



## ■ Features

- Universal AC input / Full range
- 2 pole USA plug
- Low leakage current  $<50\mu\text{A}$
- 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  $<0.3\text{W}$
- 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

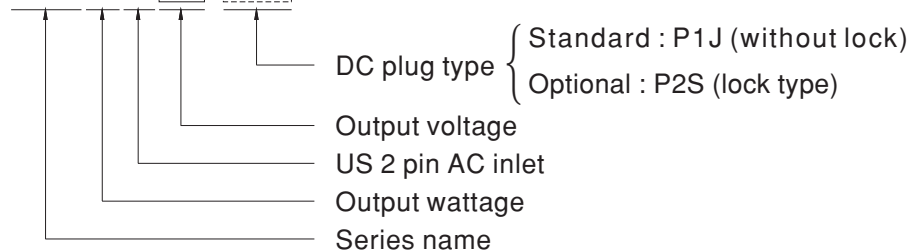
## ■ Description

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 ( $<50\mu\text{A}$ ), 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

**GSM06 U 05 -P1J**





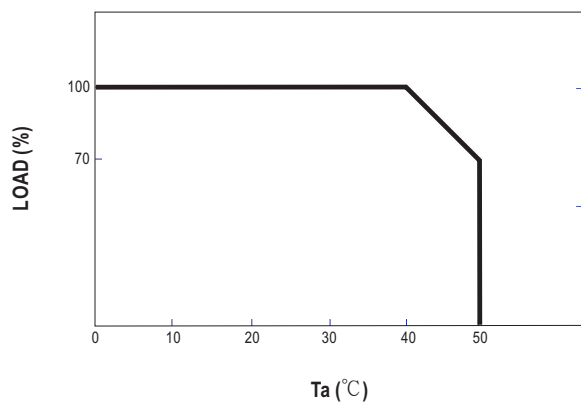
## 6W AC-DC Single Output Medical Adaptor

## GSM06U series

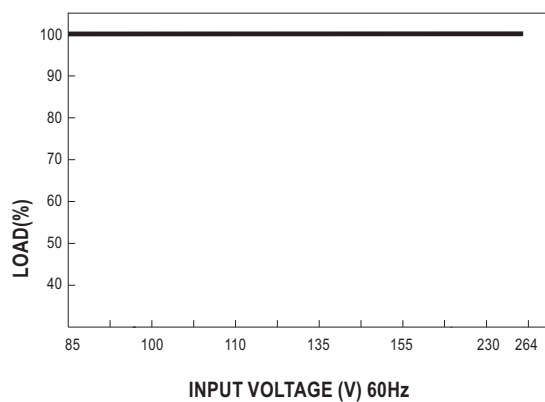
### SPECIFICATION

| 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 <small>Note.2</small>            | 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.) <small>Note.3</small> | 50mVp-p                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 50mVp-p      | 80mVp-p      | 80mVp-p      | 100mVp-p     | 120mVp-p     | 150mVp-p     | 180mVp-p     |
|                                          | VOLTAGE TOLERANCE <small>Note.4</small>     | ± 5.0%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ± 5.0%       | ± 5.0%       | ± 5.0%       | ± 5.0%       | ± 5.0%       | ± 5.0%       | ± 4.0%       |
|                                          | LINE REGULATION <small>Note.5</small>       | ± 0.5%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ± 0.5%       | ± 0.5%       | ± 0.5%       | ± 0.5%       | ± 0.5%       | ± 0.5%       | ± 0.5%       |
|                                          | LOAD REGULATION <small>Note.6</small>       | ± 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |              |              |              |              |              |              |
| PROTECTION                               | LEAKAGE CURRENT(max.)                       | Touch current < 50 $\mu$ A/264VAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |              |              |              |              |              |              |
|                                          | 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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |              |              |              |              |              |              |
| SAFETY & EMC<br><small>(Note. 8)</small> | VIBRATION                                   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |              |              |              |              |              |              |
|                                          | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |              |              |              |              |              |              |
| OTHERS                                   | EMC EMISSION                                | Compliance to FCC part 15 Class B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |              |              |              |              |              |              |
|                                          | MTBF                                        | 500Khrs min. MIL-HDBK-217F(25°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |              |              |              |              |              |              |
|                                          | DIMENSION                                   | 32*66*42.5mm (L*W*H)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |              |              |              |              |              |              |
| CONNECTOR                                | PACKING                                     | 100g ; 110pcs / 12Kg / CARTON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |              |              |              |              |              |              |
|                                          | PLUG                                        | Standard type P1J: 2.1 $\phi$ * 5.5 $\phi$ * 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. |              |              |              |              |              |              |              |

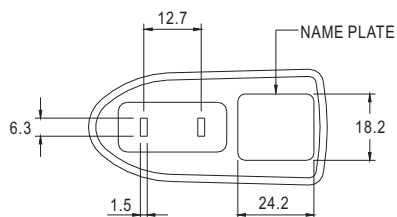
### Derating Curve



### Static Characteristics



### Mechanical Specification



### Plug Assignment

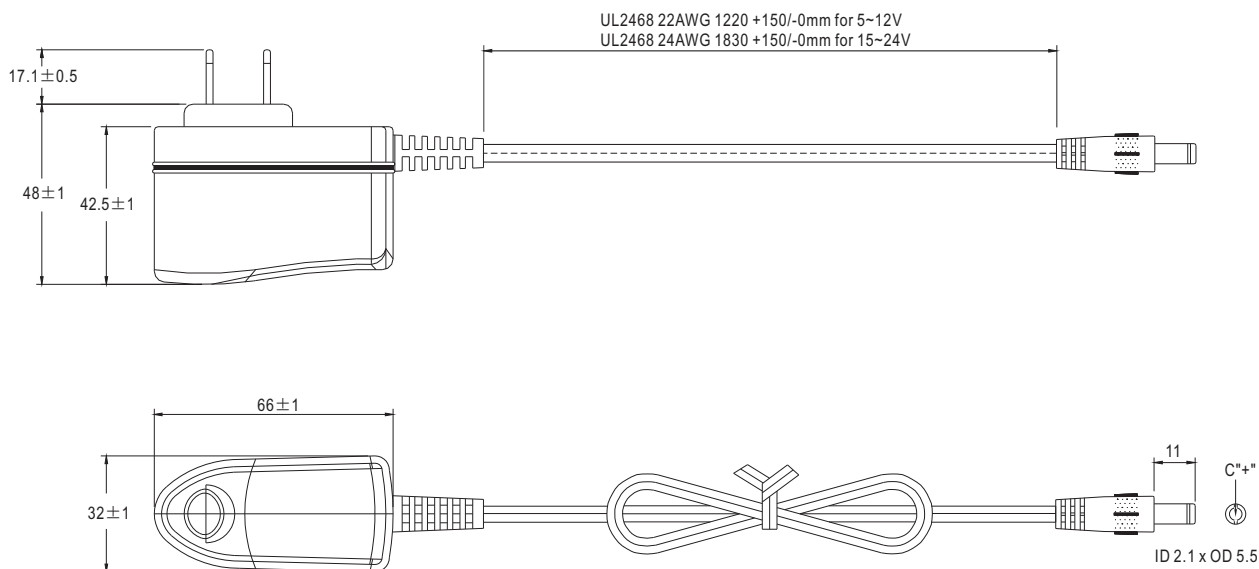
Unit:mm

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>