



■ Features

- 2 pole USA AC plug, Class II power unit
- Medical safety approved (2 x MOPP) according to ANSI/AAMI ES60601-1
- Extremely low leakage current
- No load power consumption < 0.3W
- **Energy efficiency Level V**
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Various DC plug quick adaptor accessories available. Contact TRC Electronics for details.
- 3 years warranty

■ Applications

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

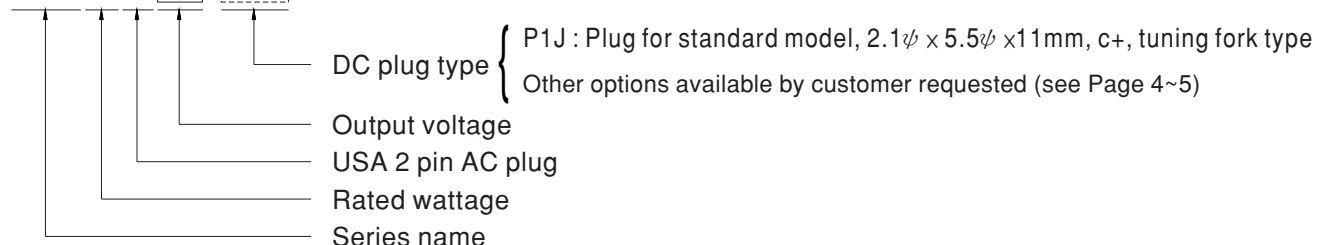
■ Description

GSM06U is a highly reliable, 6W 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 85VAC to 264VAC. The entire series supplies different output voltages between 5VDC and 24VDC 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 82% and the extreme low no-load power consumption below 0.3W. GSM06U is compliant with USA EISA 2007. 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. GSM06U is approved with the international medical safety certificates.

