



## ■ Features

- 2 pole AC inlet IEC320-C8, Class II power unit
- Medical safety approved (2 x MOPP) according to ANSI/AAMI ES60601-1-1-11, EN60601-1-1-11
- Extremely low leakage current
- No load power consumption<0.1W
- Energy efficiency Level VI and meet CoC version 5 ( except 5~9V for Level V )
- -25~+60°C wide range working temperature
- Protections: Short circuit / Overload / Over voltage
- LED indicator for power on
- **Various DC plug quick adapter accessory available**  
(Plug kit sold separately, please refer to : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf) )
- 3 years warranty

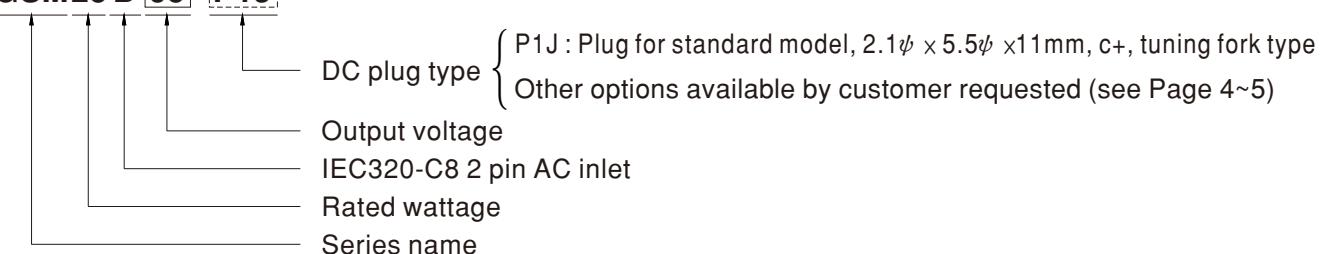
## ■ Description

GSM25B is a highly reliable, 25W 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 x MOPP), having an ultra low leakage current (<50μA), 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, GSM25B 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. GSM25B is approved with the international medical safety certificates.

