



# MW LPV-150 Series 150W Single Output Switching Power Supply User Guide

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## MW LPV-150 Series 150W Single Output Switching Power Supply



## Features

- Constant voltage design
- 90-132VAC input for LPVL-150 180-305VAC input for LPV-150
- Fully encapsulated with IP67 level (Note.7)
- Class II power unit, no FG
- Protections: Short circuit/Overload/Over voltage/Over temperature
- Fully isolated plastic case
- Fanless design, cooling by free air convection
- 100% full load burn-in test
- Low cost, high reliability
- Listed in UL Sign Component Manual (SAM)
- Type “HL” for use in class I, Division 2 hazardous (Classified) location luminaires for LPVL-150
- 2 years warranty

## Applications

- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices) (Note.10)

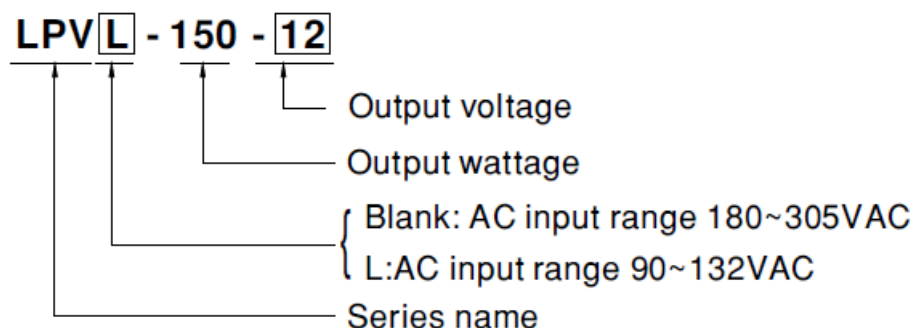
## GTIN CODE

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

## Description

LPV-150 and LPVL-150 are 150W single output power supplies that specifically and perfectly work for LED lighting and LED moving sign applications. As a class II power unit, these two series are housed with the UL 94V-0 rated flame retardant plastic enclosure. The IP67 design allows every model to fit the use at dry, damp and wet locations. Both series are constant voltage mode design that various models with 12V, 15V, 24V, 36V and 48V are offered for LPV-150 where as 12V and 24V are provided for LPVL-150.

## Model Encoding



## Specifications

MODEL		LPV-12-150	LPV-150-15	LPV-24-150	LPV-150-36	LPV-150-48
OUTPUT	DC VOLTAGE	12V	15V	24V	36V	48V
	RATED CURRENT	10A	8A	6.3A	4.2A	3.2A
	CURRENT RANGE	0 ~ 10A	0 ~ 8A	0 ~ 6.3A	0 ~ 4.2A	0 ~ 3.2A
	RATED POWER	120W	120W	151.2W	151.2W	153.6W
	RIPPLE & NOISE (max.) Note.2	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%				
	LINE REGULATION	±1.0%				
	LOAD REGULATION	±2.0%				
	SETUP, RISE TIME Note.6	LPV-150: 500ms, 50ms / 230VAC 500ms, 50ms / 277VAC; 100ms, 50ms / 115VAC LPVL-150: 15				

INPUT	<b>HOLD UP TIME (Typ.)</b>		LPV-150: 18ms/230VAC 20ms/277VAC at full load; LPVL-150: 10ms/115VAC at full load				
	<b>VOLTAGE RANGE</b> Note.4		LPV-150: 180 ~ 305VAC 254 ~ 431VDC; LPVL-150: 90~132VAC				
	<b>FREQUENCY RANGE</b>		47 ~ 63Hz				
	<b>EFFICIENCY (Typ.)</b>		87%	88%	89%	89%	90%
	<b>AC CURRENT</b>		LPV-150: 1.7A/230VAC 1.5A/277VAC; LPVL-150: 3.0A/115VAC				
	<b>INRUSH CURRENT (Typ.)</b>	<b>Blank type</b>	COLD START 60A(twidth=900μs measured at 50% Ipeak) at 230VAC				
		<b>L type</b>	COLD START 75A(twidth=900μs measured at 50% Ipeak) at 115VAC				
	<b>MAX. No. of PSUs on 16A CIRCUIT BREAKER</b>	<b>Blank type</b>	2 units (circuit breaker of type B) / 3 units (circuit breaker of type C) at 230VAC				
		<b>L type</b>	1 units (circuit breaker of type B) / 2 units (circuit breaker of type C) at 115VAC				

	<b>LEAKAGE CURRENT</b>	LPV-150: 0.25mA / 240VAC      LPVL-150:0.25mA / 120VAC				
<b>PROTECTION</b>	<b>OVERLOAD</b>	110 ~ 150% rated output power				
		Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	<b>OVER VOLTAGE</b>	13.5 ~ 18V	17 ~ 25V	27 ~ 35V	40 ~ 49V	52 ~ 63V
		Protection type : Shut down o/p voltage, re-power on to recover				
	<b>OVER TEMPERATURE</b>	Shut down o/p voltage, recovers automatically after temperature goes down				
<b>ENVIRONMENT</b>	<b>WORKING TEMP.</b>	-25 ~ +65°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 ~ 40°C for LPV-150-12,15 and LPVL-150-12,24;0~50°C for LPV-150-24,36,48)				

