



**Features**

- Universal AC input / Full range
- 2 pole AC inlet IEC320-C8
- Medical safety approved (2 × MOPP between primary to secondary)
- Suitable for BF application with appropriate system consideration
- Low leakage current <50 $\mu$ A
- No load power consumption<0.1W
- Energy efficiency Level VI( except 5~9V for Level V)
- Comply with EISA 2007/DoE,NRCan,AU/NZ MEPS,EU ErP and meet CoC Version 5
- High efficiency up to 88%
- High operating temperature up to +60°C
- Class II power (without earth pin)
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- LED indicator for power on
- Optional lock type DC plug
- 100% full load burn-in test
- 3 years warranty

**Applications**

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

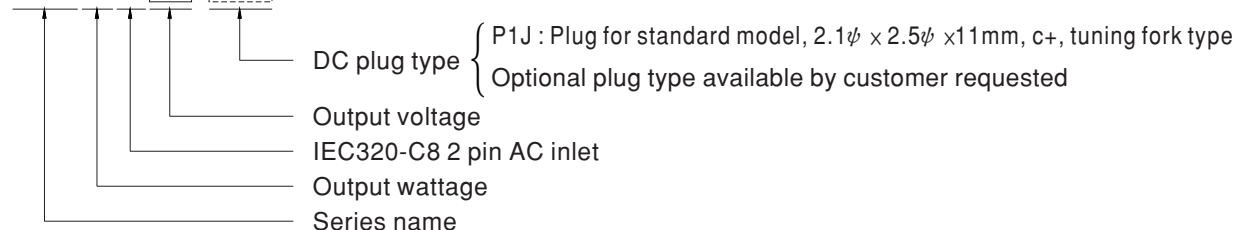
**Description**

GSM18B is a highly reliable, 18W desktop style single-output green medical adaptor series. This product is equipped with a 2-pin (no FG) standard IEC320-C8 power plug, adopting the input range from 80VAC to 264VAC. The entire series supplies different output voltages between 5VDC and 48VDC that can satisfy the demands for various kinds of miniature medical devices. The circuitry design meets the international medical standards (2 × MOPP), having an ultra low leakage current (<50 $\mu$ A), fitting the medical devices in direct electrical contact with the patients.

With the efficiency up to 88% and the extreme low no-load power consumption below 0.1W, GSM18B is compliant with USA EISA 2007/DoE, Canada NRCan, Australia and New Zealand MEPS, EU ErP and meet Code of Conduct(CoC) Version 5 ; 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. GSM18B is approved with the international medical safety certificates.