## ■ Model Encoding

**GSM25 B 05 -P1J**



## ■ Applications

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



25W AC-DC Reliable Green Medical Adaptor

GSM25B series

## SPECIFICATION

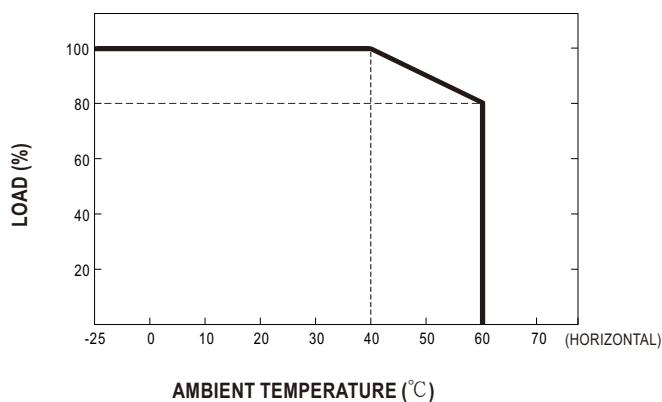
ORDER NO.	GSM25B05-P1J	GSM25B07-P1J	GSM25B09-P1J	GSM25B12-P1J	GSM25B15-P1J	GSM25B18-P1J	GSM25B24-P1J	GSM25B48-P1J																
OUTPUT	SAFETY MODEL NO.	GSM25B05	GSM25B07	GSM25B09	GSM25B12	GSM25B15	GSM25B18	GSM25B24	GSM25B48															
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	48V															
	RATED CURRENT	4A	2.93A	2.77A	2.08A	1.66A	1.38A	1.04A	0.52A															
	CURRENT RANGE	0 ~ 4A	0 ~ 2.93A	0 ~ 2.77A	0 ~ 2.08A	0 ~ 1.66A	0 ~ 1.38A	0 ~ 1.04A	0 ~ 0.52A															
	RATED POWER (max.)	20W	22W	25W	25W	25W	25W	25W	25W															
	RIPLPE & NOISE (max.) Note.3	60mVp-p	80mVp-p	80mVp-p	120mVp-p	120mVp-p	150mVp-p	180mVp-p	240mVp-p															
	VOLTAGE TOLERANCE Note.4	±6.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%															
	LINE REGULATION Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%															
	LOAD REGULATION	±6.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%															
INPUT	SETUP, RISE TIME Note.6	500ms, 30ms / 230VAC	1000ms, 30ms / 115VAC	at full load																				
	HOLD UP TIME (Typ.)	16ms / 230VAC	16ms / 115VAC	at full load																				
PROTECTION	VOLTAGE RANGE Note.7	80 ~ 264VAC	113 ~ 370VDC																					
	FREQUENCY RANGE	47 ~ 63Hz																						
	EFFICIENCY (Typ.)	80%	83%	84%	86%	86%	86%	87%	88%															
	AC CURRENT (Typ.)	0.7A / 115VAC	0.35A / 230VAC																					
	INRUSH CURRENT (Typ.)	55A / 230VAC	30A / 115VAC																					
ENVIRONMENT	LEAKAGE CURRENT(max.)	Touch current < 50 $\mu$ A/264VAC																						
	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 ~ 10.5V	9.45 ~ 13V	12.6 ~ 17.2V	15.75 ~ 20.25V	18.9 ~ 25.2V	25.2 ~ 32.4V	50.4 ~ 64.8V															
SAFETY & EMC (Note. 8)	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 non-condensing																						
	TEMP. COEFFICIENT	±0.03% / °C (0~40°C)																						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes																						
	SAFETY STANDARDS	ANSI/AAMI ES60601-1 / ES60601-1-11(3.1 version), CAN/CSA-C22 3 <sup>rd</sup> Edition, TUV EN60601-1 / EN60601-1-11, EAC TP TC 004 approved																						
	ISOLATION LEVEL	Primary-Secondary: 2xMOPP																						
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC																						
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH																						
OTHERS	EMC EMISSION	Parameter	Standard			Test Level / Note																		
		Conducted emission	EN55011 (CISPR11), FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B),MSIP KN32			Class B																		
		Radiated emission	EN55011 (CISPR11), FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B),MSIP KN32			Class B																		
		Harmonic current	EN61000-3-2			Class A																		
		Voltage flicker	EN61000-3-3			-----																		
	EMC IMMUNITY	EN60601-1-2, EN61204-3																						
		Parameter	Standard			Test Level / Note																		
		ESD	EN61000-4-2			Level 4, 15kV air ; Level 4, 8kV contact																		
		RF field susceptibility	EN61000-4-3			Level 3, 10V/m ( 80MHz~2.7GHz ) Table 9, 9~28V/m( 385MHz~5.78GHz )																		
		EFT bursts	EN61000-4-4			Level 3, 2kV																		
		Surge susceptibility	EN61000-4-5			Level 3, 1kV/Line-Line																		
		Conducted susceptibility	EN61000-4-6			Level 3, 10V																		
		Magnetic field immunity	EN61000-4-8			Level 4, 30A/m																		
CONNECTOR	Voltage dip, interruption		EN61000-4-11			100% dip 1 periods, 30% dip 25 periods, 100% interruptions 250 periods																		
	PLUG	See page 4~5 ; Other type available by customer requested																						
	CABLE	See page 4~5 ; Other type available by customer requested																						
NOTE	<ol style="list-style-type: none"> <li>1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</li> <li>2. DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</li> <li>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.</li> <li>4. Tolerance: includes set up tolerance, line regulation, load regulation.</li> <li>5. Line regulation is measured from low line to high line at rated load.</li> <li>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.</li> <li>7. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>8. 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>																							
	※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a>																							



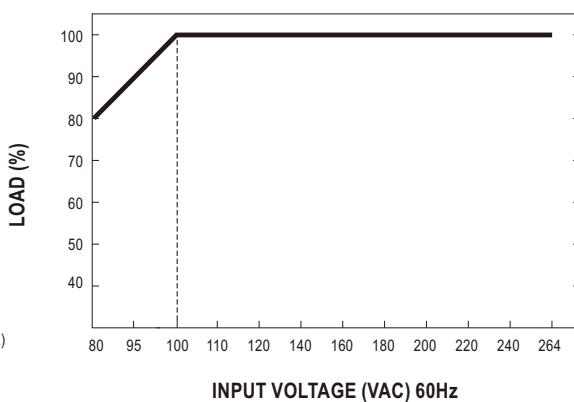
25W AC-DC Reliable Green Medical Adaptor

**GSM25B** series

■ Derating Curve



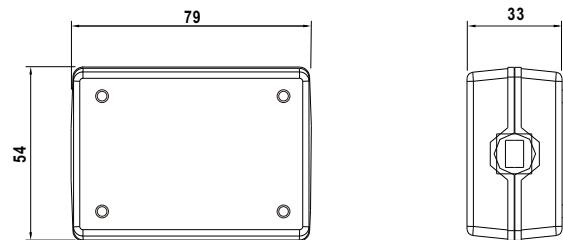
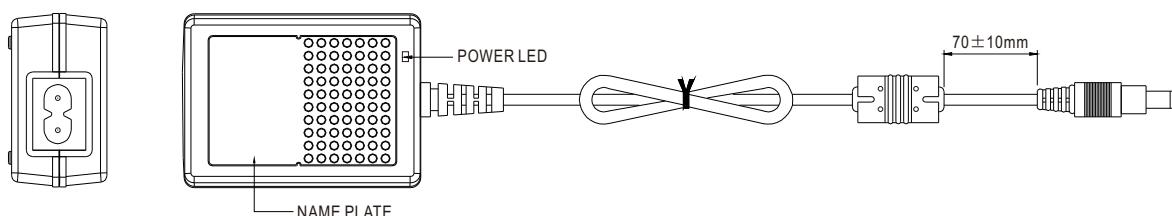
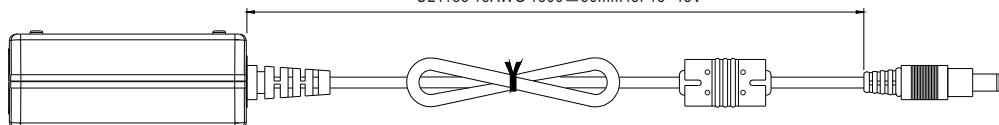
■ Static Characteristics



