



Zhitao Group

ZHITAO GROUP

Industrial Power Supply

Product Specifications

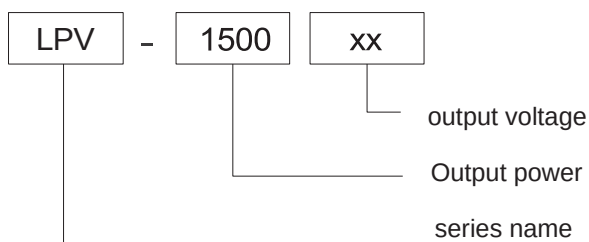
LPV-1500

- Product Category: 1500W Waterproof Power Supply
- Version Number: ZTAO3.0
- Release Date: May 1st, 2025

Product Overview

The LPV-1500W 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 protection design.

Model encoding



Product Features

- 180~264VAC AC input range
- constant voltage and constant power mode
- IP67 protection rating
- Protection type: 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)

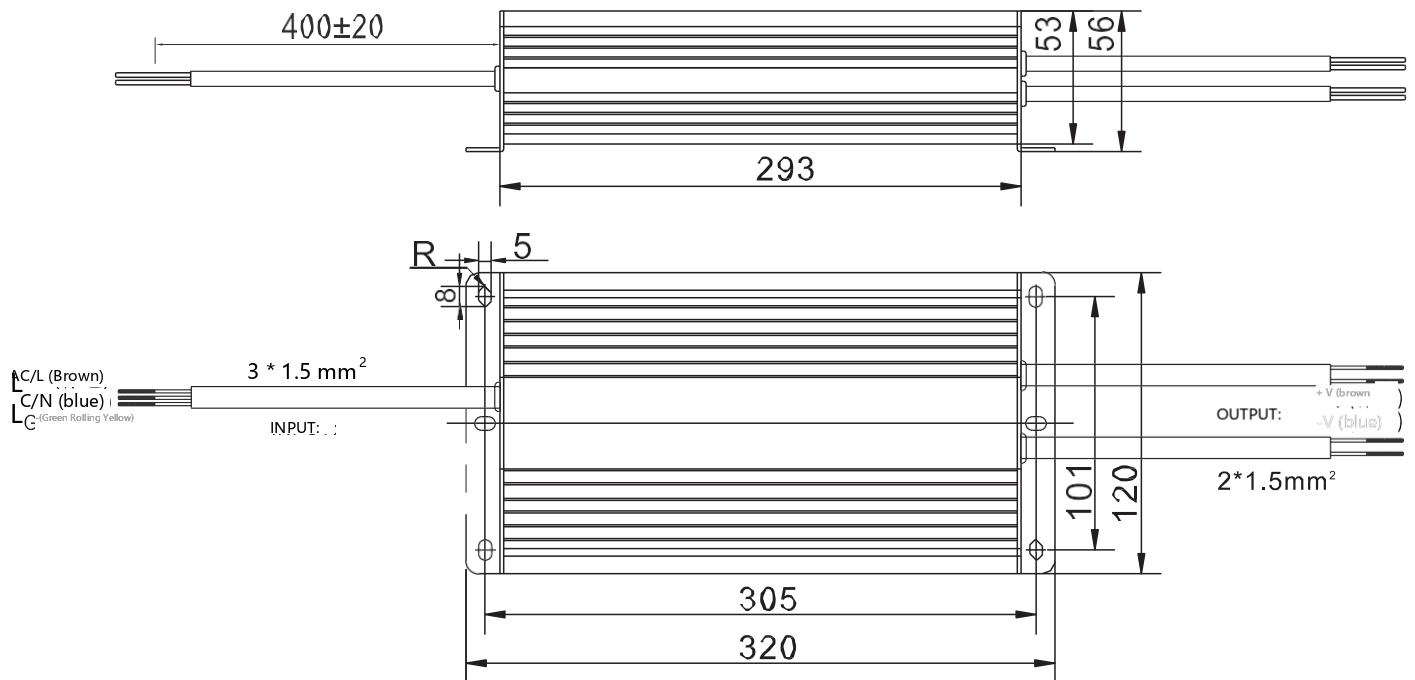


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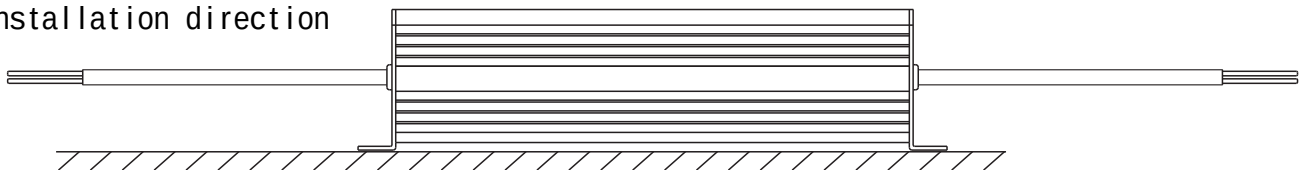
Electrical Specifications