**Model Encoding**

**GSM18 B 05 -P1J**

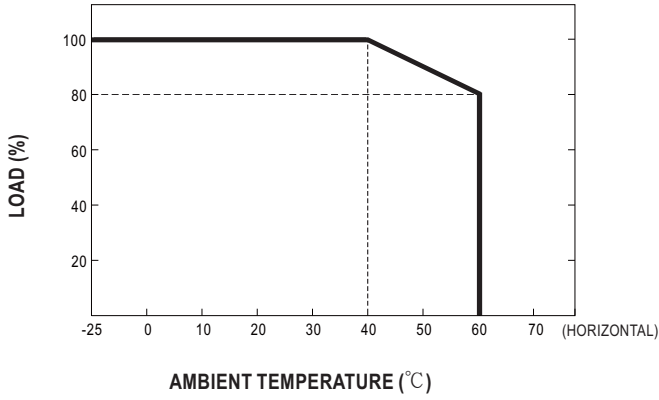




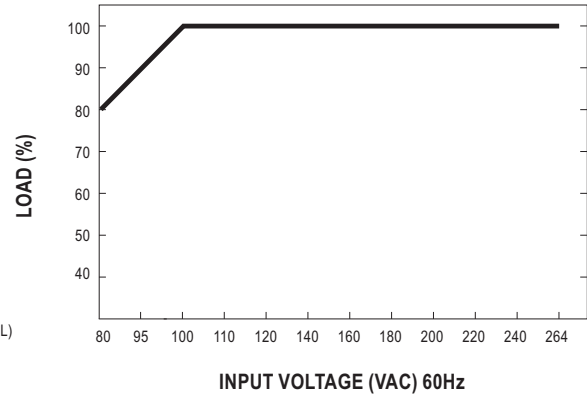
**SPECIFICATION**

| ORDER NO.                    | GSM18B05-P1J   | GSM18B07-P1J  | GSM18B09-P1J  | GSM18B12-P1J   | GSM18B15-P1J | GSM18B18-P1J   | GSM18B24-P1J | GSM18B48-P1J |              |  |
|------------------------------|--|---|---------------|----------------|--------------|----------------|--------------|--------------|--------------|--|
| OUTPUT                       | <b>SAFETY MODEL NO.</b>  | GSM18B05  | GSM18B07      | GSM18B09       | GSM18B12     | GSM18B15       | GSM18B18     | GSM18B24     | GSM18B48     |  |
|                              | <b>DC VOLTAGE</b> Note.2   | 5V  | 7.5V          | 9V             | 12V          | 15V            | 18V          | 24V          | 48V          |  |
|                              | <b>RATED CURRENT</b>   | 3A  | 2A            | 2A             | 1.5A         | 1.2A           | 1A           | 0.75A        | 0.375A       |  |
|                              | <b>CURRENT RANGE</b>   | 0 ~ 3A  | 0 ~ 2A        | 0 ~ 2A         | 0 ~ 1.5A     | 0 ~ 1.2A       | 0 ~ 1A       | 0 ~ 0.75A    | 0 ~ 0.375A   |  |
|                              | <b>RATED POWER (max.)</b>  | 15W   | 15W           | 18W            | 18W          | 18W            | 18W          | 18W          | 18W          |  |
|                              | <b>RIPPLE &amp; NOISE (max.)</b> Note.3  | 60mVp-p   | 80mVp-p       | 80mVp-p        | 120mVp-p     | 120mVp-p       | 150mVp-p     | 180mVp-p     | 240mVp-p     |  |
|                              | <b>VOLTAGE TOLERANCE</b> Note.4  | ±5.0%   | ±5.0%         | ±5.0%          | ±3.0%        | ±3.0%          | ±3.0%        | ±2.0%        | ±2.0%        |  |
|                              | <b>LINE REGULATION</b> Note.5  | ±1.0%   | ±1.0%         | ±1.0%          | ±1.0%        | ±1.0%          | ±1.0%        | ±1.0%        | ±1.0%        |  |
|                              | <b>LOAD REGULATION</b>   | ±5.0%   | ±5.0%         | ±5.0%          | ±3.0%        | ±3.0%          | ±3.0%        | ±2.0%        | ±2.0%        |  |
|                              | <b>SETUP, RISE TIME</b> Note.6   | 500ms, 30ms / 230VAC      1000ms, 30ms / 115VAC at full load  |               |                |              |                |              |              |              |  |
| <b>HOLD UP TIME (Typ.)</b>   | 16ms / 230VAC      16ms / 115VAC at full load  |   |               |                |              |                |              |              |              |  |
| INPUT                        | <b>VOLTAGE RANGE</b> Note.7  | 80 ~ 264VAC    113 ~ 370VDC   |               |                |              |                |              |              |              |  |
|                              | <b>FREQUENCY RANGE</b>   | 47 ~ 63Hz   |               |                |              |                |              |              |              |  |
|                              | <b>EFFICIENCY (Typ.)</b>   | 80%   | 83%           | 84%            | 85%          | 85.5%          | 86%          | 87%          | 88%          |  |
|                              | <b>AC CURRENT (Typ.)</b>   | 0.5A / 115VAC   |               | 0.25A / 230VAC |              |                |              |              |              |  |
|                              | <b>INRUSH CURRENT (Typ.)</b>   | 55A / 230VAC  |               | 30A / 115VAC   |              |                |              |              |              |  |
| <b>LEAKAGE CURRENT(max.)</b> | Touch current < 50 $\mu$ A/264VAC  |   |               |                |              |                |              |              |              |  |
| PROTECTION                   | <b>OVERLOAD</b>  | 105 ~ 170% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |               |                |              |                |              |              |              |  |
|                              | <b>OVER VOLTAGE</b>  | 5.25 ~ 7.5V   | 7.88 ~ 10.13V | 9.45 ~ 12.6V   | 12.6 ~ 17.2V | 15.75 ~ 20.25V | 18.9 ~ 24.3V | 25.2 ~ 32.4V | 50.4 ~ 64.8V |  |
| ENVIRONMENT                  | <b>WORKING TEMP.</b>   | -25 ~ +60°C (Refer to "Derating Curve")   |               |                |              |                |              |              |              |  |
|                              | <b>WORKING HUMIDITY</b>  | 20% ~ 90% RH non-condensing   |               |                |              |                |              |              |              |  |
|                              | <b>STORAGE TEMP., HUMIDITY</b>   | -40 ~ +85°C, 10 ~ 95% RH  |               |                |              |                |              |              |              |  |
|                              | <b>TEMP. COEFFICIENT</b>   | ±0.03% / °C (0~40°C)  |               |                |              |                |              |              |              |  |
|                              | <b>VIBRATION</b>   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |               |                |              |                |              |              |              |  |
| SAFETY & EMC (Note. 8)       | <b>SAFETY STANDARDS</b>  | ANSI/AAMI ES60601-1 / 60601-1-11, TUV EN60601-1 / 60601-1-11 approved   |               |                |              |                |              |              |              |  |
|                              | <b>WITHSTAND VOLTAGE</b>   | I/P-O/P:4KVAC   |               |                |              |                |              |              |              |  |
|                              | <b>ISOLATION RESISTANCE</b>  | I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH  |               |                |              |                |              |              |              |  |
|                              | <b>EMC EMISSION</b>  | Compliance to EN55011(CISPR11) class B, EN61000-3-2,3, FCC PART 15 class B  |               |                |              |                |              |              |              |  |
| OTHERS                       | <b>EMC IMMUNITY</b>  | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, EN61204-3 medical level, criteria A                       |               |                |              |                |              |              |              |  |
|                              | <b>MTBF</b>  | 796.7K hrs min. MIL-HDBK-217F(25°C)   |               |                |              |                |              |              |              |  |
|                              | <b>DIMENSION</b>   | 79*54*33mm (L*W*H)  |               |                |              |                |              |              |              |  |
|                              | <b>PACKING</b>   | 205g ; 60pcs / 13.3Kg / CARTON  |               |                |              |                |              |              |              |  |
| CONNECTOR                    | <b>PLUG</b>  | See page 3 ; Other type available by customer requested   |               |                |              |                |              |              |              |  |
|                              | <b>CABLE</b>   | See page 3 ; Other type available by customer requested   |               |                |              |                |              |              |              |  |
| NOTE                         | <ol style="list-style-type: none"> <li>All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</li> <li>DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</li> <li>Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1<math>\mu</math>f &amp; 47<math>\mu</math>f capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation, load regulation.</li> <li>Line regulation is measured from low line to high line at rated load.</li> <li>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>Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> </ol> |   |               |                |              |                |              |              |              |  |

