



# MEAN WELL LPV-60 Series 60W Single Output Switching Power Supply User Manual

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60W Single Output Switching Power Supply  
LPV- 60 series  
User Manual



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## Features:

- Constant voltage design
- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Protections: Short circuit / Over load / Over voltage
- Cooling by free air convection
- Fully encapsulated with IP67 level (Note.7)
- Fully isolated plastic case
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- Suitable for LED-related fixtures or appliances (such as LED Decoration or Advertisement devices)(Note. 7)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty



[http://www.meanwell.com.cn/Upload/PDF/LED\\_EN.pdf](http://www.meanwell.com.cn/Upload/PDF/LED_EN.pdf)

## SPECIFICATION

MODEL		LPV-60-5	LPV-60-12	LPV-60-15	LPV-60-24	LPV-60-36	LPV-60-48
	DC VOLTAGE	5V	12V	15V	24V	36V	48V
	RATED CURRENT	8A	5A	4A	2.5A	1.67A	1.25A
	CURRENT RANGE	0 ~ 8A	0 ~ 5A	0 ~ 4A	0 ~ 2.5A	0 ~ 1.67A	0 ~ 1.25A
	RATED POWER	40W	60W	60W	60W	60W	60W

O U T P U T	RIPPLE & NOISE (max.) Note.2	80mVp-p	120mVp-p	120mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE TOLERANCE Note.3	±8.0%	±5.0%				
	LINE REGULATION	±1.0%					
	LOAD REGULATION	±6.0%	±2.0%				
	SETUP, RISE TIME Note.6	500ms, 20ms / 230VAC 500ms, 20ms / 115VAC at full load(for 5~36V) ; 500ms, 30ms / 230VAC 500ms, 30ms / 115VAC at full load(for 48V)					
	HOLD UP TIME (Typ.)	50ms/230VAC      16ms/115VAC at full load					
I N P U T	VOLTAGE RANGE Note.4	90 ~ 264VAC      127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz					
	EFFICIENCY (Typ.)	76%	83%	83%	86%	86%	86%
	AC CURRENT (Typ.)	1.2A/115VAC 1A/230VAC					
	INRUSH CURRENT(Typ.)	COLD START 60A(twidth=525µs measured at 50% Speak) at 230VAC					

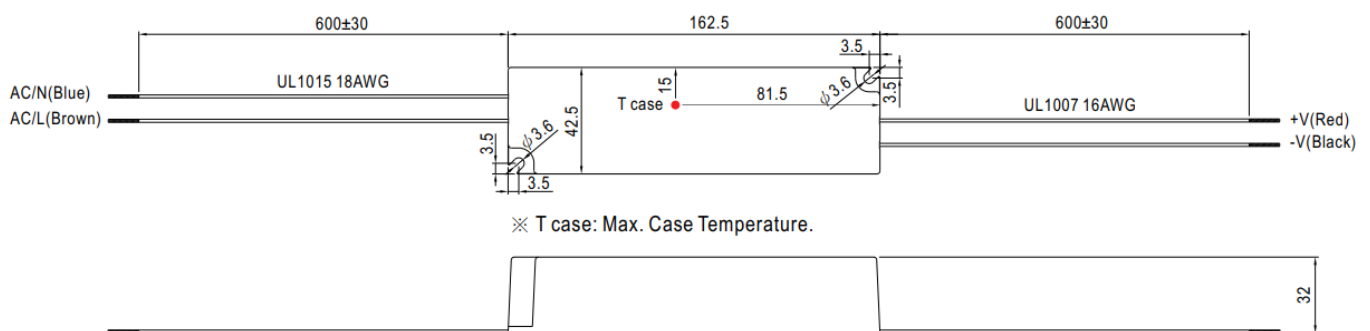
	<b>MAX. No. of PSUs on 16A CIRCUIT BREAKER</b>	3 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC					
	<b>LEAKAGE CURRENT</b>	0.25mA / 240VAC					
<b>PROTECTION</b>	<b>OVERLOAD</b>	110 ~ 150% rated output power					
		Protection type: Hiccup mode, recovers automatically after the fault condition is removed					
	<b>OVERVOLTAGE</b>	5.75 ~ 6.75 V	13.8 ~ 16.2 V	17.25 ~ 20.25V	27.6 ~ 32.4 V	41.4 ~ 48.6 V	55.2 ~ 64.8 V
		Protection type: Shut down o/p voltage, re-power on to recover					
<b>ENVIRONMENT</b>	<b>WORKING TEMP.</b>	-30 ~ +70°C (Refer to “Derating Curve”)					
	<b>WORKING HUMIDITY</b>	20 ~ 90% RH non-condensing					
	<b>STORAGE TEMP., HUMIDITY</b>	-40 ~ +80°C, 10 ~ 95% RH					
	<b>TEMP. COEFFICIENT</b>	±0.03%/°C (0 ~ 50°C)					
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, the period for 60min. each along X, Y, and Z axes					

