



■ Features

- Universal AC input / Full range
- 2 pole USA plug
- Medical safety approved (2 × MOPP between primary to secondary)
- Suitable for BF application with appropriate system consideration
- Low leakage current <math><50\mu A</math>
- No load power consumption <math><0.1W</math>
- Energy efficiency Level VI (except 5~9V for Level V)
- Comply with EISA 2007/DoE and NRCan
- High efficiency up to 88%
- High operating temperature up to +60°C
- Class II power (without earth pin)
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- LED indicator for power on
- Optional lock type DC plug
- 100% full load burn-in test
- 3 years warranty

■ Applications

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

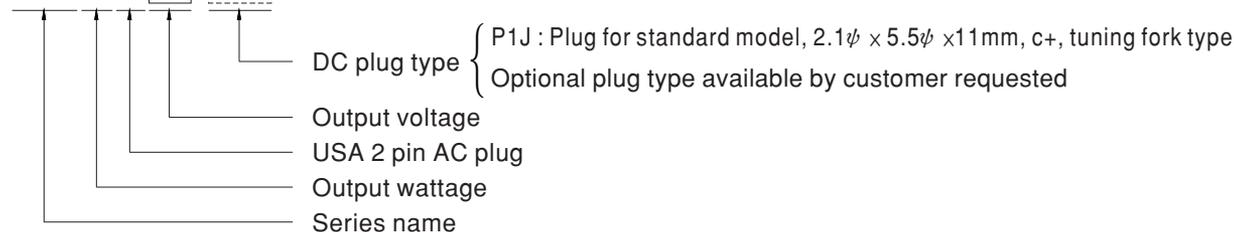
■ Description

GSM36U is a highly reliable, 36W wall-mounted style single-output green medical adaptor series. This product is equipped with a 2-pin (no FG) standard USA AC 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 (<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, GSM36U is compliant with USA EISA 2007/DoE and Canada NRCan; 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. GSM36U is approved with the international medical safety certificates.

