



## ■ 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 x 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

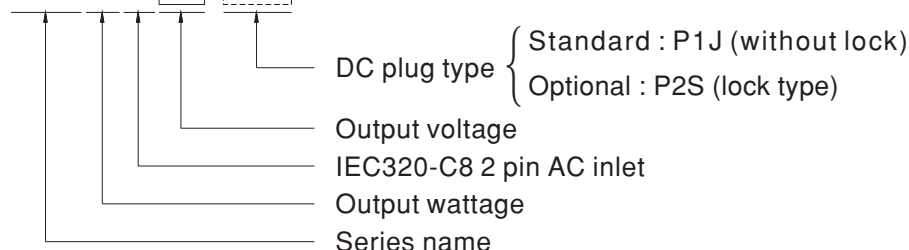
## ■ Description

GSM18B is a highly reliable, 18W 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 x 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 GSM18B 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. GSM18B is approved with the international medical safety certificates.

## ■ Model Encoding

**GSM18B 05 - P1J**

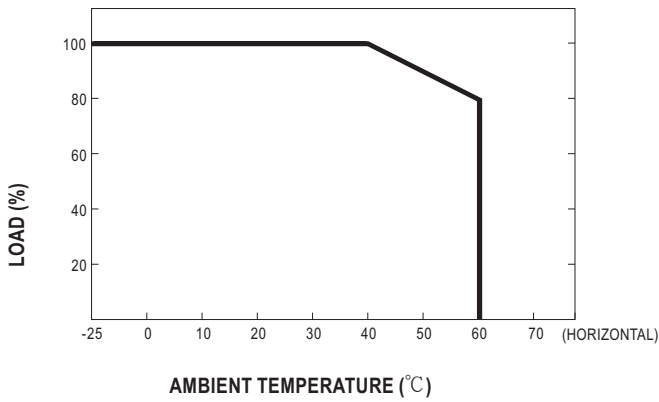




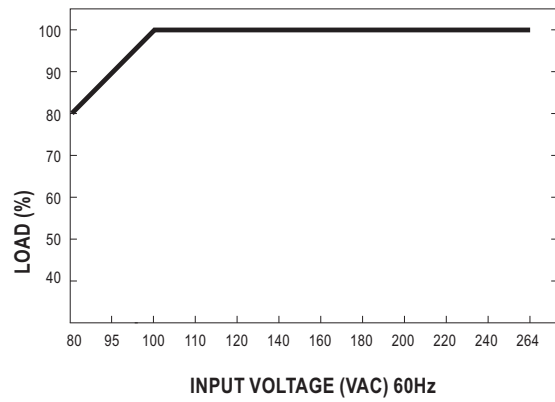
**SPECIFICATION**

ORDER NO.	GSM18B05-P1J	GSM18B07-P1J	GSM18B09-P1J	GSM18B12-P1J	GSM18B15-P1J	GSM18B18-P1J	GSM18B24-P1J	GSM18B48-P1J	
OUTPUT	SAFETY MODEL NO.	GSM18B05	GSM18B07	GSM18B09	GSM18B12	GSM18B15	GSM18B18	GSM18B24	GSM18B48
	DC VOLTAGE <span style="float:right">Note.2</span>	5V	7.5V	9V	12V	15V	18V	24V	48V
	RATED CURRENT	3A	2A	2A	1.5A	1.2A	1A	0.75A	0.375A
	CURRENT RANGE	0 ~ 3A	0 ~ 2A	0 ~ 2A	0 ~ 1.5A	0 ~ 1.2A	0 ~ 1A	0 ~ 0.75A	0 ~ 0.375A
	RATED POWER (max.)	15W	15W	18W	18W	18W	18W	18W	18W
	RIPPLE & NOISE (max.) <span style="float:right">Note.3</span>	60mVp-p	80mVp-p	80mVp-p	120mVp-p	120mVp-p	150mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE <span style="float:right">Note.4</span>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%
	LINE REGULATION <span style="float:right">Note.5</span>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%
	SETUP, RISE TIME <span style="float:right">Note.6</span>	500ms, 30ms / 230VAC      1000ms, 30ms / 115VAC at full load							
HOLD UP TIME (Typ.)	16ms / 230VAC      16ms / 115VAC at full load								
INPUT	VOLTAGE RANGE	80 ~ 264VAC    113 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	80%	83%	84%	85%	85.5%	86%	87%	88%
