

# LPV-100 Series

100W Single Output Switching Power Supply



## Features

- Constant Voltage Design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Cooling by free air convection
- Protections: Short Circuit / Over Load/ Over voltage
- Fully encapsulated with IP67 level
- Fully isolated plastic case
- Suitable for LED lighting and moving sign applications
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty



## Specification

INPUT	Voltage	90 ~ 264VAC 127 ~ 370VAC						
	Frequency	47 ~ 63 Hz						
	AC current	2.2A/115VAC 1.2A/230VAC						
	Inrush Current (Typ.)	Cold start 75A (twidh=700µs measured at 50% Ipeak) at 230VAC						
	Max. No of PSUs on 16A Circuit Breaker	2 units (circuit breaker of type B) / 3 units (circuit breaker of type C) at 230VAC						
	Leakage current	<0.25mA/240VAC						
	OUTPUT	MODEL No.	LPV-100-5	LPV-100-12	LPV-100-15	LPV100-24	LPV-100-36	LPV-100-48
DC Voltage		5V	12V	15V	24V	36V	48V	
Rated current		12A	8.5A	6.7A	4.2A	2.8A	2.1A	
Current Range		0 ~ 12A	0 ~ 8.5A	0 ~ 6.7A	0 ~ 4.2A	0 ~ 2.8A	0 ~ 2.1A	
Rated Power		60W	102W	100.5W	100.8W	100.8W	100.8W	
R&N		80mVp-p	120mVp-p	120mVp-p	150mVp-p	150mVp-p	150mVp-p	
Efficiency		80%	85%	87%	88%	88%	89%	
Voltage Tolerance		±8.0%	±5.0%	±5.0%	±5.0%	±5.0%	±5.0%	
Line Regulation		±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
Load Regulation		±6.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	
Set up, Rise Time		2000ms, 25ms/230VAC 2000ms, 25ms/115VAC						
Hold Up Time		50ms/230VAC 14ms/115VAC at full load						
PROTECTION		Overload	110 ~ 150% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed					
		Over Voltage	5.75 ~ 6.75V 13.8 ~ 16.2V 17.25 ~ 20.25V 27.6 ~ 32.4V 41.4 ~ 48.6V 55.2 ~ 64.8V Protection Type: Shut off o/p voltage, re-power on to recover					
ENVIRONMENT	Working Temperature	-25 ~ +70°C (Please refer to 'Derating Curve' section)						
	Working Humidity	20 ~ 90% RH non-condensing						
	Storage Temp., Humidity	-40 ~ +80°C, 10 ~ 95% RH						
	Temp Coefficient	±0.0.3%/°C (0 ~ 50°C)						
	Vibration	10 ~ 500Hz, 2G 10 min./1cycle, period for 60 min. each along X, Y, Z axes						
SAFETY & EMC	Safety Standards	UL8750,CSA C22.2 No 250.13-12,UL879,CSA C22.2 No.207-M89,IP67 approved. Design refer to EN60950-1						
	Withstand voltage	I/P-O/P:3KVAC						
	Isolation Resistance	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH						
	EMC Emission	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2 Class A(≠80% load), EN61000-3-3, EAC TP TC 020						
OTHERS	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN55024, light industry level, criteria A, EAC TP TC 020						
	M.T.B.F.	703Khrs min. MIL-HDBK-217F (25°C)						
	Packing	0.63Kg; 20pcs/13.6Kg/0.55CUFT						

