

# LPV-60E Series single output switching power supply



## Features:

- Constant voltage design
- Universal AC input range/withstand 300VAC surge input for 5 seconds
- Fully encapsulated with IP67 level, Fully isolated plastic case, laser labeling
- Protections: short circuit, over load, over voltage
- Cooling by free air convection
- Class II power unit, no FG; Class 2 power unit
- Passed LPS (Limited Power Source) Test
- 100% full load burn-in test
- Suitable for LED lighting and moving sign applications
- High reliability/Low cost
- 2 Years warranty

## SPECIFICATION

Dimension: 162.5 × 42.5 × 32mm



	Model	LPV-60E-5	LPV-60E-12	LPV-60E-15	LPV-60E-24	LPV-60E-36	LPV-60E-48	
Output	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	
	Ripple&noise	80mVp-p	120mVp-p	120mVp-p	150mVp-p	150mVp-p	150mVp-p	
	Voltage tolerance	± 8.0%	± 5.0%					
	Line regulation	± 1.0%						
	Load regulation	± 6.0%	± 2.0%					
	Setup, rise time	500ms, 20ms/230VAC 500ms, 20ms/115VAC at full load						
Hold up time	50ms/230VAC 16ms/115VAC at full load							
Input	Voltage range	90~264VAC 127~370VDC						
	Efficiency	76%	83%	83%	86%	86%	86%	
	Frequency range	47~63Hz						
	AC current	1.2A/115VAC 1A/230VAC						
	Inrush current	Cold start 60A/230VAC (twidth=525 μ s measured at 50% Ipeak)						
Leakage current	< 0.25mA/240VAC							
Protection	Overload	110~150% rated output power Start overload protection Protection type: hiccup mode, auto-recovery 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 down output voltage, re-power on to recover						
Environment	Working temperature	-30°C ~ +70°C (Please refer to "derating curve" )						
	Working humidity	20%~90%RH Non-condensing						
	Storage temp, humidity	-40°C ~ +80°C; 10%~95%RH						
	Temp. coefficient	± 0.03%/°C ( 0~50°C )						
	Vibration	10 ~ 500Hz, 2G 10min./1Cycle, Period for 60min, Each axes						
Safety& EMC	Safety standards	UL879, UL1310, CSAC22.2NO.207-M89, CAN/CSA C22.2 NO.223-M91, IP67 approved; design refer to TUV EN 60950-1						
	Withstand voltage	I/P-O/P; 3KVAC						
	Isolation resistance	I/P-O/P; 100M Ohms/500VDC/25°C/70%RH						
	EMC emission	Compliance to EN55022(CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3						
	EMC immunity	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN55024, light industry level, criteria A						
Others	MTBF	705K hrs min. MIL-HDBK-217F(25°C)						
	Dimension	162.5*42.5*32 mm ( L*W*H )						
	Packing	0.41kg/40pcs/16.5kgs/0.027m³/0.95CUFT						

- Note: 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. 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.  
 5. Suitable for indoor use or outdoor use without direct sunlight exposure. Please avoid immerse in the water over 30 minute.  
 6. Derating may be needed under low input voltage. Please check the static characteristics for more details.  
 7. 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.