



## Features

- 2 pole AC inlet IEC320-C8, Class II power unit
- Medical safety approved (2 × MOPP) according to ANSI/AAMI ES60601-1/-1-11, BS EN/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 sperately, please refer to : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf) )
- 3 years warranty

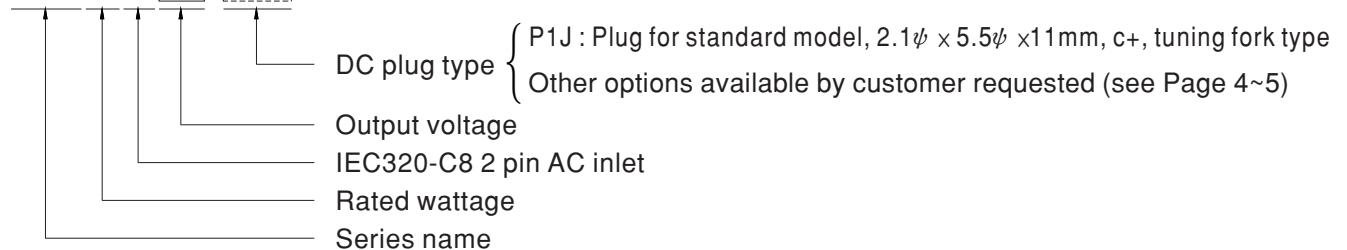
## Description

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 × 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

**GSM25B 05 -P1J**



## Applications

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

## GTIN CODE

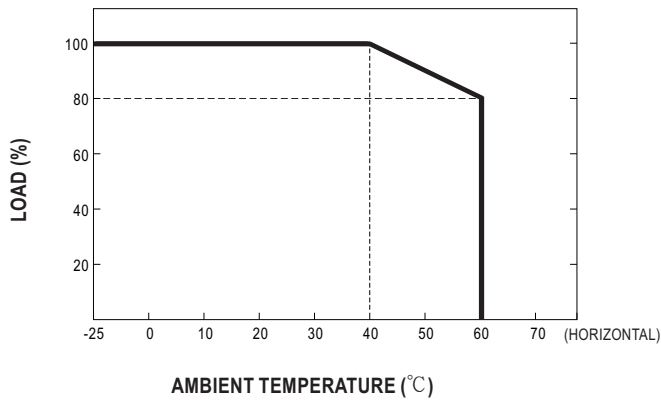
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