SA FE TY & EM C	SAFETY STANDARDS	UL879(except for LPV-60-5), UL1310(except for LPV-60-5), CSA C22.2 No. 207-M89(except for LPV-60-5, LPV-60-48), CAN/CSA C22.2 No. 223-M91(except for LPV-60-5,LPV-60-48), BIS IS15885(for LPV-60-12,LPV-60-24 only), EAC TP TC 004, IP67, IEC62368-1 , BS EN/EN62368-1 approved
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2 Class A, BS EN/EN61000-3-3, EAC TP TC 020
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020
OT HE RS	MTBF	5188.4K hrs min. Telcordia SR-332 (Bellcore); 732.1Khrs min. MIL-HDBK-217F (25°C)
	DIMENSION	162.5*42.5*32mm (L*W*H)
	PACKING	0.4Kg; 32pcs/13.8Kg/0.63CUFT

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1. All parameters NOT specially mentioned are measured at 230VAC input, rated load, and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation, and load regulation.
4. Derating may be needed under low input voltage. Please check the static characteristics for more details.
5. The power supply is considered a component that will be operated in combination with the 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 an increase in the setup time.
7. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immersing in the water for over 30 minutes.
8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitudes higher than 2000m(6500ft).
9. Products sourced from the Americas regions may not have the TUV/BIS/CCC logo. Please contact your MEAN WELL sales for more information.
10. For any application note and IP waterproof function installation caution, please refer to our user manual before using.  
[https://www.meanwell.com/Upload/PDF/LED\\_EN.pdf](https://www.meanwell.com/Upload/PDF/LED_EN.pdf)
11. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NPF/XLG series are recommended.)  
※ Product Liability Disclaimer For detailed information, please refer to <https://www.meanwell.com/serviceDisclaimer.aspx>