■ Model Encoding

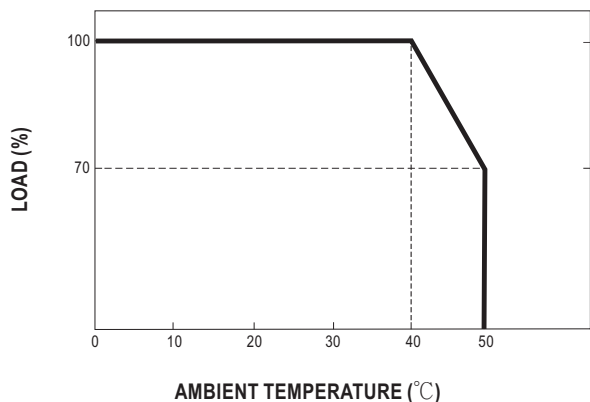
GSM06 U 05 -P1J



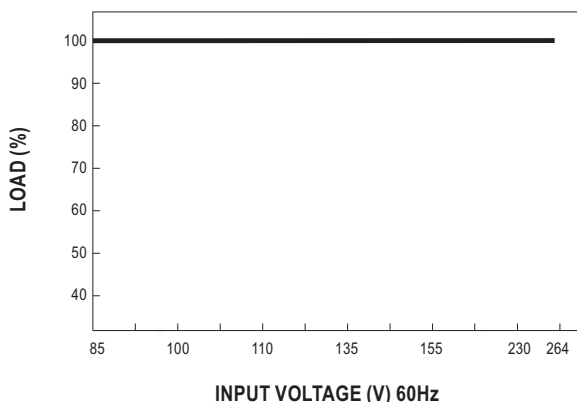
SPECIFICATION

ORDER NO.		GSM06U05-P1J	GSM06U06-P1J	GSM06U07-P1J	GSM06U09-P1J	GSM06U12-P1J	GSM06U15-P1J	GSM06U18-P1J	GSM06U24-P1J	
OUTPUT	SAFETY MODEL NO.	GSM06U05	GSM06U06	GSM06U07	GSM06U09	GSM06U12	GSM06U15	GSM06U18	GSM06U24	
	DC VOLTAGE Note.2	5V	6V	7.5V	9V	12V	15V	18V	24V	
	RATED CURRENT	1.2A	1.0A	0.8A	0.66A	0.5A	0.4A	0.33A	0.25A	
	CURRENT RANGE	0 ~ 1.2A	0 ~ 1.0A	0 ~ 0.8A	0 ~ 0.66A	0 ~ 0.5A	0 ~ 0.4A	0 ~ 0.33A	0 ~ 0.25A	
	RATED POWER	6W	6W	6W	6W	6W	6W	6W	6W	
	RIPPLE & NOISE (max.) Note.3	50mVp-p	50mVp-p	80mVp-p	80mVp-p	100mVp-p	120mVp-p	150mVp-p	180mVp-p	
	VOLTAGE TOLERANCE Note.4	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	±4.0%	
	LINE REGULATION Note.5	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION Note.6	±5.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	
SETUP, RISE, HOLD UP TIME	1000ms, 50ms, 12ms at full load									
INPUT	VOLTAGE RANGE	85 ~ 264VAC		120 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	68%	74%	74%	76%	77%	79%	80%	82%	
	AC CURRENT	0.18A / 100VAC								
	INRUSH CURRENT (max.)	Cold start 15A / 115VAC			30A / 230VAC					
LEAKAGE CURRENT(max.)	Touch current < 50µA/264VAC									
PROTECTION	OVERLOAD	>105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	>120% rated output voltage Protection type : Clamp by zener diode								
ENVIRONMENT	WORKING TEMP.	0 ~ +50°C (Refer to "Derating Curve")								
	WORKING HUMIDITY	20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH non-condensing								
	TEMP. COEFFICIENT	±0.04% / °C (0 ~ 40°C)								
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes									
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	ANSI/AAMI ES60601-1(3.1 version),CAN/CSA-C22 NO. 60601-1 3rd edition, EAC TP TC 004 approved								
	WITHSTAND VOLTAGE	I/P-O/P:5656VDC								
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH								
	EMC EMISSION	Parameter	Standard						Test Level / Note	
Conducted emission		FCC PART 15 & 18 / CISPR22, CAN ICES-3(B)/NMB-3(B)						Class B		
Radiated emission	FCC PART 15 & 18 / CISPR22, CAN ICES-3(B)/NMB-3(B)						Class B			
OTHERS	MTBF	500Khrs min. MIL-HDBK-217F(25°C)								
	DIMENSION	32*66*42.5mm (L*W*H)								
	PACKING	100g; 110pcs/12Kg/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	<p>1.All parameters are specified at 115VAC input, rated load, 25°C 70% RH ambient.</p> <p>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.</p> <p>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf & 47µf capacitor.</p> <p>4.Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>5.Line regulation is measured from low line to high line at rated load.</p> <p>6.Load regulation is measured from 10% to 100% rated load.</p> <p>7.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."</p>									