■ Derating Curve

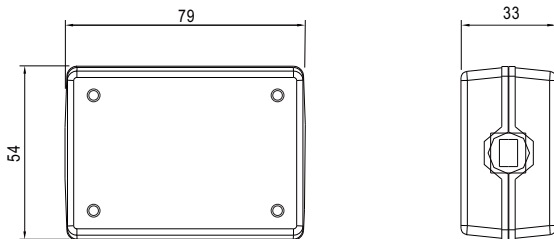
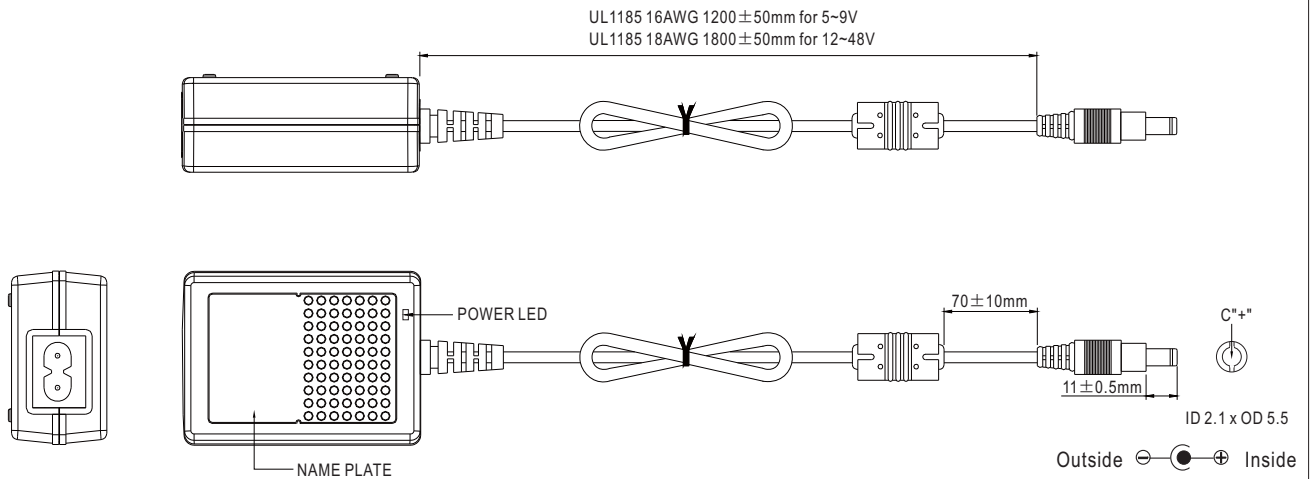


■ Static Characteristics



■ Mechanical Specification

Unit:mm



■ Plug Assignment

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>