



## ■ Features

- Universal AC input / Full range
- 2 pole AC inlet IEC320-C8
- High efficiency up to 88%
- Low leakage current <math><50\mu A</math>
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Medical safety approved (2 × MOPP between primary to secondary)
- Class II power (without earth pin)
- LED indicator for power on
- No load power consumption <math><0.1W</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

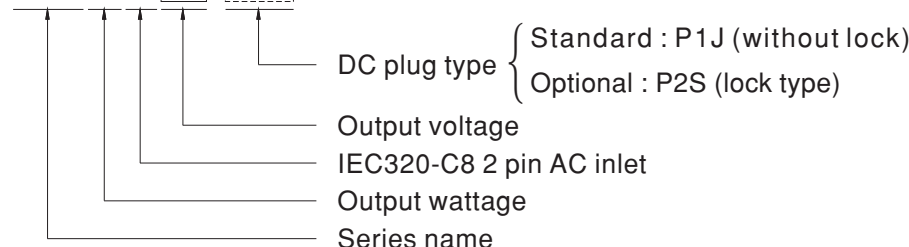
## ■ Description

GSM25B is a highly reliable, 25W 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 (<math><50\mu A</math>), 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, the design of GSM25B 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. GSM25B is approved with the international medical safety certificates.

## ■ Model Encoding

**GSM25 B 05 - P1J**

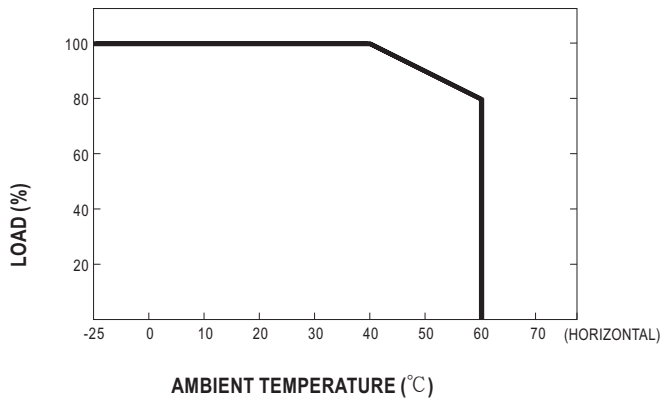




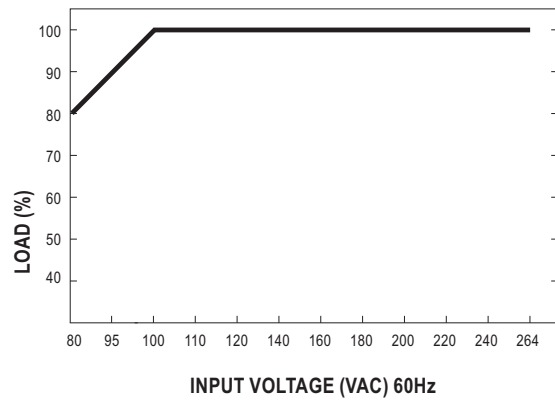
**SPECIFICATION**

ORDER NO.	GSM25B05-P1J	GSM25B07-P1J	GSM25B09-P1J	GSM25B12-P1J	GSM25B15-P1J	GSM25B18-P1J	GSM25B24-P1J	GSM25B48-P1J	
OUTPUT	<b>SAFETY MODEL NO.</b>	GSM25B05	GSM25B07	GSM25B09	GSM25B12	GSM25B15	GSM25B18	GSM25B24	GSM25B48
	<b>DC VOLTAGE</b> Note.2	5V	7.5V	9V	12V	15V	18V	24V	48V
	<b>RATED CURRENT</b>	4A	2.93A	2.77A	2.08A	1.66A	1.38A	1.04A	0.52A
	<b>CURRENT RANGE</b>	0 ~ 4A	0 ~ 2.93A	0 ~ 2.77A	0 ~ 2.08A	0 ~ 1.66A	0 ~ 1.38A	0 ~ 1.04A	0 ~ 0.52A
	<b>RATED POWER (max.)</b>	20W	22W	25W	25W	25W	25W	25W	25W
