



Zhitao Group

ZHITAO GROUP

Industrial Power Supply

Product Specifications

LPV -1500

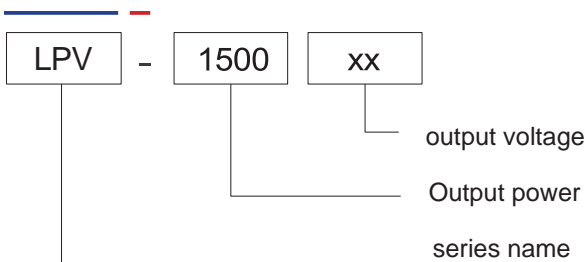
- Product Category: 1500W Waterproof Power Supply
- Version Number: ZTAO3.0
- Release Date: May 1st, 2025



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. Boasting a high conversion efficiency of up to 94%, it utilizes self-cooling technology. It features a gold-plated casing and IP67 rating. High 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



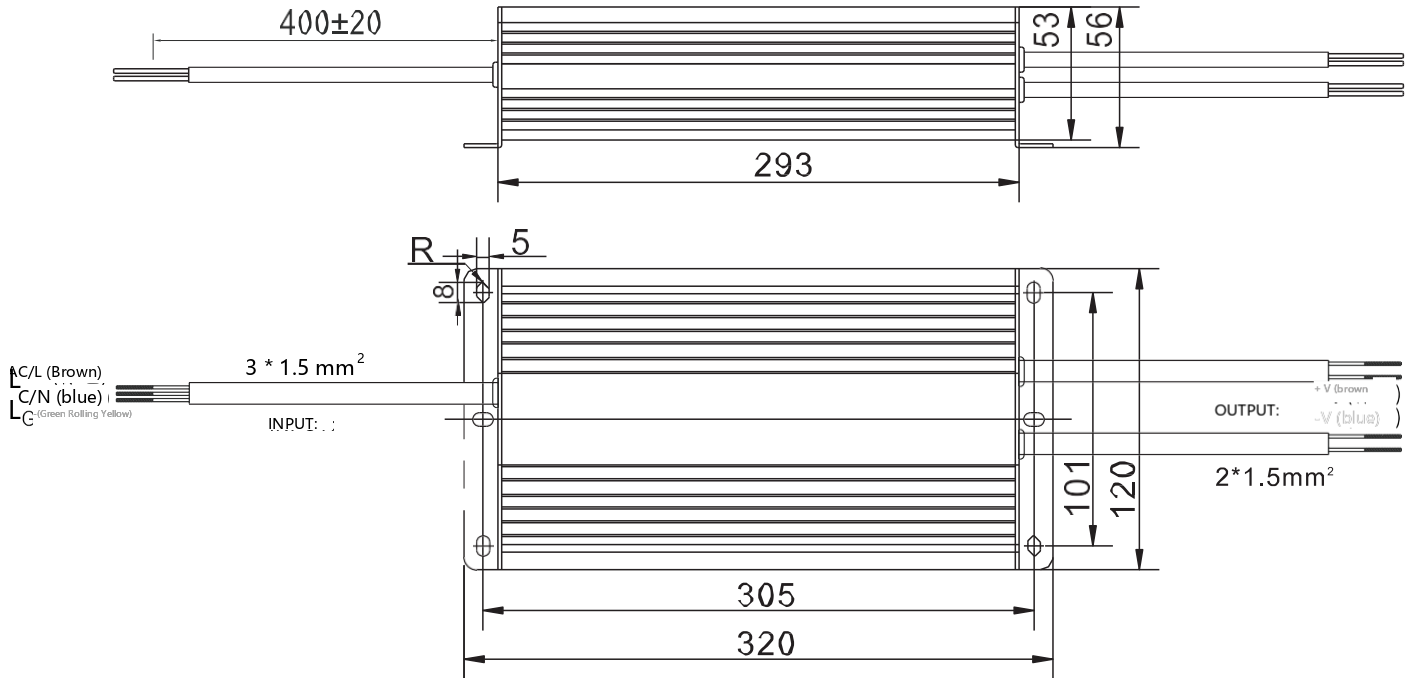
application field

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

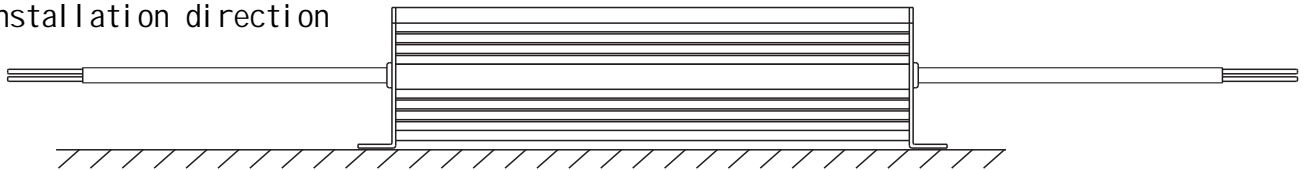
Electrical Specifications

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				
	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				
Environment	Operating Temperature	-20°C ~+60°C (Please refer to the load derating curve)				
	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	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:

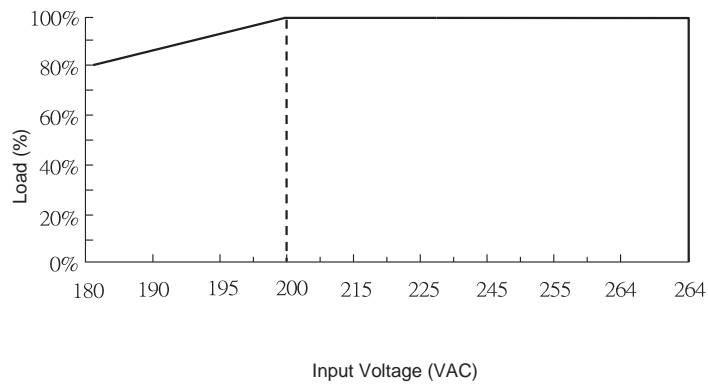
Unit: mm [inch]; tolerances not specified are ±0.5 [±0.020]

Terminal Pin No. Assignment

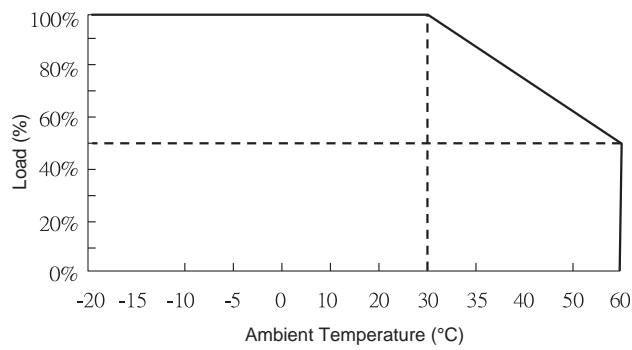
Input(black three core)		Output(black two core)	
Brown	AC/L	Brown	DC OUTPUT +V
Blue	AC/N	Blue	DC OUTPUT -V
Green & yellow	⊕ : Ground		

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.