

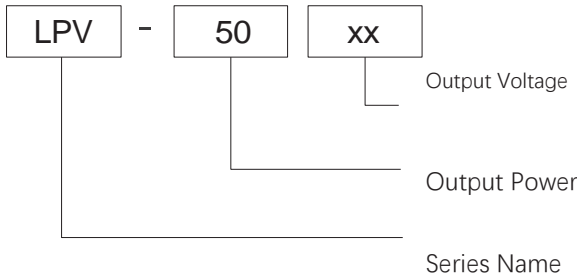
LPV-50

- Product Category: 50W switching Waterproof Power Supply
- Version Number: ZTAO3.0
- Release Date: May 1st, 2025

Product Overview

The LPV-50W series is a waterproof AC-to-DC LED driver power supply designed for constant voltage, constant current, and constant power output. It adopts a full-range international AC input and offers 12V, 24V, 36V, and 48V output options. It boasts a high conversion efficiency of up to 88.5% and features self-cooling. It also features a gold-plated casing and IP67 high protection rating.

Model encoding



Product Features

- 95~264VAC AC input range in constant voltage, constant current, and constant power modes
- Fully potted, meets IP65/IP67 protection standards, suitable for both indoor and outdoor installation.
- Protection types: short circuit/overload/overvoltage/overtemperature. Natural Air Cooling
- Suitable for Dry, Humid, and Rainy Environments
- 100% Full Load Burn-in Test
- 3-Year Warranty



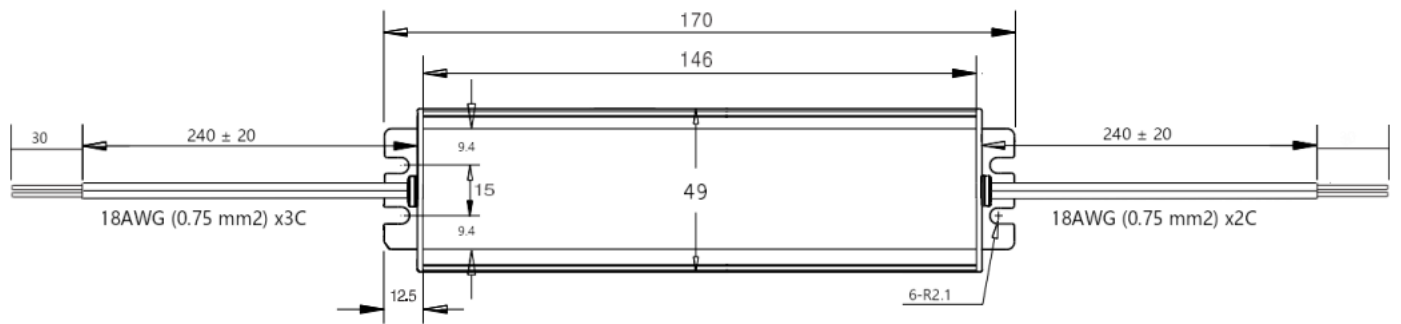
Application Areas

Street Lighting, Wall Washer Lights, Courtyard Lights, Fishing Lights, Floodlights, Building Lighting, Plant Lighting, Electronic Instruments and Devices, etc. (excluding information technology equipment)