Model Number		LPV-1500-24	LPV-1500-36	LPV-1500-45	LPV-1500-48	LPV-1500-60
output	DC output voltage	24V	36V	45V	48V	60V
	rated current	55A	41.5A	33A	31A	25A
	current range	0~55A	0~41.5A	0~33A	0~31A	0~25A
	rated power	1320W	1494W	1485W	1488W	1500W
	Ripple&Noise (Maximum)	240mVp-p	300mVp-p	350mVp-p	350mVp-p	400mVp-p
	voltage accuracy	±2%	±2%	±2%	±2%	±2%
	line regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	load regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Start&Rise Time	500ms, 50ms / 230VAC (at full load)				
	holding time	24ms / 230VAC (at full load)				
Input	Input Voltage	180~264VAC selectable via switch 245~370VDC(switc on 230VAC)				
	Input Frequency	50~60HZ				
	Efficiency	93.5%	94.5%	95%	95%	95%
	Input Current	13.5A/230VAC				
	Power Factor	0.5~0.7				
	Leakage Current	< 3mA/240VAC				
Protection	Overload Protection	Overcurrent Limitation of 90~105% of Rated Power, Automatic Recovery After Abnormal Conditions Are Removed				
		Protection Mode: Current Limiting Mode, Automatic Recovery After Abnormal Conditions Are Removed				
	Overvoltage Protection	Overvoltage Protection Activated at 115%~135% of Rated Output Voltage				
		Protection Mode: Voltage Limiting Mode, Automatic Recovery After Abnormal Conditions Are Removed				
Environment	Over-Temperature Protection	105°C±10°C (JK1/JK2 tested on transformer side/Mos surface)				
		Protection Mode: Voltage Limiting Mode, Automatic Recovery After Temperature Drops				
	Operating Temperature	-20°C ~+60°C (Please refer to the load derating curve)				
	Operating Humidity	20~90%RH non-condensing				
Safety	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				
Other	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	320*120*56mm (L*W*H)				
	Packaging	2.75kg/6pcs/17.5Kg/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)



Suggested installation direction



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]

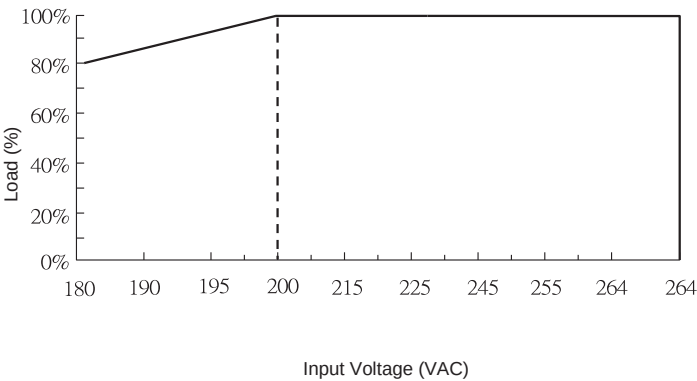
Terminal Pin No. Assignment

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

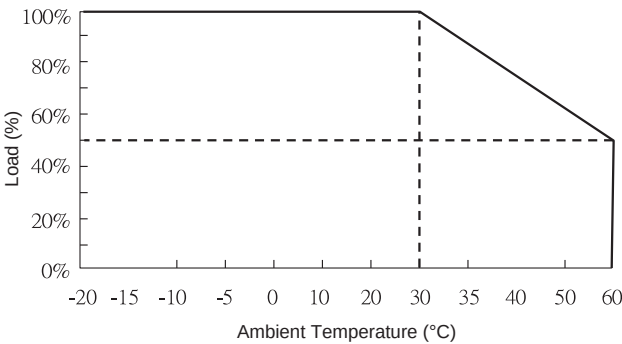


Characteristic Curve

Input Voltage VS Output Load



Ambient Temperature VS Output Load



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