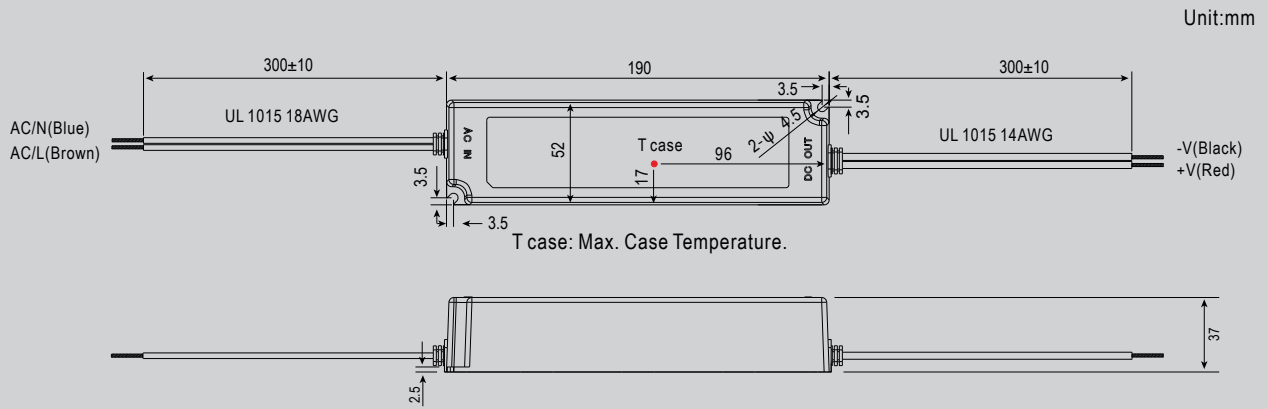
1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and Noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with 0.1µf & 47µf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Derating may be needed under low input voltages. Please check the derating curve for more details.
5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.
6. 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.
7. The unit might not be suitable for lighting applications in EU countries. Please check with your local authorities for the possible use of the unit.
8. Suitable for indoor use or outdoor use without direct sunlight exposure.

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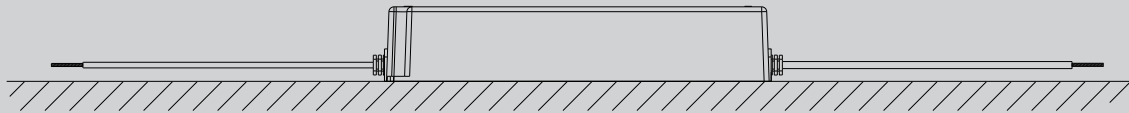
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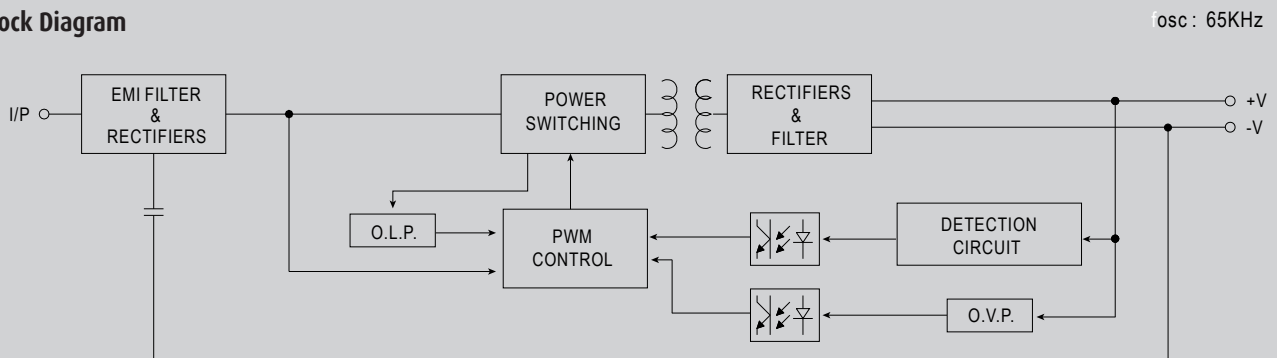
### Mechanical Diagram



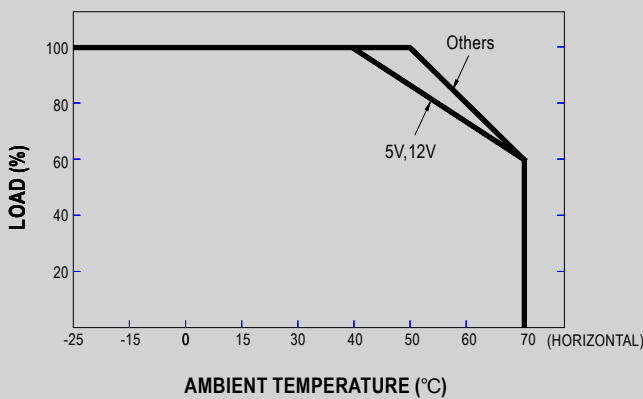
### Mounting Recommendation



### Block Diagram



### Derating Curve



### Static Characteristic

