



Zhitao Group

ZHITAO GROUP

Industrial Power Supply

Product Specifications

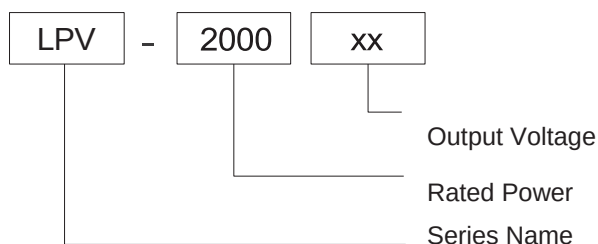
LPV-2000

- Product Category: 2000W Waterproof Power Supply
- Version Number: ZTAO3.0
- Release Date: May 1st, 2025

Product Overview

The LPV-2000W series is a waterproof AC-to-DC LED driver power supply designed for constant voltage and constant power output. It features an AC input voltage range of 180~264VAC and offers 12V, 24V, 36V, and 48V output options. good conversion efficiency of up to 94%, it utilizes self-cooling technology. It features a gold-plated casing and IP67 rating. good protection level design.

model encoding



Product Characteristics

- 180~264VAC AC input range
- constant voltage and constant power mode
- IP67 protection rating
- 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
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Application Areas

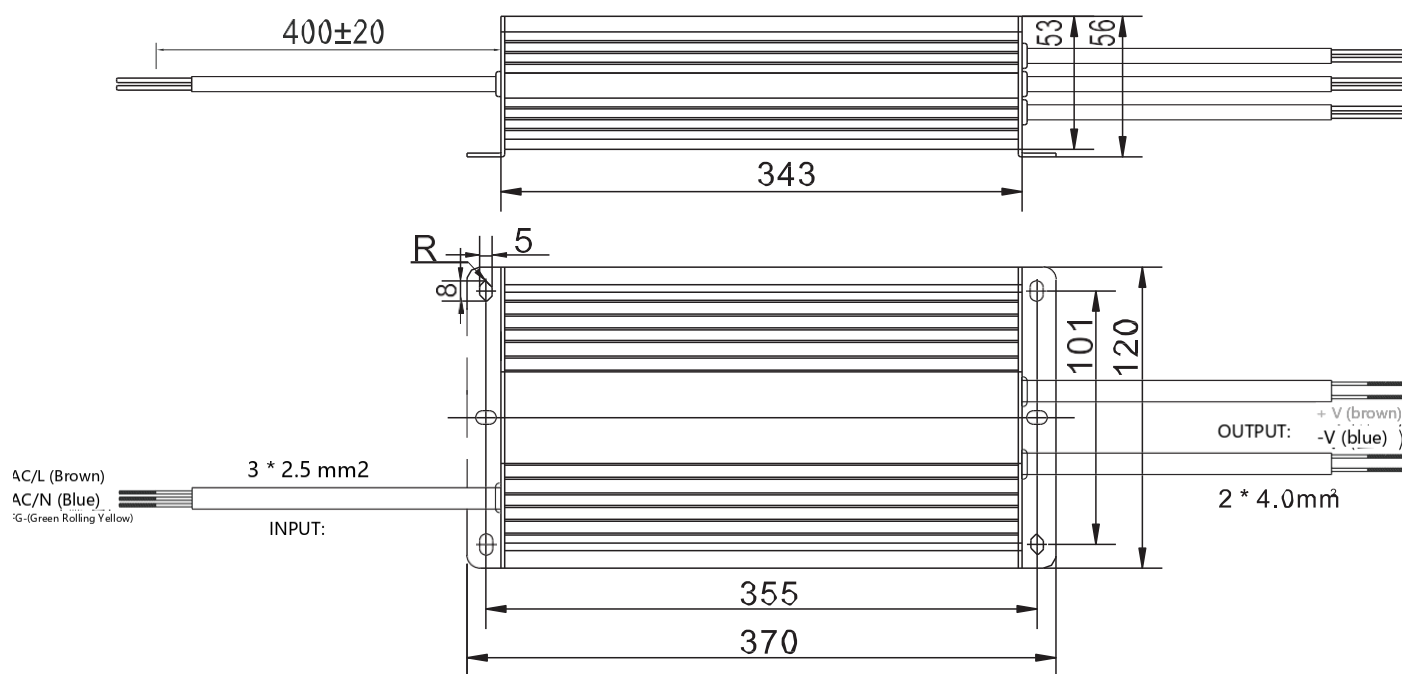
Street Lighting, Wall Washers, Courtyard Lights, Fishing Lights, Floodlights, Building Lighting, Plant Lighting, Electronic Instruments and Devices, etc. (excluding information technology equipment)



