

# **Model: GP-LS050P Series**

#### **■** Features

- Universal AC Input 100~277VAC.
- Constant Voltage / Constant Current Operation.
- Suitable for LED Lighting Applications.
- Built-in PFC Function.
- Protections: OCP / SCP / OTP.
- IP67 Level Design for Indoor or Outdoor Installations.
- Cooling by Free Air Convection.

## **■** Approvals





#### ■ Size

176 x 68 x 39 mm (L x W x H)



## **■** Specifications

Model No.		GP-LS050P-12	GP-LS050P-24	GP-LS050P-36	GP-LS050P-48
Output	DC Voltage Range Note.2	8~12V	18~24V	25~36V	33~48V
	Rated Current	4.2A	2.1	1.4A	1.05A
	Current Tolerance	±5%	±5%	±5%	±5%
	Rated Power	50W	50W	50W	50W
	Ripple & Noise(Max.) Note.3	2.5V	3V	4V	4V
	Efficiency at 230Vac(Typ.)	82%	85%	87%	87%
	Voltage Tolerance Note.4	5%	5%	5%	5%
Input	Voltage Range	90 ~ 300VAC / 127 ~ 424VDC			
	Frequency Range	47 Hz ~ 63 Hz			
	AC Current (Max.)	2A at 115VAC / 1A at 230VAC			
	Power Factor	>0.98 at 115VAC / $\geq$ 0.94 at 230VAC at full load. $\geq$ 0.9 at 70% load.			
	Inrush Current (Max.)	65A at 230VAC (COLD STAR)			
	Leakage Current	<0.5mA / 240VAC			
Protections	Over Current	95~108% rated current. Type: Constant current limit and recovers after fault condition disappeared.			
	Short Circuit	Type: Hiccup mode & recovers after fault condition disappeared.			
	Over Temperature	Tcase: 95°C ±10°C  Type: Hiccup mode & recovers after fault condition disappeared.			
Environment	Operation Temp.	$-20 \sim 50^{\circ}\text{C}$ at Full Load, $70^{\circ}\text{C}$ at $60\%$ Load (Refer to output load derating curve)			
	Operation Humidity	20% ~ 90% RH non-condensing.			
	Storage Temp.	-40 ~ +80°C			
	Storage Humidity	10% ~ 90% RH			
	Vibration	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.			





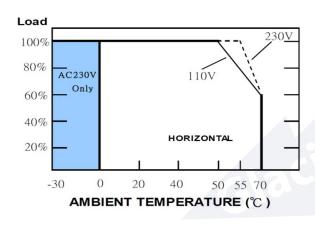


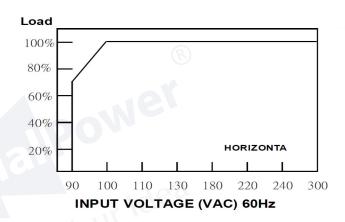




Safety & EMC	Safety Standards	UL8750,,EN61347-1,EN61347-2-13 ,IP67	
	Withstand Voltage	I/P-O/P: 3.75KVAC I/P-FG:1.88KVAC O/P-FG:0.5KVAC	
	Isolation Resistance	I/P - O/P, I/P - FG : 100M ohms / 500VDC at 25°C	
	EMI Conduction & Radiation	Compliance to EN55015,FCC part 18	
	Harmonic Current	Compliance to EN61000-3-2 Class C (≥75% Load),EN61000-3-3	
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11 Light industry level, criteria A	
	MTBF	300K hours min.MIL-HDBK-217F(25°C)	
Others	Dimension(L x W x H)	176 x 68 x 39 mm; 816.4g/pcs	
Note	<ol> <li>All specifications not specially mentioned are measured at 230VAC and 25°C ambient temperature.</li> <li>The range is for constant current application.</li> <li>Ripple &amp; Noise are measured at 20MHz bandwidth by using a 12" twisted pair-wire terminated with 0.1uf &amp; 47uf parallel capacitor.</li> <li>Voltage Tolerance: includes line regulation, load regulation and set-up tolerance.</li> </ol>		

## **■** Derating Curve





## **■** Mechanical Specification