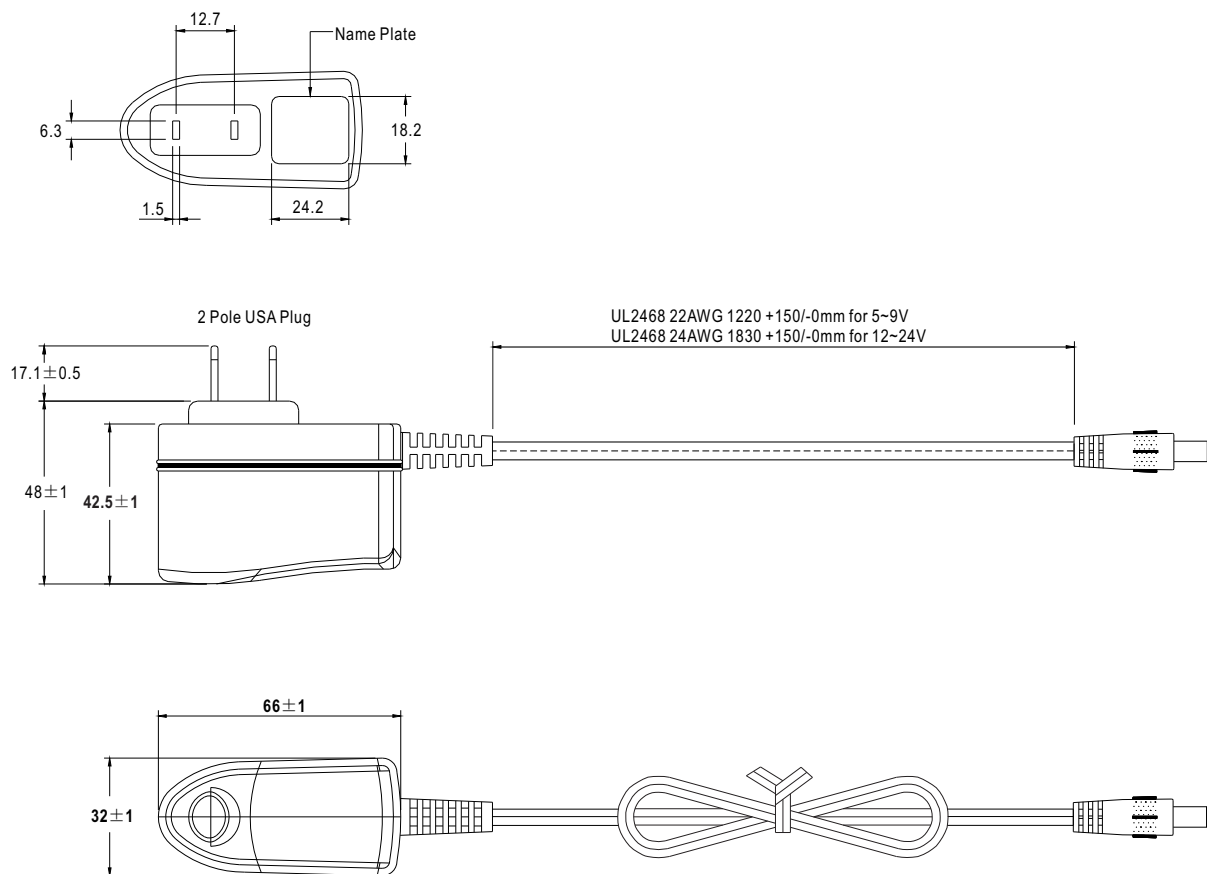
■ Derating Curve



■ Static Characteristics






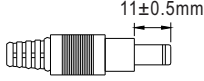


■ Mechanical Specification



■ DC output plug

◎ Standard plug: P1J

Unit:mm

P1J		Pin Assignment
		
		Outside  Inside 



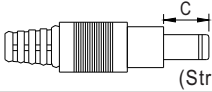


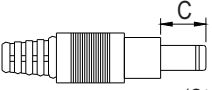


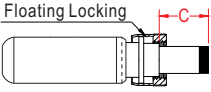


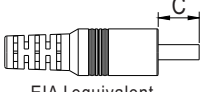
◎ DC plug changeable through:

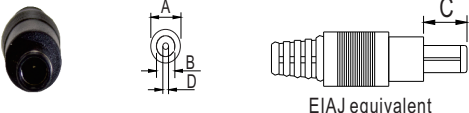
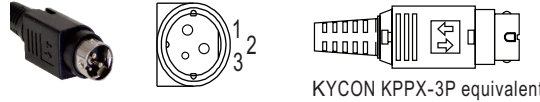
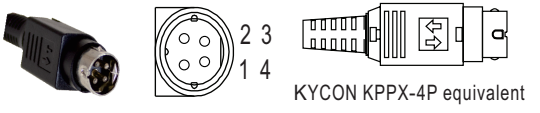
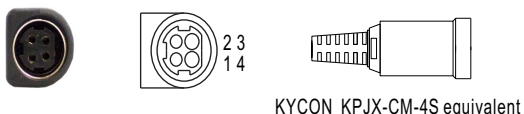
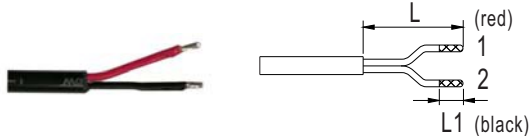
- (1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- (2) Quick adapter accessory (sold separately without MOQ)

Please refer to below table : Example quick adapter accessory:



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

Tuning Fork Style		Type No.	A OD	B ID	C L	Quick Adapter Accessory	
		 (Straight)	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 OD	B ID	C L	None	
		 (Straight)	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			
	P2MR	5.5	2.5	11.0			
Lock Style		Type No.	A OD	B ID	C L		None
		 Floating Locking SWITCHCRAFT original or equivalent	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	
Min. Pin Style		Type No.	A OD	B ID	C L	Available (Current rating: 5A max.)	
		 EIAJ equivalent	P3A	2.35	0.7		11.0
			P3B	4.0	1.7		11.0
			P3C	4.75	1.7	11.0	

Center Pin Style	Type No.	A	B	C	D	Quick Adapter Accessory
		OD	ID	L	Center Pin	
 <p>EIAJ equivalent</p>	P4A	5.5	3.4	11.0	1.0	Available (Current rating: 7.5A max.)
	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.)
 <p>KYCON KPPX-3P equivalent</p>	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.)
 <p>KYCON KPPX-4P equivalent</p>	R7B	PIN No.		Output		
		1		+Vo		
		2		-Vo		
		3		-Vo		
4		+Vo				
Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment				None
 <p>KYCON KPJX-CM-4S equivalent</p>	R7BF	PIN No.		Output		
		1		+Vo		
		2		-Vo		
		3		-Vo		
4		+Vo				
Stripped and tinned leads	Type No.	Pin Assignment				None
 <p>Length of Land L1 by request (MW's standard length, L: <u>.25</u>_mm, L1: <u>.10</u>_mm)</p>	by customer	PIN No.		Output		
		1		+Vo		
2		-Vo				