	<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	±6.0%	±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>	±6.0%	±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>	80 ~ 264VAC    113 ~ 370VDC							
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz							
	<b>EFFICIENCY (Typ.)</b>	80%	83%	84%	86%	86%	86%	87%	88%
	<b>AC CURRENT (Typ.)</b>	0.7A / 115VAC		0.35A / 230VAC					
	<b>INRUSH CURRENT (Typ.)</b>	55A / 230VAC		30A / 115VAC					
<b>LEAKAGE CURRENT(max.)</b>	Touch current < 50µA/264VAC								
PROTECTION	<b>OVERLOAD</b>	105 ~ 170% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	<b>OVER VOLTAGE</b>	5.25 ~ 7.5V	7.88 ~ 10.5V	9.45 ~ 13V	12.6 ~ 17.2V	15.75 ~ 20.25V	18.9 ~ 25.2V	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. 7)	<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>	235g ; 60pcs / 15.1Kg / CARTON							
CONNECTOR	<b>PLUG</b>	Standard type P1J: 2.1φ * 5.5φ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested							
	<b>CABLE</b>	See page 2							
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 0.1uf &amp; 47uf 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>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



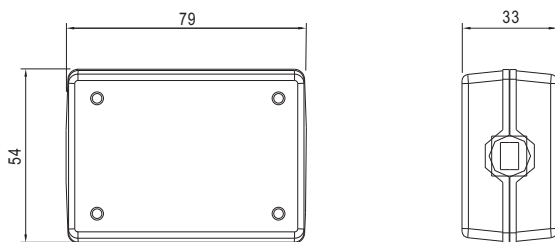
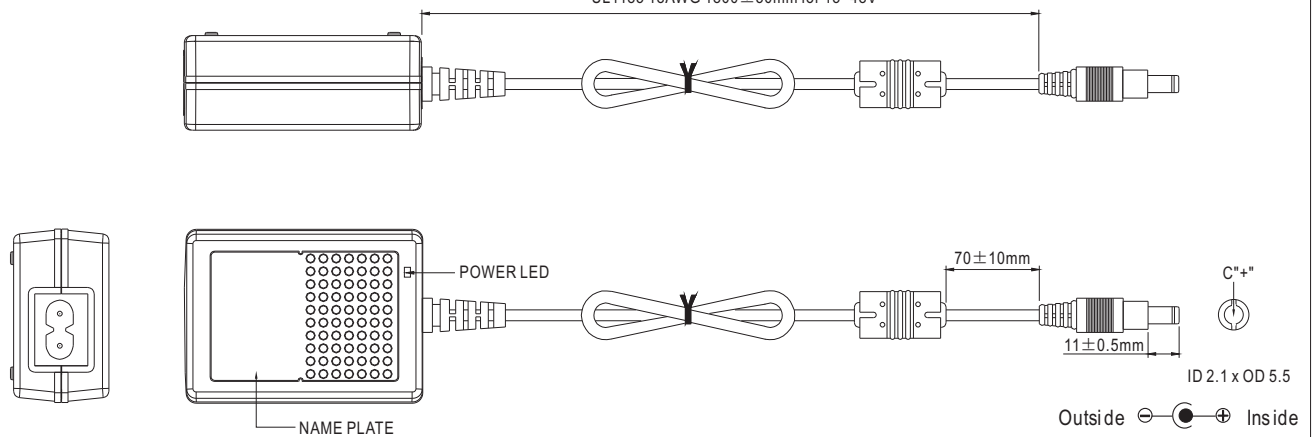
### Static Characteristics



### Mechanical Specification

Unit:mm

UL1185 16AWG 1200±50mm for 5-9V  
 UL1185 16AWG 1800±50mm for 12V  
 UL1185 18AWG 1800±50mm for 15-48V



### 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>