Electrical Specifications

Model Number		LPV-2000-24	LPV-2000-36	LPV-2000-45	LPV-2000-48	LPV-2000-60
Output	DC Output Voltage	24V	36V	45V	48V	60V
	Rated Current	83A	55.5A	44.4A	41.5A	33.3A
	Current Range	0~83A	0~55.5A	0~44.4A	0~41.5A	0~33.3A
	Rated Power	1992W	1998W	1998W	1992W	1998W
	Ripple & Noise (Maximum)	300mVp-p	360mVp-p	450mVp-p	450mVp-p	550mVp-p
	Voltage Accuracy	±2%	±2%	±2%	±2%	±2%
	Linearity Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Start-up & Rise Time	500ms, 50ms/230VAC (at full load)				
	Hold Time	24ms/230VAC (at full load)				
Input	Input Voltage	180~277VAC selectable via switch 245~390VDC (switch on 230VAC)				
	Input Frequency	50~60HZ				
	Efficiency	93.5%	94.5%	95%	95%	95%
	Input Current	21A/230VAC				
	Power Factor	0.5~0.7				
	Leakage Current	< 3mA/240VAC				
Protection	Overload Protection	Overcurrent limit of 95~105% of rated power, automatically recovers after abnormal conditions are removed				
		Protection Mode: Current limiting mode, automatically recovers after abnormal conditions are removed				
	Overvoltage Protection	Overvoltage protection activated at 115%~135% of rated output voltage				
		Protection Mode: Voltage limiting mode, automatically recovers after abnormal conditions are removed				
Environment	Operating Temperature	105°C±10°C (JK1/JK2 tested on transformer side/Mos surface)				
		Protection Mode: Voltage limiting mode, automatically recovers after temperature drops				
	Operating Humidity	20~90%RH non-condensing				
	Storage Temperature / Humidity	-40~+80°C 10~95%RH, non-condensing				
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	370*120*56mm (L*W*H)				
	Packaging	4.5kg/2pcs/11.5Kg/0.033 cubic meters				
Remarks		1. Unless otherwise specified, all parameters are measured under 230VAC 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.				

Dimensions and Mounting Dimensions (mm)



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		

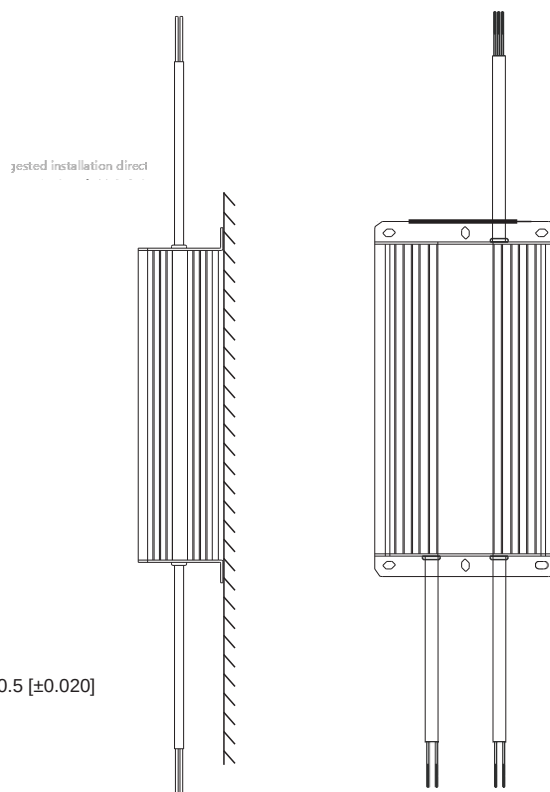
Pinout	Function
L	AC LINE
N	AC NETURAL
⊕	EARTH
-V	DC output -
-V	DC output -
+V	DC output +
+V	DC output +

4-M4 Customer System Mounting Hole

Screws: M4

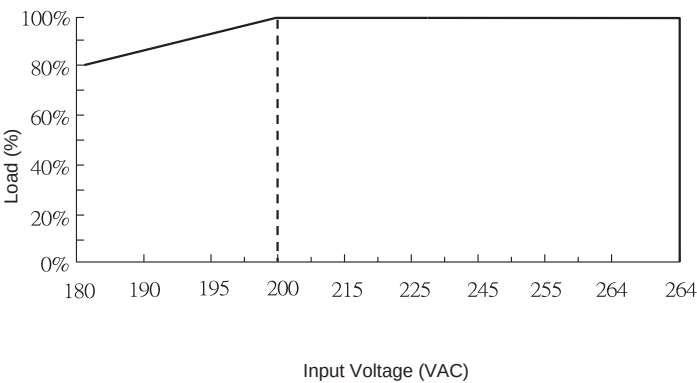
Mounting Torque: 8Kgf.cm (0.8Nm)

Remarks:

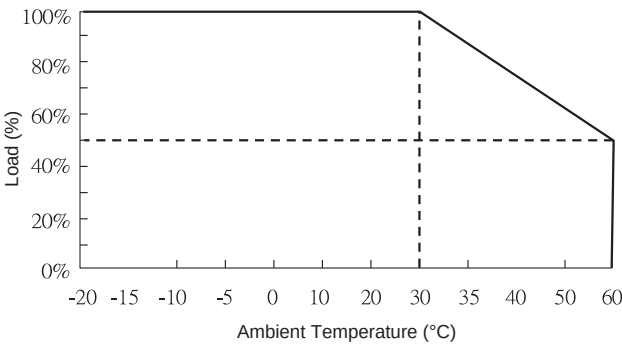
Unit: mm [inch]; tolerances not specified are ± 0.5 [± 0.020]

Characteristic Curve

Input Voltage VS Output Load



Ambient Temperature VS Output Load



- Note:
- 1. For more detailed test data, please contact our technical support for 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.