

LPV-120

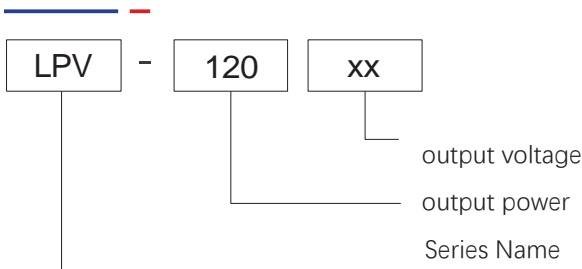
- Product Category: 120W Waterproof switching Power Supply
- Version Number: ZTAO3.0
- Release date: May 1st, 2025



Product Overview

The LPV-120W 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 90% 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
- constant voltage, constant current, and constant power modes
- Fully potted, meets IP65/IP67 protection ratings, suitable for indoor and outdoor installation.
- Protection types: short circuit / overload / overvoltage / overtemperature
- natural air cooling
- Suitable for dry, humid, and rainy environments
- 100% full load burning test
- 3-year warranty



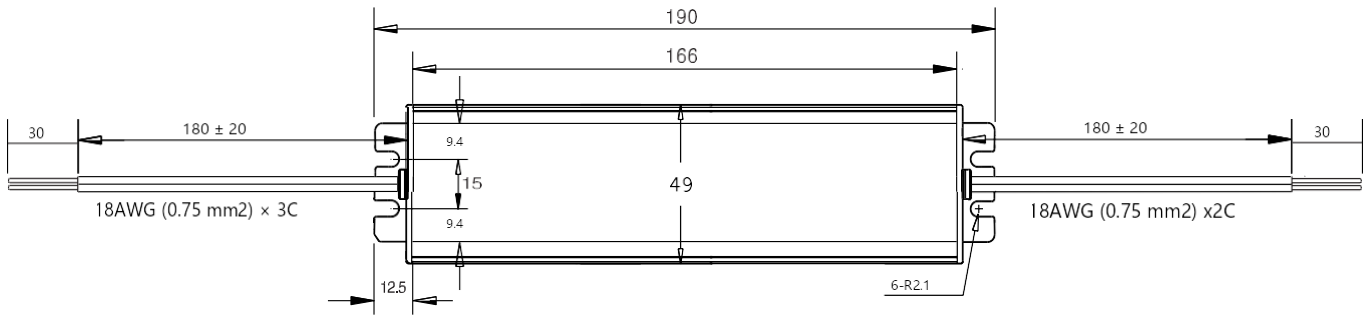
Application field

Street lighting, wall washers, courtyard lights, fishing lights, floodlights, building lighting, plant lighting, electronic instruments and equipment, etc. (excluding information technology equipment)

