


CB **EAC** **CE** **UKCA**


■ Features

- 2 pole EURO plug, Class II power unit
- Medical safety approved (2 x MOPP) according to 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 separately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf)
- 3 years warranty

■ Applications

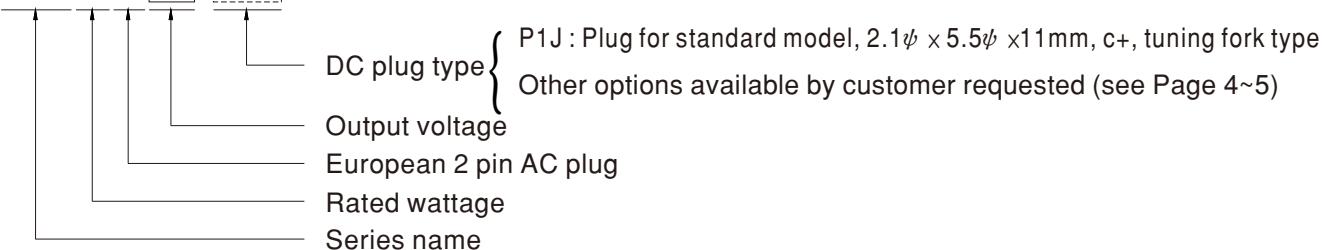
- Blood glucose meter
- Blood pressure meter
- Nebulizer
- Inhaler
- Portable medical device

■ Description

GSM25E is a highly reliable, 25W wall-mounted style single-output green medical adaptor series. This product is equipped with a 2-pin (no FG) standard European 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 (<50 μ 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, GSM25E is compliant with 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. GSM25E is approved with the international medical safety certificates.

■ Model Encoding

GSM25 E 05 -P1J




25W AC-DC Reliable Green Medical Adaptor

GSM25E series

SPECIFICATION

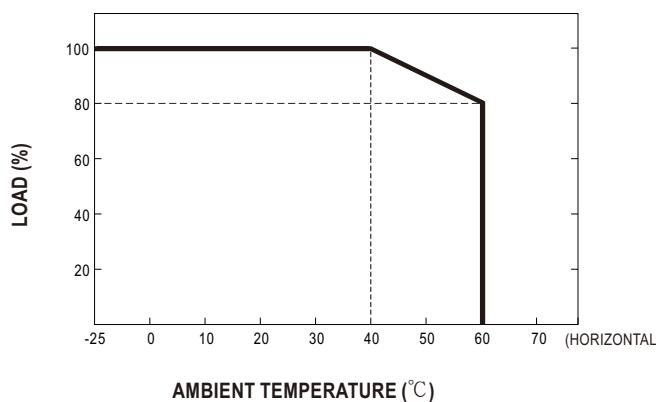
ORDER NO.	GSM25E05-P1J	GSM25E07-P1J	GSM25E09-P1J	GSM25E12-P1J	GSM25E15-P1J	GSM25E18-P1J	GSM25E24-P1J	GSM25E48-P1J					
OUTPUT	SAFETY MODEL NO.	GSM25E05	GSM25E07	GSM25E09	GSM25E12	GSM25E15	GSM25E18	GSM25E24	GSM25E48				
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	48V				
	RATED CURRENT	4A	2.93A	2.77A	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%				
	SETUP, RISE TIME Note.6	500ms, 30ms / 230VAC	1000ms, 30ms / 115VAC										
	HOLD UP TIME (Typ.)	16ms / 230VAC	16ms / 115VAC										
INPUT	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										
PROTECTION	LEAKAGE CURRENT(max.)	Touch current < 50 μ 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				
		Protection type : Shut down o/p voltage, re-power on to recover											
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 non-condensing											
	TEMP. COEFFICIENT	±0.03% / °C (0~40°C)											
SAFETY & EMC (Note. 8)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes											
	SAFETY STANDARDS	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°C / 70% RH											
	EMC EMISSION	Parameter	Standard			Test Level / Note							
		Conducted emission	BS EN/EN55011 (CISPR11)			Class B							
		Radiated emission	BS EN/EN55011 (CISPR11)			Class B							
		Harmonic current	BS EN/EN61000-3-2			Class A							
	EMC IMMUNITY	Voltage flicker	BS EN/EN61000-3-3			-----							
		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							
OTHERS	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								
CONNECTOR	PLUG	See page 4~5 ; Other type available by customer requested											
	CABLE	See page 4~5 ; Other type available by customer requested											
		1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. 2. DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1 μ f & 47 μ f capacitor. 4. Tolerance: includes set up tolerance, line regulation, load regulation. 5. Line regulation is measured from low line to high line at rated load. 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. 7. Derating may be needed under low input voltage. Please check the derating curve for more details. 8. The power supply is considered as an independent unit, but the final equipment still need to re-confirmed 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 http://www.meanwell.com)											
NOTE		※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx											



