



■ Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- High efficiency up to 91%
- Low leakage current <100 $\mu$  A
- Protections: Short circuit / Overload / Over voltage/ Over temperature
- Fully enclosed plastic case
- Medical safety approved (2xMOPP between primary to secondary)
- Class 1 power (with earth pin)
- LED indicator for power on
- No load power consumption<0.1W
- ErP step2 compliant (level 1)
- Meet EISA 2007 (Energy Independence and Security Act)
- Optional lock type DC plug
- 3 years warranty

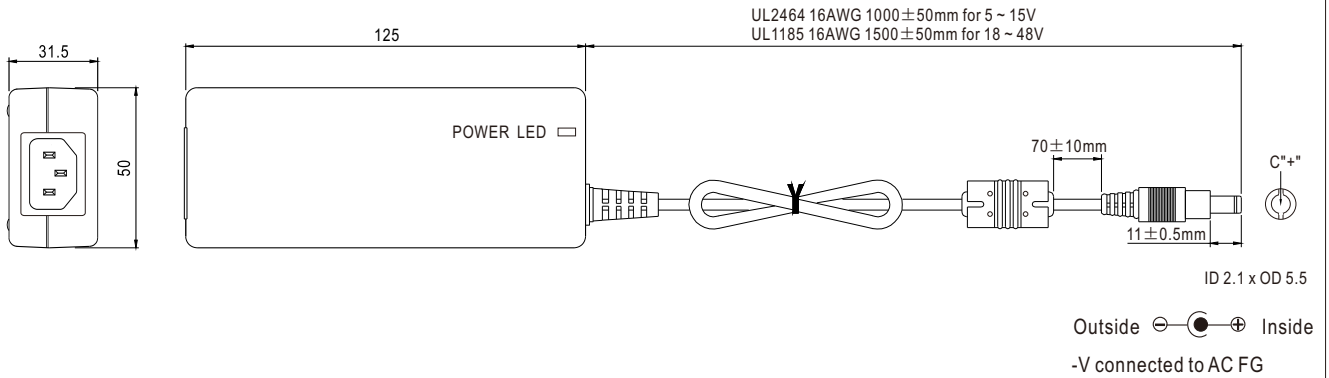


**SPECIFICATION**

ORDER NO.	GSM60A05-P1J	GSM60A07-P1J	GSM60A09-P1J	GSM60A12-P1J	GSM60A15-P1J	GSM60A18-P1J	GSM60A24-P1J	GSM60A48-P1J	
OUTPUT	SAFETY MODEL NO.	GSM60A05	GSM60A07	GSM60A09	GSM60A12	GSM60A15	GSM60A18	GSM60A24	GSM60A48
	DC VOLTAGE <small>Note.2</small>	5V	7.5V	9V	12V	15V	18V	24V	48V
	RATED CURRENT	6A	6A	6A	5A	4A	3.33A	2.5A	1.25A
	CURRENT RANGE	0.1 ~ 6A	0.1 ~ 6A	0.1 ~ 6A	0.1 ~ 5A	0.1 ~ 4A	0.1 ~ 3.33A	0.1 ~ 2.5A	0.1 ~ 1.25A
	RATED POWER (max.)	30W	45W	54W	60W	60W	60W	60W	60W
	RIPPLE & NOISE (max.) <small>Note.3</small>	100mVp-p	100mVp-p	100mVp-p	100mVp-p	100mVp-p	150mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±3.0%	±2.5%
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±3.0%	±2.5%
	SETUP, RISE TIME <small>Note.6</small>	1000ms, 30ms / 230VAC      1500ms, 30ms / 115VAC at full load							
HOLD UP TIME (Typ.)	50ms / 230VAC      15ms / 115VAC at full load								
INPUT	VOLTAGE RANGE	80 ~ 264VAC    113 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	81.5%	86%	87.5%	88%	88.5%	89%	90%	91%
	AC CURRENT (Typ.)	1.4A / 115VAC    1A / 230VAC							
	INRUSH CURRENT (Typ.)	65A / 230VAC    30A/115VAC							
	LEAKAGE CURRENT(max.)	Earth leakage current < 100 $\mu$ A/264VAC , Touch current < 100 $\mu$ A/264VAC							
PROTECTION	OVERLOAD	105 ~ 160% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5.25 ~ 6.75V	7.88 ~ 10.13V	9.45 ~ 12.15V	12.6 ~ 16.2V	15.75 ~ 20.25V	18.9 ~ 24.3V	25.2 ~ 32.4V	50.4 ~ 64.8V
		Protection type : Shut down o/p voltage, re-power on to recover							
	OVER TEMPERATURE	RTH2 > 70 $^{\circ}$ C Protection type : Shut down o/p voltage, re-power on to recover							
ENVIRONMENT	WORKING TEMP.	-30 ~ +60 $^{\circ}$ C (Refer to "Derating Curve")							
	WORKING HUMIDITY	20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85 $^{\circ}$ C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03% / $^{\circ}$ C (0 ~ 50 $^{\circ}$ C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC (Note. 6)	SAFETY STANDARDS	ANSI/AAMI ES60601-1 , TUV EN60601-1 approved							
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC    I/P-FG:2KVAC    O/P-FG:SHORT							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25 $^{\circ}$ C / 70% RH							
	EMC EMISSION	Compliance to EN55011(CISPR11) class B, EN61000-3-2,3, FCC PART 15 class B							
	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	720K hrs min. MIL-HDBK-217F(25 $^{\circ}$ C )							
	DIMENSION	125*50*31.5mm (L*W*H)							
	PACKING	0.32Kg; 40pcs/    13.8Kg/1.05CUFT							
CONNECTOR	PLUG	Standard type P1J: 2.1 $\phi$ * 5.5 $\phi$ * 11mm, tuning fork type, center positive for stock ; Other type available by customer requested							
	CABLE	See page 2 ; 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 0.1uf &amp; 47uf 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>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.</li> </ol>								

## Mechanical Specification

Case No. GS60A Unit:mm



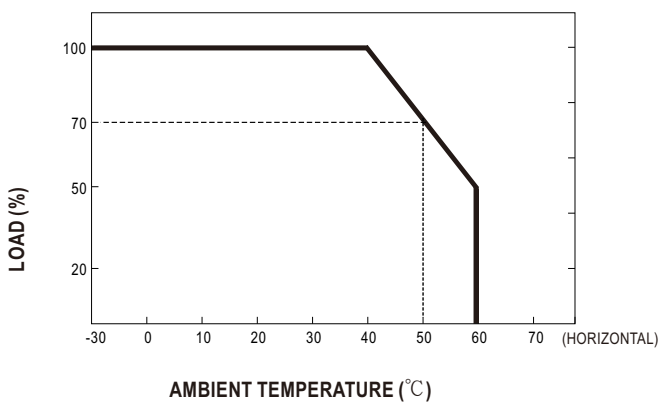
## Plug Assignment

- Standard plug: P1J

P1J	
P/N	OUTPUT
CENTER	+

- Optional lock type plug: P2S  
 SWITCHCRAFT S761K plug equivalent

## Derating Curve



## Static Characteristics

