

25W AC-DC Single Output Medical Adaptor

GSM25E series





Features

- · Universal AC input / Full range
- 2 pole EURO plug
- · High efficiency up to 88%
- Low leakage current <50 μA
- · 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<0.1W
- ErP step2 compliant (level V)

contact with the patients.

- Meet EISA 2007 (Energy Independence and Security Act)
- · Optional lock type DC plug
- · 3 years warranty

Applications

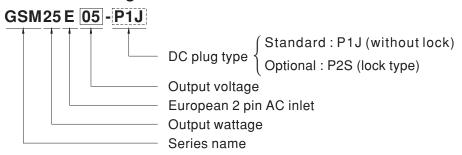
- · Blood glucose meter
- · Blood pressure meter
- Nebulizer
- Inhaler
- · Portable medical device

■ Description

GSM25E is a highly reliable, 25W 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 $(2 \times \text{MOPP})$, having an ultra low leakage current (<50 μ A), fitting the medical devices in direct electrical

With the efficiency up to 88% and the extreme low no-load power consumption below 0.1W, the design of GSM25E 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. GSM25E is approved with the international medical safety certificates.

■ Model Encoding







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SPECIFICATION

ORDER NO.		GSM25E05-P1J	GSM25E07-P1J	GSM25E09-P1J	GSM25E12-P1J	GSM25E15-P1J	GSM25E18-P1J	GSM25E24-P1J	GSM25E48-P1J
	SAFETY MODEL NO.	GSM25E05	GSM25E07	GSM25E09	GSM25E12	GSM25E15	GSM25E18	GSM25E24	GSM25E48
ОИТРИТ	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
	RIPPLE & 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 / 2	230VAC 10	00ms, 30ms / 11	5VAC 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%	86%	86%	86%	87%	88%
	AC CURRENT (Typ.)	0.7A / 115VAC							
	INRUSH CURRENT (Typ.)	55A / 230VAC 30A / 115VAC							
	LEAKAGE CURRENT(max.)	Touch current < 50µA/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-pov	ver on to recover	r			
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 STANDARDS	TUV EN60601-1 / 60601-1-11 approved							
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:4KVAC							
EMC	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
(Note. 7)	EMC EMISSION	Compliance to EN55011(CISPR11) class B, EN61000-3-2,3							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, EN61204-3 medical level, criteria A							
OTHERS	MTBF	796.7K hrs min. MIL-HDBK-217F(25°C)							
	DIMENSION	79*54*33mm (L*W*H)							
	PACKING	230g; 60pcs / 14.8Kg / CARTON							
CONNECTOR	PLUG	Standard type P1J: 2.1ψ * 5.5ψ * 11mm, tuning fork type, center positive for stock; Other type available by customer requested							
	CABLE	See page 2							
NOTE	 All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. DC voltage: The output voltage set at point measure by plug terminal & 50% load. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. Tolerance: includes set up tolerance, line regulation, load regulation. Line regulation is measured from low line to high line at rated load. 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. 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 http://www.meanwell.com) 								





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