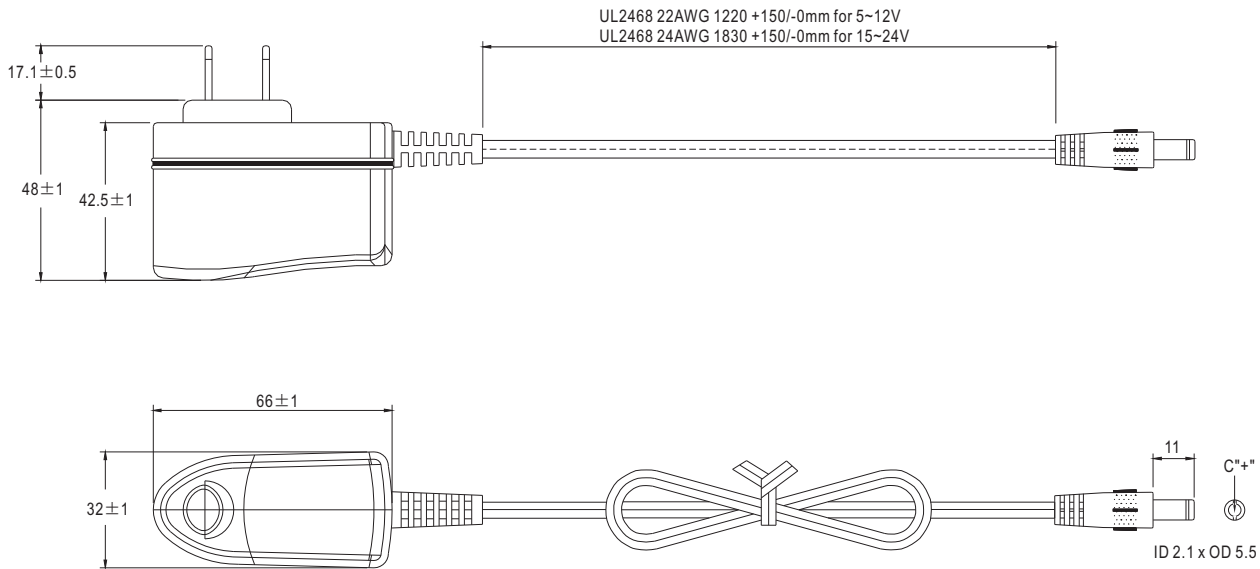
Unit:mm

Standard plug: P1J

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

Optional lock type plug: P2S

SWITCHCRAFT S761K plug equivalent



■ Installation Manual

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