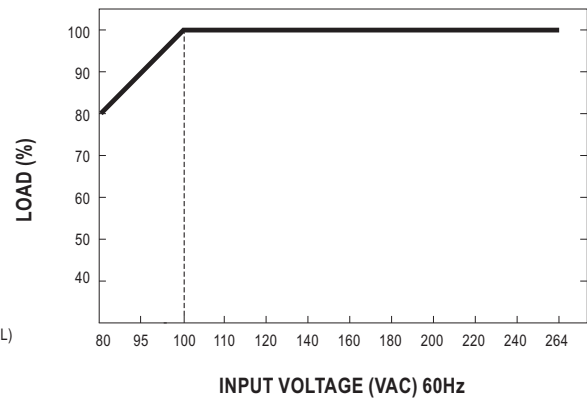
## SPECIFICATION

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 <span style="float:right">Note.2</span>	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	
	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>	±6.0%	±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	±6.0%	±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    100ms, 30ms / 115VAC at full load								
HOLD UP TIME (Typ.)	16ms / 230VAC    16ms / 115VAC at full load									
INPUT	VOLTAGE RANGE <span style="float:right">Note.7</span>	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						
	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 ~ 10.5V	9.45 ~ 13V	12.6 ~ 17.2V	15.75 ~ 20.25V	18.9 ~ 25.2V	25.2 ~ 32.4V	50.4 ~ 64.8V	
		Protection type : Shut down o/p voltage, re-power on to recover								
ENVIRONMENT	WORKING TEMP.	-25 ~ +60 $^{\circ}$ C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +85 $^{\circ}$ C, 10 ~ 95% RH non-condensing								
	TEMP. COEFFICIENT	±0.03% / $^{\circ}$ C (0~40 $^{\circ}$ C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
SAFETY & EMC (Note. 8)	SAFETY STANDARDS	ANSI/AAMI ES60601-1 / ES60601-1-11(3.1 version), CAN/CSA-C22 3 <sup>rd</sup> Edition, TUV BS EN/EN60601-1 / BS EN/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 $^{\circ}$ C / 70% RH								
	EMC EMISSION	Parameter	Standard					Test Level / Note		
		Conducted emission	BS EN/EN55011 (CISPR11), FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B),MSIP KN32					Class B		
		Radiated emission	BS EN/EN55011 (CISPR11), FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B),MSIP KN32					Class B		
		Harmonic current	BS EN/EN61000-3-2					Class A		
		Voltage flicker	BS EN/EN61000-3-3					-----		
	EMC IMMUNITY	BS EN/EN60601-1-2, BS EN/EN61204-3								
		Parameter	Standard					Test Level / Note		
		ESD	BS EN/EN61000-4-2					Level 4, 15KV air ; Level 4, 8KV contact		
		RF field susceptibility	BS EN/EN61000-4-3					Level 3, 10V/m( 80MHz~2.7GHz ) Table 9, 9~28V/m( 385MHz~5.78GHz )		
		EFT bursts	BS EN/EN61000-4-4					Level 3, 2KV		
Surge susceptibility		BS EN/EN61000-4-5					Level 3, 1KV/Line-Line			
Conducted susceptibility		BS EN/EN61000-4-6					Level 3, 10V			
Magnetic field immunity		BS EN/EN61000-4-8					Level 4, 30A/m			
Voltage dip, interruption	BS EN/EN61000-4-11					100% dip 1 periods, 30% dip 25 periods, 100% interruptions 250 periods				
OTHERS	MTBF	3887.1K hrs min.    Telcordia SR-332 (Bellcore) ; 791.9K hrs min.    MIL-HDBK-217F (25 $^{\circ}$ C)								
	DIMENSION	79*54*33mm (L*W*H)								
	PACKING	235g ; 60pcs / 15.1Kg / CARTON								
CONNECTOR	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>All parameters are specified at 230VAC input, rated load, 25<math>^{\circ}</math>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="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a>)</li> </ol> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>									