■ Mechanical Specification

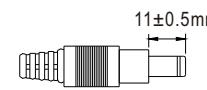
Unit:mm

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



**■ DC output plug**

- ◎ Standard plug: P1J

P1J	Pin Assignment
	
5.5 2.1  11±0.5mm 	Outside  Inside

- ◎ DC plug changeable through:

(1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)

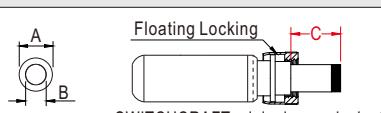
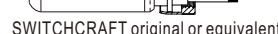
(2) Quick adapter accessory (sold separately without MOQ)

Please refer to below table and online selection guide : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf)

Example quick adapter accessory:



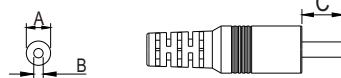
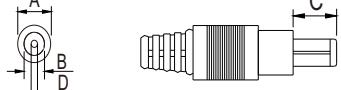
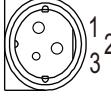
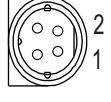
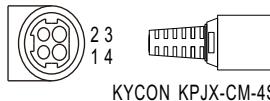
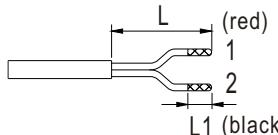
- ◎ Optional DC plug: (Available in customized cable or quick adapter)

Tuning Fork Style	Type No.	A	B	C	Quick Adapter Accessory
		OD	ID	L	
 	P1I	5.5	2.1	9.5	Available (Current rating: 7.5A max.)
	P1L	5.5	2.5	9.5	
	P1M	5.5	2.5	11.0	
	P1IR	5.5	2.1	9.5	
	P1JR	5.5	2.1	11.0	
	P1LR	5.5	2.5	9.5	
	P1MR	5.5	2.5	11.0	
Barrel Style	Type No.	A	B	C	None
		OD	ID	L	
 	P2I	5.5	2.1	9.5	
	P2J	5.5	2.1	11.0	
	P2L	5.5	2.5	9.5	
	P2M	5.5	2.5	11.0	
	P2IR	5.5	2.1	9.5	
	P2JR	5.5	2.1	11.0	
	P2LR	5.5	2.5	9.5	
Lock Style	Type No.	A	B	C	None
		OD	ID	L	
 	P2S(S761K)	5.53	2.03	12.06	
	P2K(761K)	5.53	2.54	12.06	
	P2C(S760K)	5.53	2.03	9.52	
	P2D(760K)	5.53	2.54	9.52	
  					



25W AC-DC Reliable Green Medical Adaptor

GSM25B series

Min. Pin Style	Type No.	A	B	C	Quick Adapter Accessory	
		OD	ID	L		
  EIAJ equivalent	P3A	2.35	0.7	11.0	Available (Current rating: 5A max.)	
	P3B	4.0	1.7	11.0		
	P3C	4.75	1.7	11.0		
  EIAJ equivalent	Type No.	A	B	C	Available (Current rating: 7.5A max.)	
	P4A	OD	ID	L		
		5.5	3.4	11.0		
  KYCON KPPX-3P equivalent	Type No.	Pin Assignment			Available (Current rating: 7.5A max.)	
	R6B	PIN No.	Output			
		1	+Vo			
  KYCON KPPX-4P equivalent	Type No.	Pin Assignment			Available (Current rating: 7.5A max.)	
	R7B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
  KYCON KPJX-CM-4S equivalent	Type No.	Pin Assignment			None	
	R7BF	PIN No.	Output			
		1	+Vo			
		2	-Vo			
 	Type No.	Pin Assignment			Available (Current rating: 7.5A max.)	
	R1B	PIN No.	Output			
		1	-Vo			
		2	-Vo			
		3	+Vo			
  Length of Land L1 by request (MW's standard length, L: <u>25</u> mm, L1: <u>5</u> mm)	Type No.	Pin Assignment			None	
	by customer	PIN No.	Output			
		1	+Vo			
		2	-Vo			

### ■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>