	AC CURRENT (Typ.)	0.5A / 115VAC		0.25A / 230VAC					
	INRUSH CURRENT (Typ.)	55A / 230VAC		30A / 115VAC					
LEAKAGE CURRENT(max.)	Touch current < 50 $\mu$ A/264VAC								
PROTECTION	OVERLOAD	105 ~ 170% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	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	WORKING TEMP.	-25 ~ +60°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 (0~40°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	ANSI/AAMI ES60601-1 / 60601-1-11, TUV EN60601-1 / 60601-1-11 approved							
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
	EMC EMISSION	Compliance to EN55011(CISPR11) class B, EN61000-3-2,3, FCC PART 15 class B							
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, EN61204-3 medical level, criteria A							
	MTBF	796.7K hrs min. MIL-HDBK-217F(25°C)							
	DIMENSION	79*54*33mm (L*W*H)							
CONNECTOR	PACKING	205g ; 60pcs / 13.3Kg / CARTON							
	PLUG	Standard type P1J: 2.1 $\phi$ * 5.5 $\phi$ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested							
NOTE	CABLE	See page 2 ; Other type available by customer requested							
	<p>1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</p> <p>2. DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</p> <p>3. 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.</p> <p>4. Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>5. Line regulation is measured from low line to high line at rated load.</p> <p>6. 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.</p> <p>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. 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>)</p>								

### Derating Curve

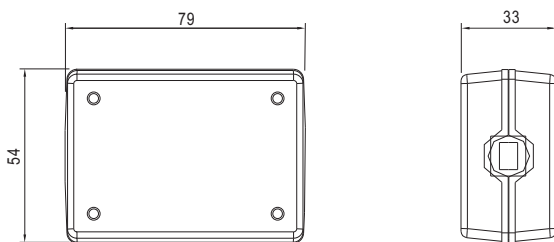
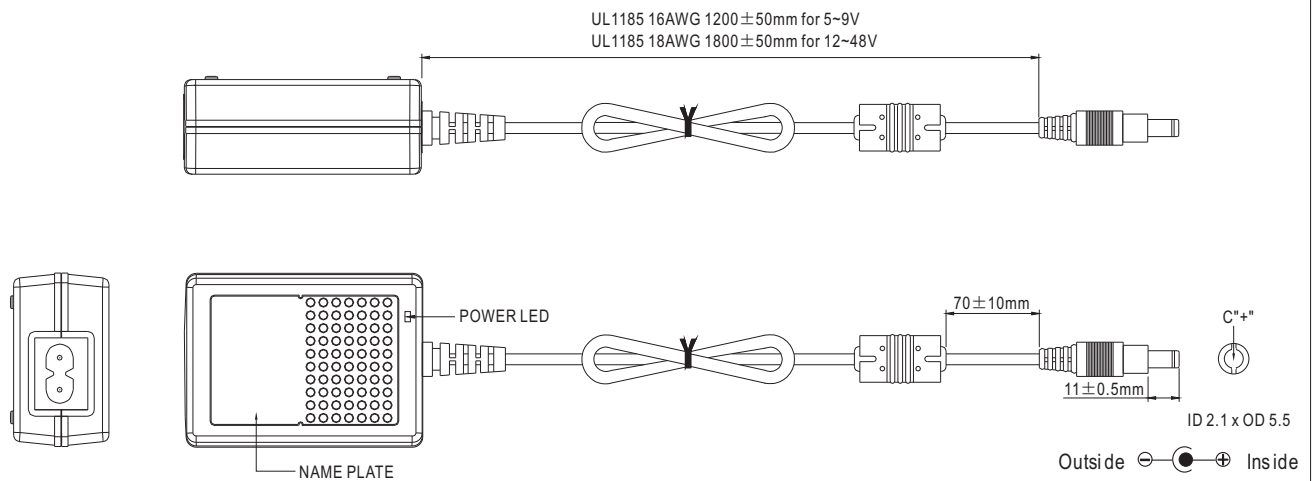


### Static Characteristics



### 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>