### Derating Curve



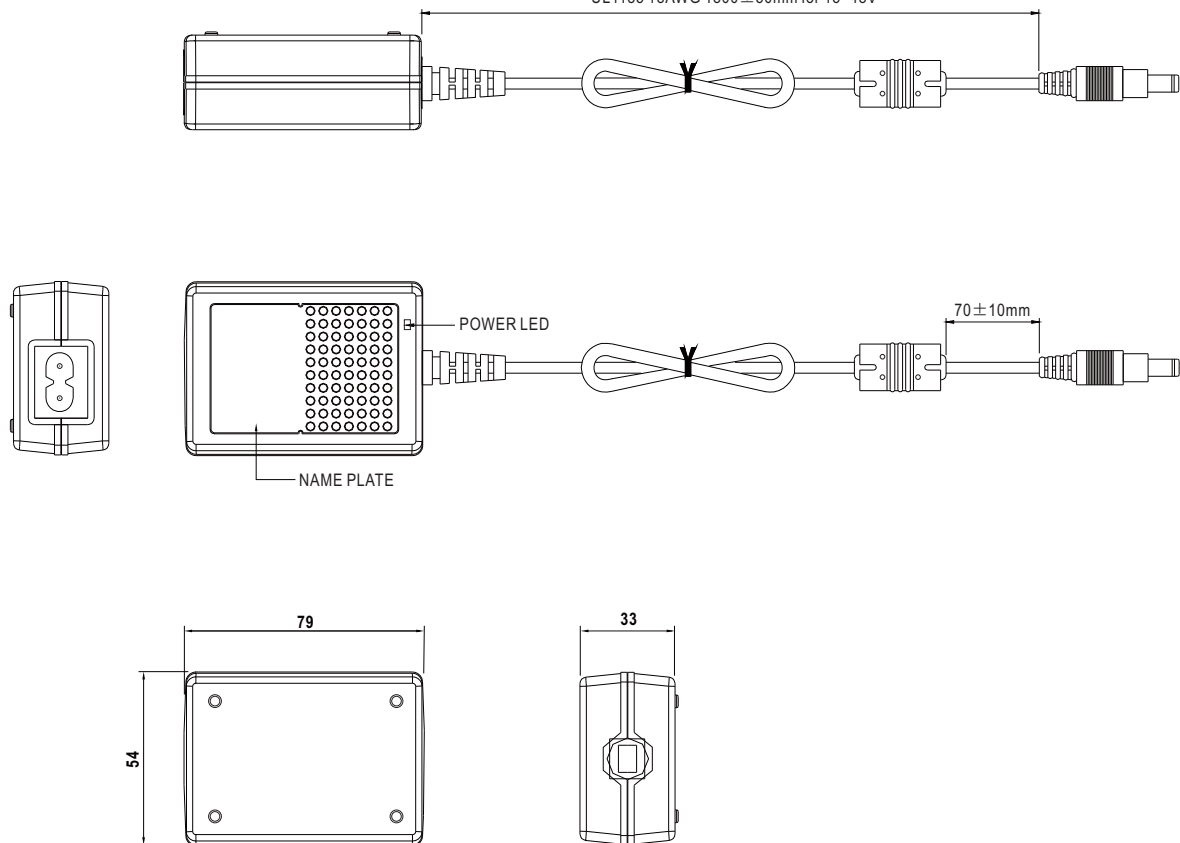
### Static Characteristics



### 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
	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 (Straight)	5.5	2.1	9.5	Available (Current rating: 7.5A max.)
	P1L (Straight)	5.5	2.5	9.5	
	P1M (Straight)	5.5	2.5	11.0	
	P1IR (Right-angled)	5.5	2.1	9.5	
	P1JR (Right-angled)	5.5	2.1	11.0	
	P1LR (Right-angled)	5.5	2.5	9.5	
P1MR (Right-angled)	5.5	2.5	11.0		
Barrel Style	Type No.	A	B	C	Quick Adapter Accessory
		OD	ID	L	
	P2I (Straight)	5.5	2.1	9.5	None
	P2J (Straight)	5.5	2.1	11.0	
	P2L (Straight)	5.5	2.5	9.5	
	P2M (Straight)	5.5	2.5	11.0	
	P2IR (Right-angled)	5.5	2.1	9.5	
	P2JR (Right-angled)	5.5	2.1	11.0	
	P2LR (Right-angled)	5.5	2.5	9.5	
	P2MR (Right-angled)	5.5	2.5	11.0	
Lock Style	Type No.	A	B	C	Quick Adapter Accessory
		OD	ID	L	
	P2S(S761K)	5.53	2.03	12.06	None
	P2K(761K)	5.53	2.54	12.06	
	P2C(S760K)	5.53	2.03	9.52	
	P2D(760K)	5.53	2.54	9.52	

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		
Center Pin Style	Type No.	A	B	C	D	Available (Current rating: 7.5A max.)
 EIAJ equivalent	P4A	5.5	3.4	11.0	1.0	
	P4B	6.5	4.4	11.0	1.4	
	P4C	7.4	5.1	11.0	0.6	
Min. DIN 3 Pin with Lock (male)	Type No.	Pin Assignment		Available (Current rating: 7.5A max.)		
 KYCON KPPX-3P equivalent	R6B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
3	+Vo					
Min. DIN 4 Pin with Lock (male)	Type No.	Pin Assignment		Available (Current rating: 7.5A max.)		
 KYCON KPPX-4P equivalent	R7B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
4	+Vo					
Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment		None		
 KYCON KPJX-CM-4S equivalent	R7BF	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
4	+Vo					
DIN 5 Pin (male)	Type No.	Pin Assignment		Available (Current rating: 7.5A max.)		
 	R1B	PIN No.	Output			
		1	-Vo			
		2	-Vo			
		3	+Vo			
		4	-Vo			
5	+Vo					
Stripped and tinned leads	Type No.	Pin Assignment		None		
 Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 5 mm) ( NOTE: The wire color is for reference only, please refer to the actual product)	by customer	PIN No.	Output			
		1	+Vo			
2	-Vo					

■ Installation Manual

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