## Mechanical Specification

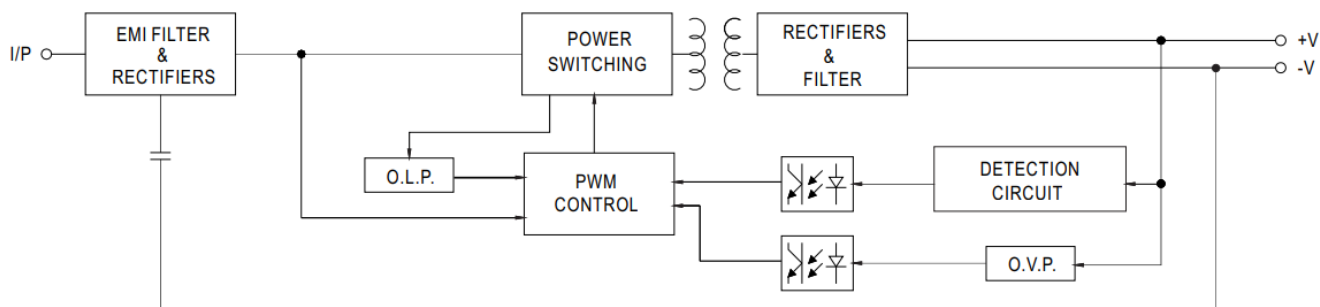


## Recommend Mounting Direction

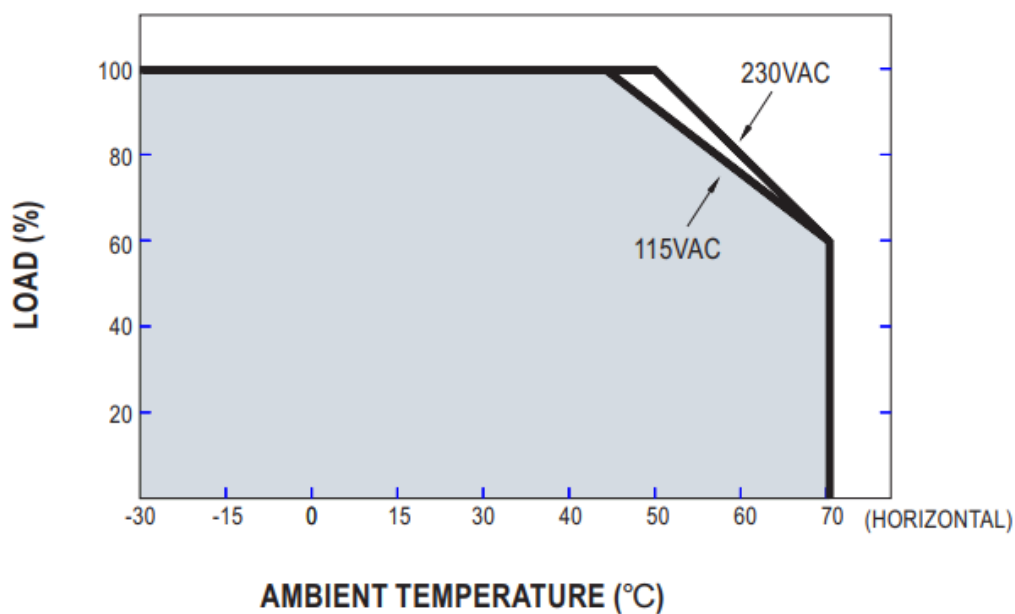


## Block Diagram

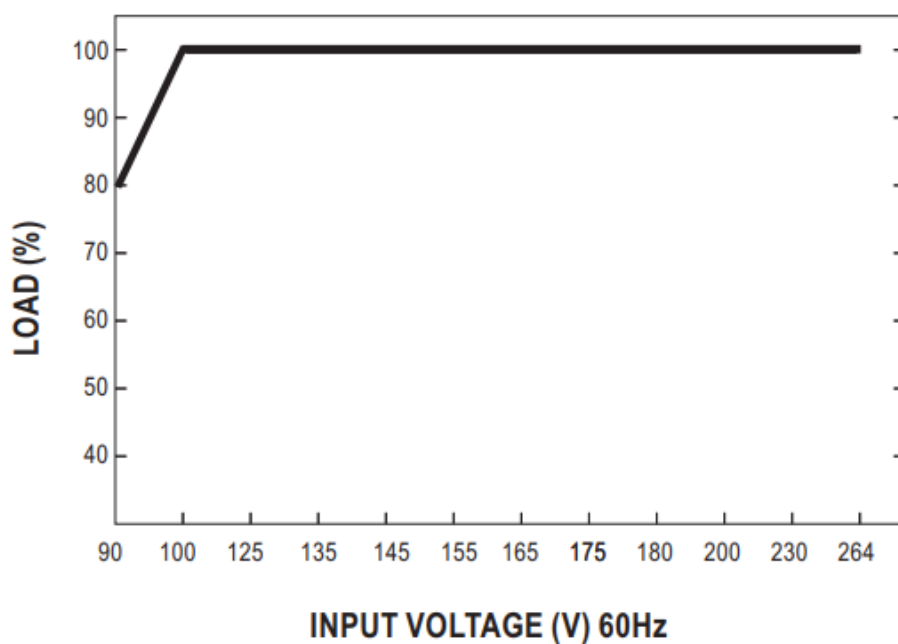
fosc: 65KHz



## Derating Curve



## Static Characteristics



## GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