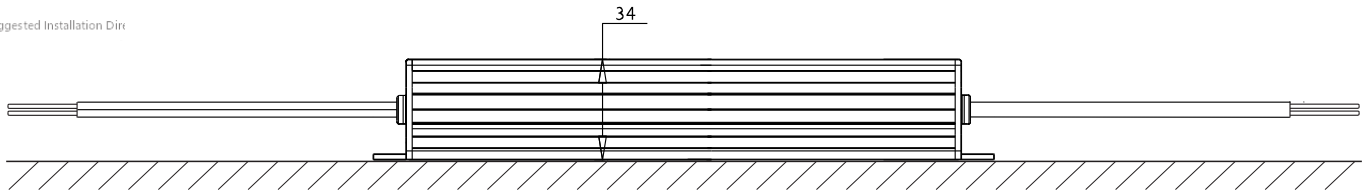
Electrical Specifications

Model		LPV-120-12	LPV-120-15	LPV-120-24	LPV-120-36	LPV-120-48
Output	DC Output Voltage	12V	15V	24V	36V	48V
	Rated Current	10A	8.0A	5.0A	3.3A	2.5A
	Constant Voltage Range	6~12V	7~15V	12~24V	18~36V	24~48V
	Rated Power	120W	120W	120W	118.8W	120W
	Ripple & Noise (Maximum)	150mVp-p	150mVp-p	180mVp-p	180mVp-p	200mVp-p
	Voltage Accuracy	±3%	±2%	±2%	±2%	±2%
	Linearity Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±2%	±0.5%	±0.5%	±0.5%	±0.5%
	Start-up & Rise Time	500ms, 80ms/230VAC (at full load)				
	Hold Time	16ms/230VAC (at full load)				
Input	Input Voltage	95~264VAC	135~373VDC			
	Input Frequency	50~60HZ				
	Efficiency	87.5%	87.5%	89%	90%	91%
	Input Current	2.4A/110VAC 1.4A/230VAC				
	Leakage Current	< 3mA/240VAC				
Environmental Protection	Overload Protection	95~108% of rated power starting overcurrent limit, automatically recovers after abnormal conditions are removed Protection Mode: Hiccup-type protection, automatically recovers after abnormal conditions are removed				
	Operating Temperature	-20°C ~+60°C				
	Operating Humidity	20~90%RH Non-condensing				
	Storage Temperature / Humidity	-40~+80°C 10~95%RH, Non-condensing				
	Vibration Resistance	10~500HZ, 5G 10 minutes / Cycle, X, Y, Z each 60 minutes				
Safety	Withstand Voltage	Input to output: 1.5KVAC; Input to ground: 1.5KVAC; Output to ground: 500VAC				
	Insulation Resistance	Input to output, input to ground, output to ground: 100 Ohms/500VDC/25°C /70%RH				
Other	Product Dimensions	190*49*34mm (L*W*H)				
	Packaging	0.65kg/30pcs/20.5Kg/0.025 square meters				
	Remarks	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: Includes setting error, line regulation, and load regulation. 4. Line Regulation Measurement Method: Tested from low voltage to high voltage under rated load. 5. Load Regulation Measurement Method: From 0% to 100% of rated load. 6. Startup time is measured under cold start conditions. Rapid and frequent power-on and power-off may increase startup time. 7. When operating at an altitude higher than 2000 meters (6500 ft): the operating environment needs to be lowered by 5°C / 1000 meters				

Dimensions and Mounting Dimensions (mm)



Suggested Installation Dir



Pinout	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.cn (0.8Nm)

Notes:

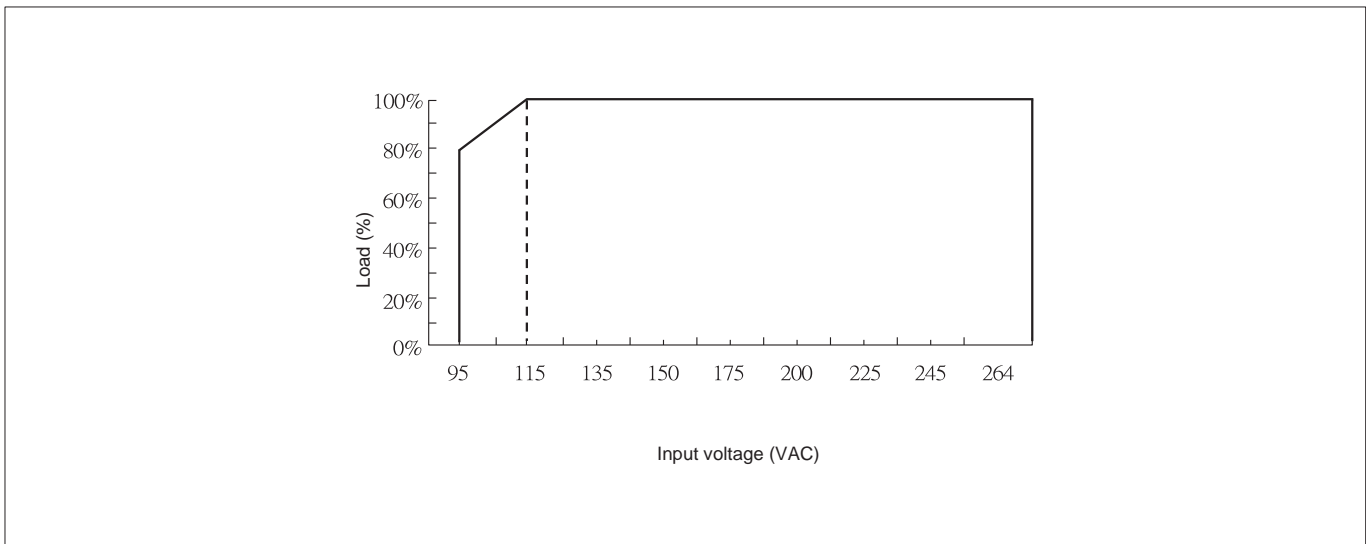
Unit: mm [inch]; tolerance not specified is ±0.5 [±0.020]