■ Model Encoding

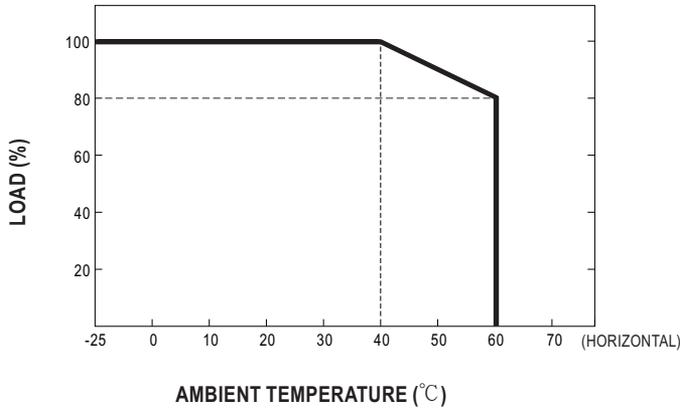
GSM36U 05 -P1J



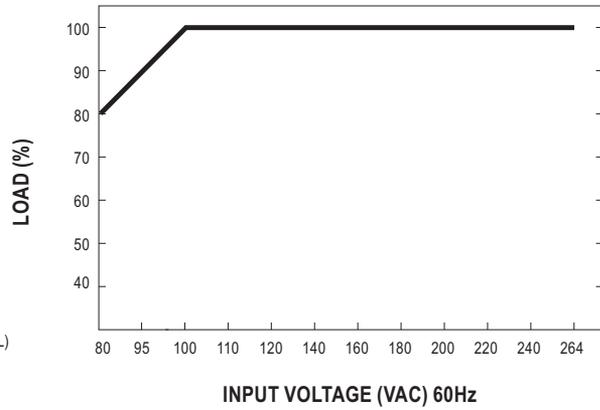
SPECIFICATION

ORDER NO.	GSM36U05-P1J	GSM36U07-P1J	GSM36U09-P1J	GSM36U12-P1J	GSM36U15-P1J	GSM36U18-P1J	GSM36U24-P1J	GSM36U48-P1J		
OUTPUT	SAFETY MODEL NO.	GSM36U05	GSM36U07	GSM36U09	GSM36U12	GSM36U15	GSM36U18	GSM36U24	GSM36U48	
	DC VOLTAGE <small>Note.2</small>	5V	7.5V	9V	12V	15V	18V	24V	48V	
	RATED CURRENT	4.5A	4.32A	4A	3A	2.4A	2A	1.5A	0.75A	
	CURRENT RANGE	0 ~ 4.5A	0 ~ 4.32A	0 ~ 4A	0 ~ 3A	0 ~ 2.4A	0 ~ 2A	0 ~ 1.5A	0 ~ 0.75A	
	RATED POWER (max.)	22.5W	32.4W	36W	36W	36W	36W	36W	36W	
	RIPPLE & NOISE (max.) <small>Note.3</small>	80mVp-p	80mVp-p	80mVp-p	120mVp-p	120mVp-p	150mVp-p	180mVp-p	240mVp-p	
	VOLTAGE TOLERANCE <small>Note.4</small>	±6.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%	
	LINE REGULATION <small>Note.5</small>	±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 <small>Note.6</small>	500ms, 30ms / 230VAC 1000ms, 30ms / 115VAC at full load								
HOLD UP TIME (Typ.)	16ms / 230VAC 16ms / 115VAC at full load									
INPUT	VOLTAGE RANGE <small>Note.7</small>	80 ~ 264VAC 113 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	80%	83%	84%	86%	87%	87%	87%	88%	
	AC CURRENT (Typ.)	0.9A / 115VAC		0.45A / 230VAC						
	INRUSH CURRENT (Typ.)	55A / 230VAC		30A / 115VAC						
	LEAKAGE CURRENT(max.)	Touch current < 50 μ 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°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. 8)	SAFETY STANDARDS	ANSI/AAMI ES60601-1, ES60601-1-11, EAC TP TC 004 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 FCC PART 15 class B								
OTHERS	MTBF	657.4K hrs min. MIL-HDBK-217F(25°C)								
	DIMENSION	79*54*33mm (L*W*H)								
	PACKING	215g ; 60pcs / 13.9Kg / CARTON								
CONNECTOR	PLUG	See page 3 ; Other type available by customer requested								
	CABLE	See page 3 ; Other type available by customer requested								
NOTE	<ol style="list-style-type: none"> All parameters are specified at 115VAC 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. Derating may be needed under low input voltage. Please check the derating curve for more details. 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." 									

■ Derating Curve

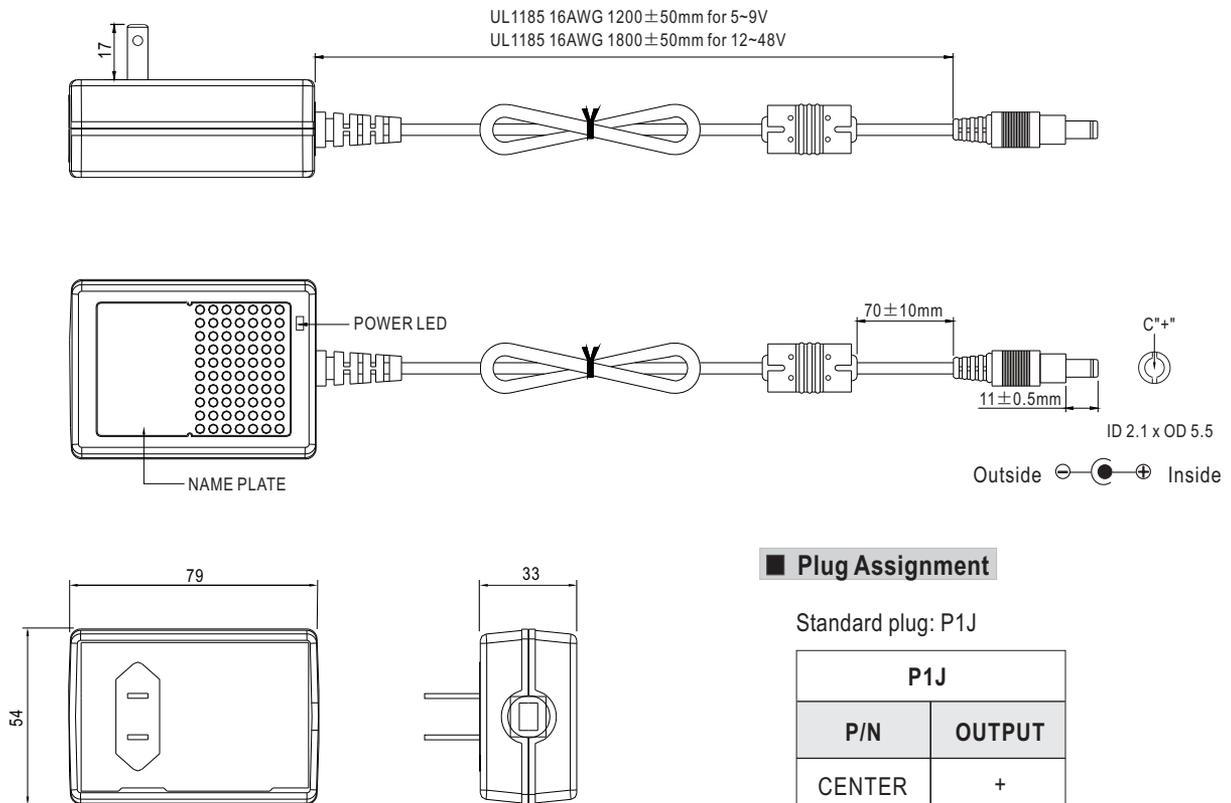


■ Static Characteristics



■ Mechanical Specification

Unit:mm



■ Plug Assignment

Standard plug: P1J

P1J	
P/N	OUTPUT
CENTER	+

Optional lock type plug: P2S

SWITCHCRAFT S761K plug equivalent