

# **Model: GP-LS100P Series**

#### **Features**

- Universal AC Input 90~305VAC.
- Constant Voltage / Constant Current Operation.
- Suitable for High Brightness Light-Emitting Diode Products.
- Built-in PFC Function.
- Protections: OVP / OCP / SCP / OTP.
- IP67 Design For Indoor or Outdoor Installations.
- Cooling by Free Air Convection.

### **Approvals**





#### <u>Size</u>

222 \* 68 \* 39 mm (L\*W\*H)



### **Specifications**

Model No.		GP-LS100P-12	GP-LS100P-15	GP-LS100P-24	GP-LS100P-30	GP-LS100P-36	GP-LS100P-48	GP-LS100P-57	
Output	DC Voltage	12V	15V	24V	30V	36V	48V	57V	
	Constant Current Region Note.4	9 ~ 12V	10 ~ 15V	14 ~ 24V	22 ~ 30V	26 ~ 36V	34 ~ 48V	43-57V	
	Rated Current	8.3A	6.6A	4.2A	3.3A	2.8A	2.1A	1.75A	
	Current Tolerance	± 5%							
	Rated Power	99.6W	99W	100.8W	99W	100.8W	100.8W	99.7W	
	Ripple & Noise (Max.) Note.2	150mV	150mV	150mV	150mV	150mV	200mV	240mV	
	Efficiency at 230V AC(Typ.)	88%	88%	90%	90%	90%	90.5%	90.5%	
	Voltage Tolerance Note.3	-1%~5%	-1%~5%	-1%~5%	-1%~5%	-1%~5%	-1%~5%	-1%~5%	
	Set up time Max.)	0.7s / 230VAC, 1.5s / 115VAC, at full load.							
Input	Voltage Range	90 ~ 305VAC / 127 ~ 430VDC							
	Frequency Range	47 Hz ~ 63 Hz							
	AC Current (Max.)	1.4A at 115VAC / 0.7A at 230VAC							
	Power Factor	>0.98 at 115VAC / >0.95 at 230VAC at full load. PF≥0.9 at 75% load							
	Inrush Current (Max.)	COLD START 50A at 230VAC							
	Leakage Current	<0.75mA / 240VAC							
Protections	Over Current	95~105% rated current.  Type: Auto-recovery after fault condition disappeared.							
	Short Circuit	Type: Hiccup mode & recovers after fault condition disappeared.							
	Over Voltage	13.5~17V	17~21V	28~34V	34~41V	41~49V	53~65V	63-76V	
		Type: Latch mode (re-power on to recover).							
	Over Temperature	Tcase: 95°C ± 10°C							
		Type: Shutdown mode (re-power on to recover).							









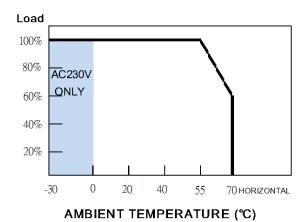


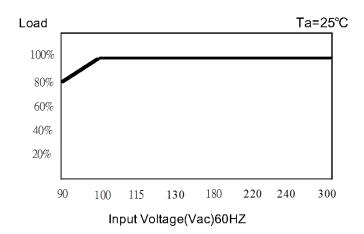


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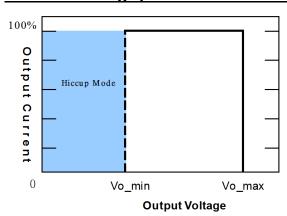
Environment	Operation Temp. Note.5	-30°C ~70°C (Refer to output load derating curve)			
	Operation Humidity	20% ~ 90% RH non-condensing.			
	Storage Temp.	-40 ~ +80°C			
	Storage Humidity	10% ~ 90% RH			
	Vibration	10~500 Hz, 2G 10 min./1 cycle, period for 60 min. each along X, Y, Z axes.			
Safety & EMC	Safety Standards	UL8750 (except 15V/57V), EN61347-1,EN61347-2-13 ,independent;IP67 Approved.			
	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,O/P-FG:100M ohms / 500VDC at 25°C			
	EMI Conduction & Radiation	Compliance to EN55015,FCC part 15			
	Harmonic Current	Compliance to EN61000-3-2 Class C(≥75% load),EN61000-3-3			
	EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,11;EN61547, Light industry level, criteria A			
Others	MTBF	250K hours min. MIL-HDBK-217F(25°C)			
	Dimension(L x W x H)	222 x 68 x 39mm; 1024g/pcs			
Note	<ol> <li>All specifications not specially mentioned are measured at 230VAC and 25°C ambient temperature.</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> <li>Constant current operation region is within 75%~100% rated output voltage. This is the suitable operation region for LED related applications, but please reconfirm special electrical requirements for some specific system design.</li> <li>Please refer to derating curve.</li> </ol>				

#### **Derating Curve**





### **Constant Voltage / Constant Current Curve**



Note: The output current will return to 100% after the AC voltage is removed for a while and ON again.













## **Mechanical Specification**