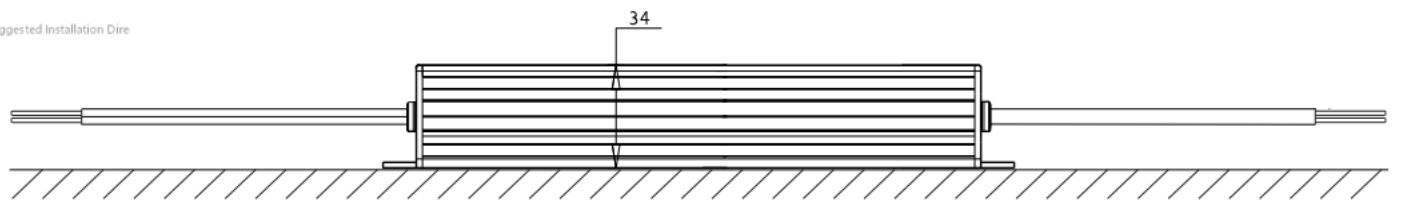
Electrical specifications

model		LPV-50-12	LPV-50-15	LPV-50-24	LPV-50-36	LPV-50-48
output	DC output voltage	12V	15V	24V	36V	48V
	rated current	4.2A	3.4A	2.1A	1.4A	1.05A
	Constant voltage range	6~12V	7.5~15V	12~24V	18~36V	24~48V
	rated power	50W	51W	50W	50W	50W
	Ripple&Noise (Maximum)	180mVp-p	180mVp-p	180mVp-p	200mVp-p	200mVp-p
	voltage accuracy	±3%	±2%	±2%	±2%	±2%
	line regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	load regulation	±2%	±0.5%	±0.5%	±0.5%	±0.5%
	Start&Rise Time	500ms, 80ms / 230VAC (at full load)				
	holding time	16ms / 230VAC (at full load)				
input	input voltage	95~264VAC	135~373VDC			
	input frequency	50~60HZ				
	efficiency	86.5%	86.5%	87.5%	87.5%	88.5%
	input current	0.7A/230VAC 1.4A/115VAC				
	leakage current	< 3mA/240VAC				
protection	overload protection	95~108% of rated power is subject to overcurrent limitation, which can be automatically restored after abnormal conditions are removed Protection mode: Hiccup protection, automatically restored after abnormal conditions are removed				
	Operating Temperature	-20°C ~+60°C				
environment	Operating Humidity	20~90%RH Non-condensing				
	Storage temperature/humidity	-40~+80°C 10~95%RH, Non-condensing				
safety	shockproof	10~500HZ, 5G 10 minutes / Cycle, X, Y, Z each 60 minutes				
	pressure resistance	Input to output: 1.5KVAC; Input to ground: 1.5KVAC; Output to ground: 500VAC				
other	insulation resistance	Input to output, input to ground, output to ground: 100 Ohms/500VDC/25°C /70%RH				
	Product dimensions	170*49*24mm (L*W*H)				
remark	packaging	0.4kg/30pcs/13Kg/0.025 square meters				
		1. Unless otherwise specified, all parameters are measured under 230VAC voltage input, rated load, and 25°C conditions. 2. Ripple and noise voltage were measured on a 20MHz bandwidth oscilloscope with 0.1μ and 47μ capacitors added to the ends of a 12-inch twisted pair cable. Measurements were performed at a 20MHz bandwidth. 3. Accuracy: including setting error, linear adjustment rate, and load adjustment rate. 4. Linear adjustment rate measurement method: Test from low voltage to high voltage under rated load 5. Measurement method for load adjustment rate: from 0% to 100% rated load 6. The start-up time is measured in a cold start state, and rapid and frequent power on and off may increase the start-up time. 7. When operating at an altitude higher than 2000 meters (6500 ft): the operating environment temperature needs to be lowered by 5°C / 1000 meters				

Dimensions and Mounting Dimensions (mm)



suggested Installation Dire



pin	function
L	AC LINE
N	AC NETURAL
⊕	EARTH
-V	DC output -
+V	DC output +

4-M4 customer system
 mounting hole mounting
 screws: M4
 Mounting torque: 8Kgf.cm (0.8Nm)