Terminal Pin No. Assignment

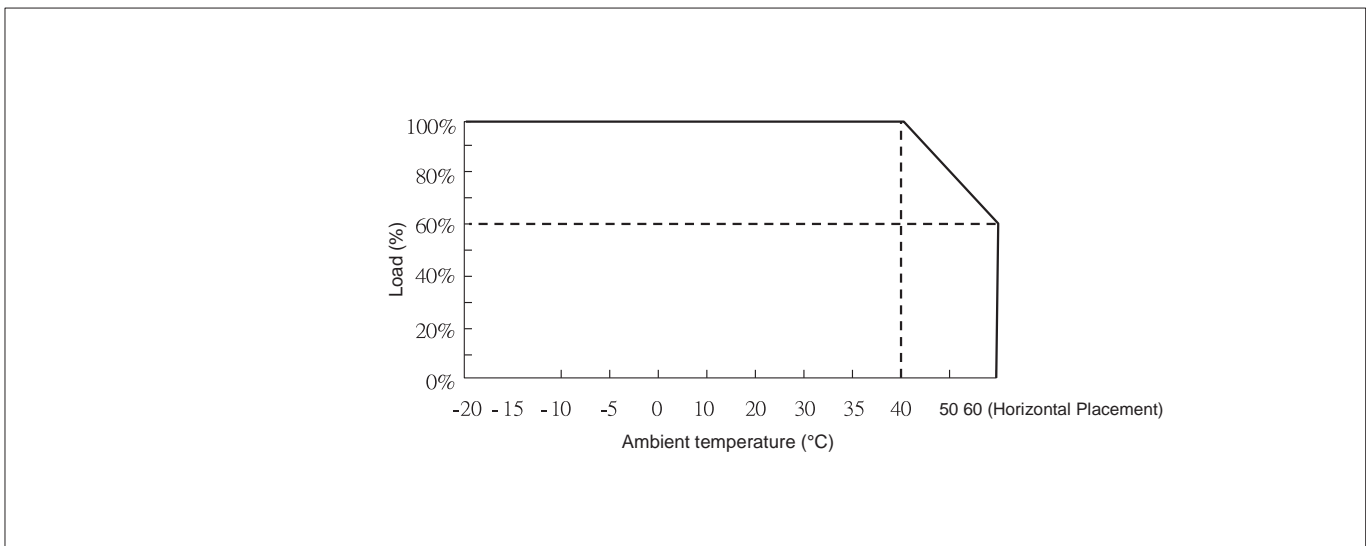
Input (black three core)		Output (black two core)	
Brown	AC/L	Brown	DC OUTPUT +V
Blue	AC/N	Blue	DC OUTPUT -V
Green & yellow	⊕ : Ground		

Characteristic Curve

Input voltage VS output load



Ambient temperature VS output load



Note:

1. For more detailed test data, please contact our technical support to obtain the application notes for the corresponding product.
2. This product is suitable for use in natural air convection environments. For use in enclosed environments, please contact our technical support.