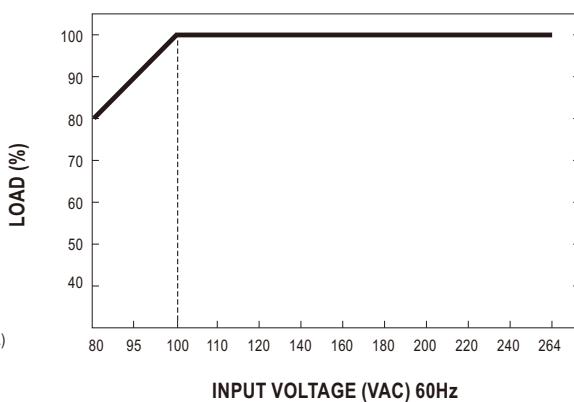
25W AC-DC Reliable Green Medical Adaptor

GSM25E series

■ Derating Curve

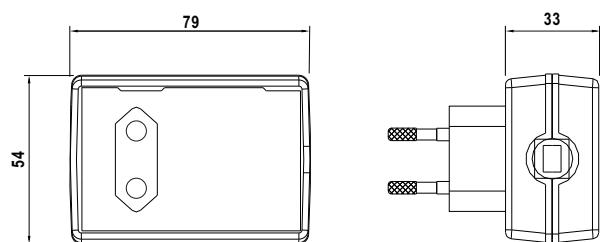
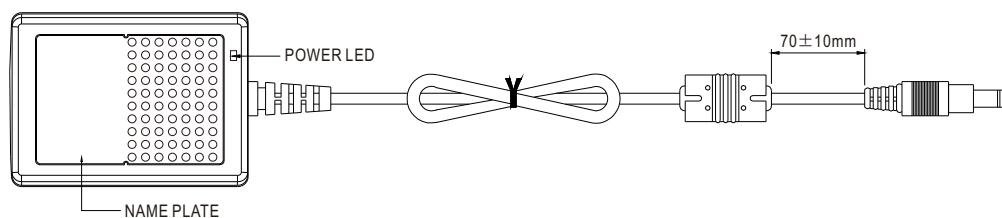
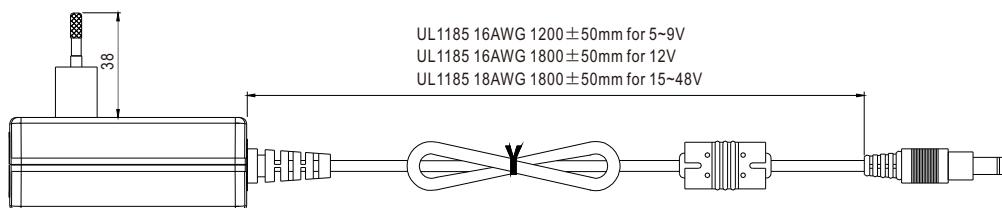


■ Static Characteristics



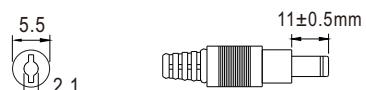
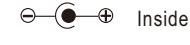
■ Mechanical Specification

Unit:mm



■ DC output plug

- ◎ Standard plug: P1J

P1J	Pin Assignment
	
5.5 2.1 	Outside 

- ◎ DC plug changeable through:

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

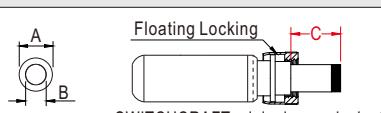
(2) Quick adapter accessory (sold separately without MOQ)

Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

Example quick adapter accessory:



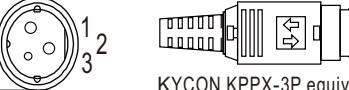
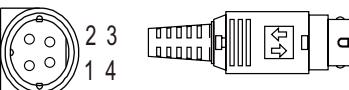
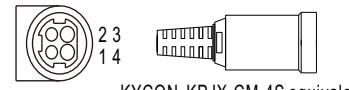
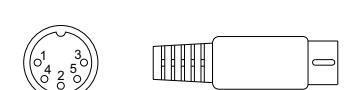
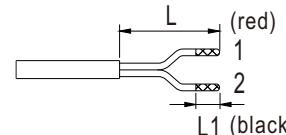
- ◎ Optional DC plug: (Available in customized cable or quick adapter)

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	
 SWITCHCRAFT original or equivalent					



25W AC-DC Reliable Green Medical Adaptor

GSM25E 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>