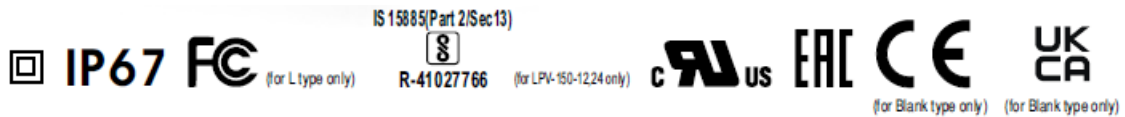
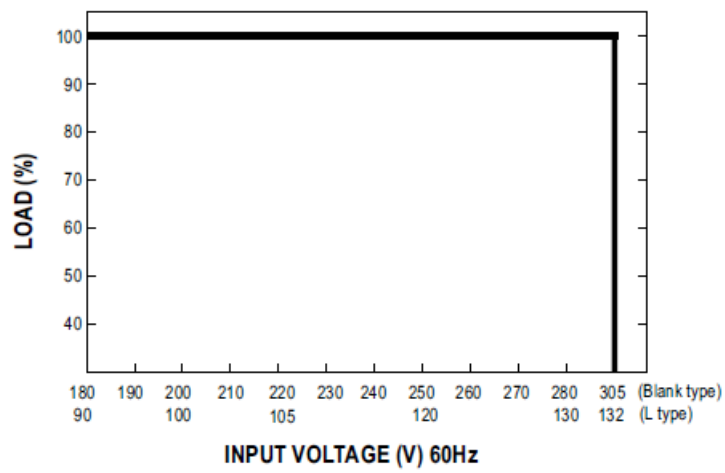
	<b>VIBRATION</b>		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes
<b>SAFE TY &amp; EMC</b>	<b>SAFETY STANDARDS</b>	<b>Blank type</b>	UL8750,CSA C22.2 No 250.13-12,UL879,CSA C22.2 No.207-M89,BIS IS15885(for LPV-150-12,24 only),EAC TP TC 004, IP67, IEC62368-1, BS EN/EN62368-1 approved
		<b>L type</b>	UL8750(type"HL"),CSA C22.2 No 250.13-12,UL879,CSA C22.2 No.207-M89,IP67 approved
	<b>WITHSTAND VOLTAGE</b>		I/P-O/P:3KVAC
	<b>ISOLATION RESISTANCE</b>		I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH
	<b>EMC EMISSION</b>	<b>Blank type</b>	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2 Class A(≤80% load), BS EN/EN61000-3-3, EAC TP TC 020
		<b>L type</b>	Compliance to FCC part 15
	<b>EMC IMMUNITY</b>	<b>Blank type</b>	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN55035, light industry level, EAC TP TC 020
		<b>L type</b>	Design refer to IEC61000-4-2,3,4,5,6,8,11; light industry level

OTHERS	MTBF	3361.2K hrs min. Telcordia SR-332 (Bellcore) ; 391.9Khrs min. MIL-HDBK-217F (25°C)
	DIMENSION	191*63*37.5mm (L*W*H)
	PACKING	LPV-150: 0.74Kg;20pcs/15.8Kg/0.95CUFT; LPVL-150: 0.85Kg;20pcs/17Kg/0.95CUFT
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC(115VAC for LPVL) input, rated load and 25°C of ambient temperature.</p> <p>2. Hipple &amp; noise are measured at 20MHZ of bandwidth by using a 12 twisted pair-wire terminated with a 0.1µt &amp; 4/µt parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltage. Please check the static characteristics for more details.</p> <p>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-quality EMC Directive on the complete installation again.</p> <p>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.</p> <p>7. Suitable for indoor use or outdoor use without direct sunlight exposure.</p> <p>8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).</p> <p>9. For any application note and IP water proof function installation caution, please refer our user manual before using.</p> <p><a href="https://www.meanwell.com/Upload/PDFILED_EN.pdf">https://www.meanwell.com/Upload/PDFILED_EN.pdf</a></p> <p>10. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPFNPF/XLG series are recommended.)</p> <ul style="list-style-type: none"> <li>Product Liability Disclaimer: For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></li> </ul>	

## Mechanical Specification

## Static Characteristics





## Documents / Resources

	<a href="#">MW LPV-150 Series 150W Single Output Switching Power Supply [pdf] User Guide</a> LPV-150 Series 150W Single Output Switching Power Supply, LPV-150 Series Power Supply, 150W Single Output Switching Power Supply, Power Supply, 150W Single Output Switching, 150W Power Supply
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## References

- [MW Product Liability Disclaimer-MEAN WELL Switching Power Supply Manufacturer](#)