

PA-60-48-US

**60 Watt External switching power supply.
Power Adapter for LNP, LMP & IMP Series
using US Plug**

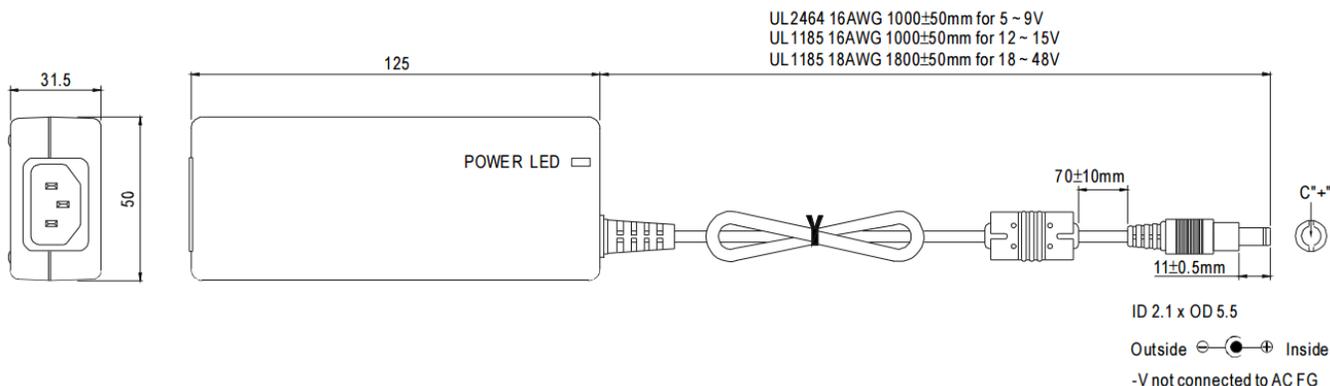


Features

- ▶ Universal AC input / Full range
- ▶ 3 pole AC inlet IEC320-C14
- ▶ Pass LPS
- ▶ Protections: Short circuit / Overload / Over voltage / Over temperature
- ▶ Fully enclosed plastic case
- ▶ Approvals: UL / CUL / PSE / TUV / BSMI / CCC / CB / FCC / CE
- ▶ Class I power (with earth pin)
- ▶ No load power consumption < 0.3W
- ▶ Erp step 2 Compliant (level V)
- ▶ NRCan compliant
- ▶ MEPS compliant
- ▶ NRCan compliant
- ▶ Meet EISA 2007 (Energy Independence and Security Act)
- ▶ 2-Year Warranty



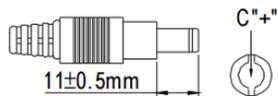
DIMENSIONS



Plug Assignment

Standard plug: P1J

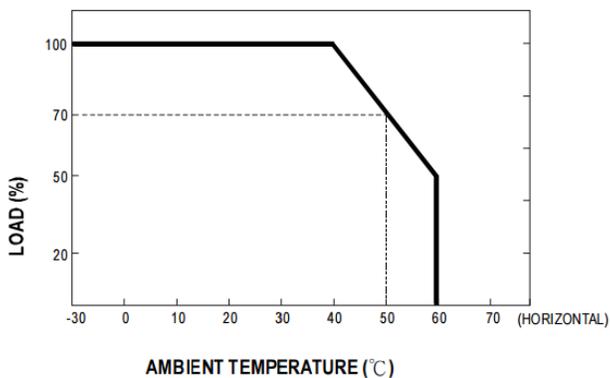
P1J	
P/N	OUTPUT
CENTER	+



ID 2.1 x OD 5.5

Outside ⊖ ⊕ Inside
 -V not connected to AC FG

Output Derating Curve



SPECIFICATIONS

ORDER NO.	GS60A05-P1J	GS60A07-P1J	GS60A09-P1J	GS60A12-P1J	GS60A15-P1J	GS60A18-P1J	GS60A24-P1J	GS60A48-P1J	
OUTPUT	SAFETY MODEL NO.	GS60A05	GS60A07	GS60A09	GS60A12	GS60A15	GS60A18	GS60A24	GS60A48
	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 ~ 6A	0 ~ 6A	0 ~ 6A	0 ~ 5A	0 ~ 4A	0 ~ 3.33A	0 ~ 2.5A	0 ~ 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.7</small>	1000ms, 30ms / 230VAC 1000ms, 30ms / 115VAC at full load							
HOLD UP TIME (Typ.)	50ms / 230VAC 15ms / 115VAC at full load								
INPUT	VOLTAGE RANGE	90 ~ 264VAC 135 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	81%	85.5%	87.5%	88%	88.5%	88.5%	90%	92%
	AC CURRENT (Typ.)	1.4A / 115VAC 1A / 230VAC							
	INRUSH CURRENT (max.)	65A / 230VAC							
	LEAKAGE CURRENT(max.)	0.75mA / 240VAC							
PROTECTION	OVERLOAD	105 ~ 150% 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
	OVER TEMPERATURE	RTH2 > 70°C Protection type : Shut down o/p voltage, re-power on to recover							
ENVIRONMENT	WORKING TEMP.	-30 ~ +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 <small>(Note. 6)</small>	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, BSMI CNS14336, CCC GB4943, J60950-1(except for 48V) approved							
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH							
	EMC EMISSION	Compliance to EN55022 class B, EN61000-3-2,3, FCC PART 15 / CISPR22 class B, CNS13438 class B, GB9254, GB17625.1							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A							
OTHERS	MTBF	711K hrs min. MIL-HDBK-217F(25°C)							
	DIMENSION	125*50*31.5mm (L*W*H)							
	PACKING	0.305Kg; 40pcs/13.02Kg/1.05CUFT							
CONNECTOR	PLUG	Standard type P1J: 2.1φ * 5.5φ * 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"> 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. 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. 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. 								

ORDERING INFO

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