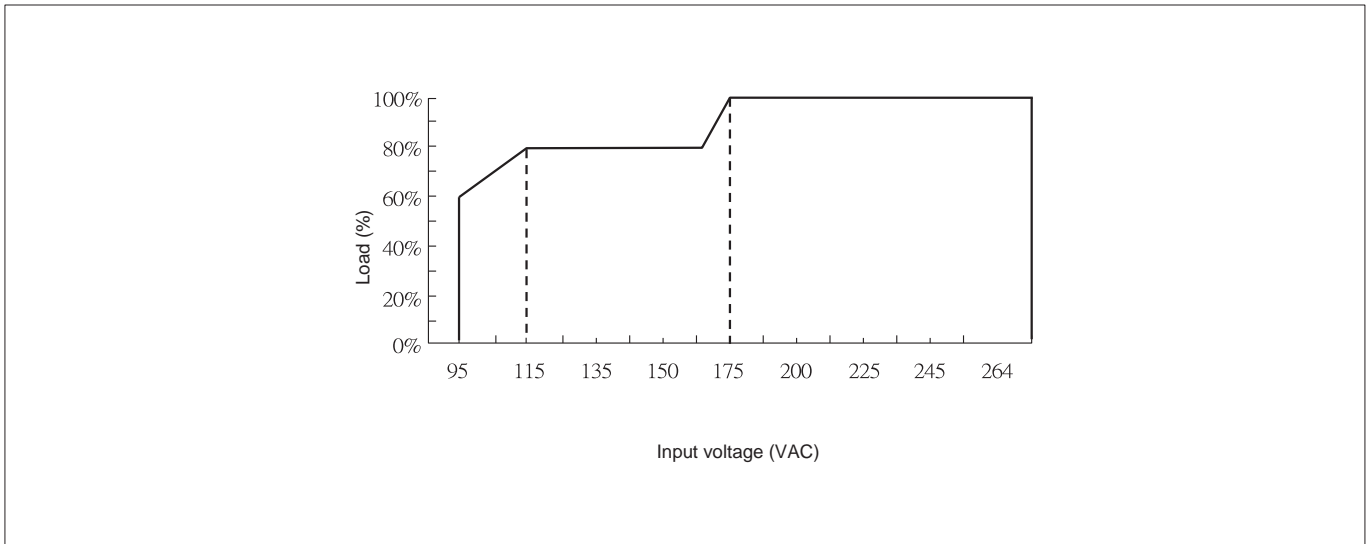
Note
 Unit: mm [inch]; tolerance not specified is ±0.5 [±0.020]

Terminal Pin No. Assignment

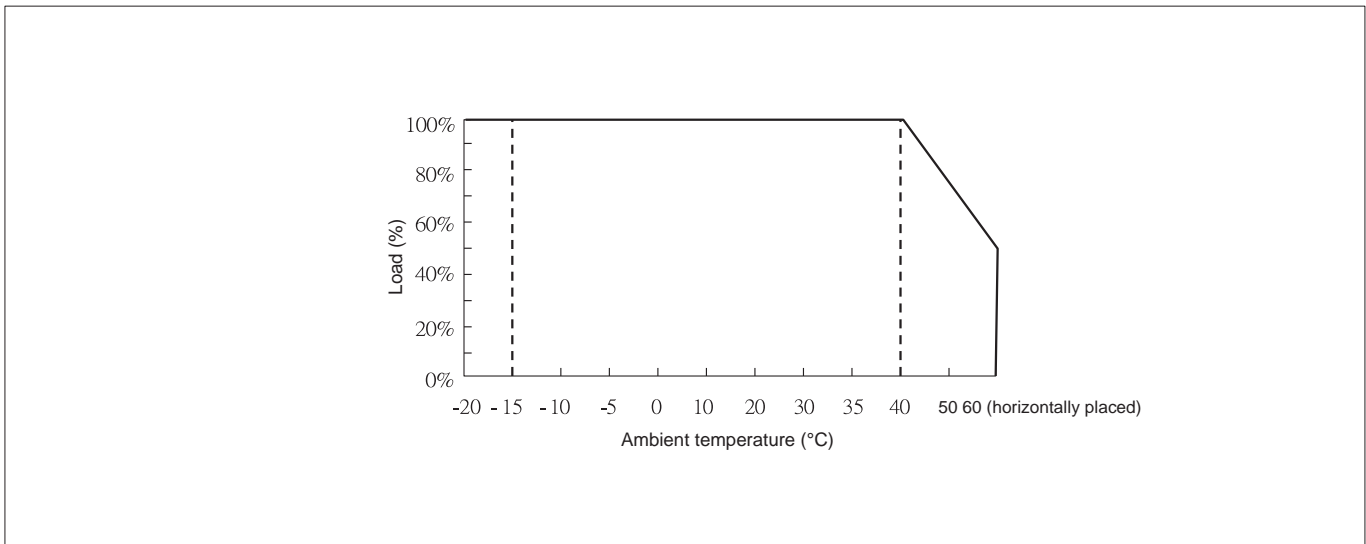
Input (black three core)		Output (black two core)	
Brown	AC/L	Brown	DC OUTPUT +V
Blue	AC/N	Blue	DC OUTPUT -V
Green & yellow	⊕ : Ground		

Characteristic Curve

Input voltage VS output load



Ambient temperature VS output load



Note:
If you need to know more detailed test data when applying, please contact our technical support to obtain application notes for the corresponding product.
2. This product is suitable for use in natural air convection environments. If used in a closed environment, please contact our technical support personnel.