

## Product Specification

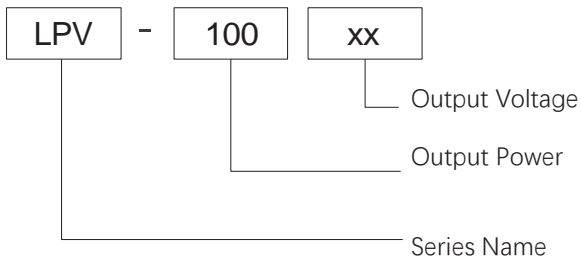
# LPV-100

- Product Category: 100W Waterproof Power Supply
- Version Number: ZTAO3.0
- Release Date: May 1, 2025

### Product Overview

The LPV-100W 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 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



RoHS



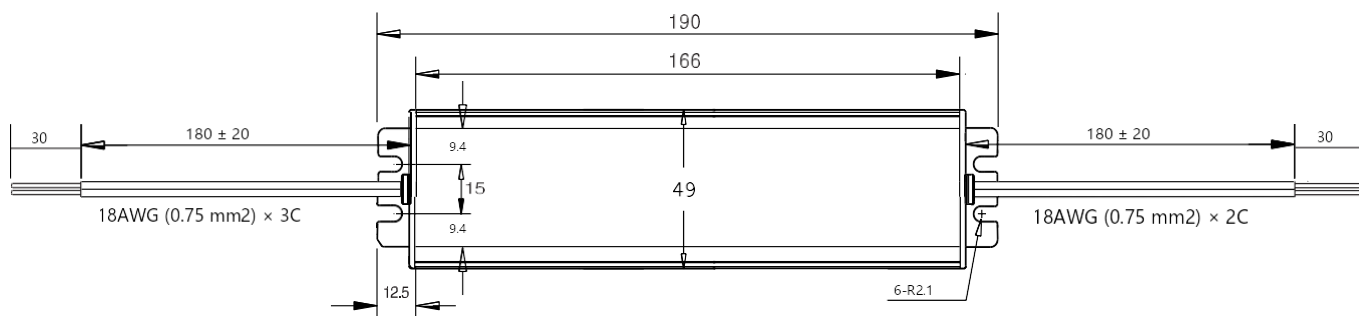
### Application Areas

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

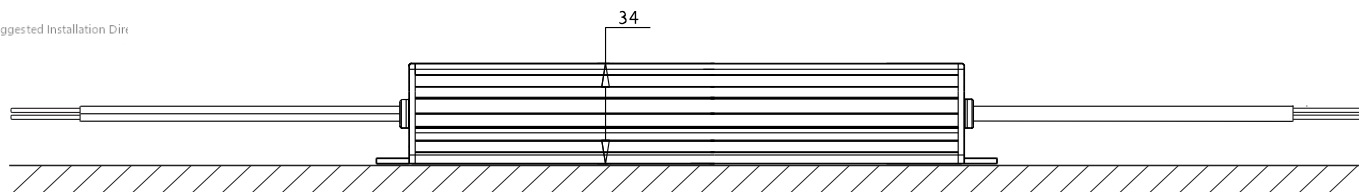
Electrical Specifications

| Model                    |                                | LPV-100-12  | LPV-100-15 | LPV-100-24 | LPV-100-36 | LPV-100-48 |
|--------------------------|--------------------------------|---|------------|------------|------------|------------|
| Output                   | DC Output Voltage              | 12V   | 15V        | 24V        | 36V        | 48V        |
|                          | Rated Current                  | 8.3A  | 6.6A       | 4.2A       | 2.8A       | 2.1A       |
|                          | Constant Voltage Range         | 6~12V   | 7.5~15V    | 12~24V     | 18~36V     | 24~48V     |
|                          | Rated Power                    | 99.6W   | 99W        | 100.8W     | 100.8W     | 100.8W     |
|                          | 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                  | 2.2A/110VAC 1.2A/230VAC   |            |            |            |            |
|                          | Leakage Current                | < 3mA/240VAC  |            |            |            |            |
| Environmental Protection | Overload Protection            | 95~108% of rated power starting overcurrent limit, automatically recovers after abnormal conditions are removed<br>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  |            |            |            |            |
| Protection               | 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.<br>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.<br>3. Accuracy: Includes setting error, line regulation, and load regulation.<br>4. Line Regulation Measurement Method: Tested from low voltage to high voltage under rated load.<br>5. Load Regulation Measurement Method: From 0% to 100% of rated load.<br>6. Startup time is measured under cold start conditions. Rapid and frequent power-on and power-off may increase startup time.<br>7. When operating at an altitude higher than 2000 meters (6500ft): 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:

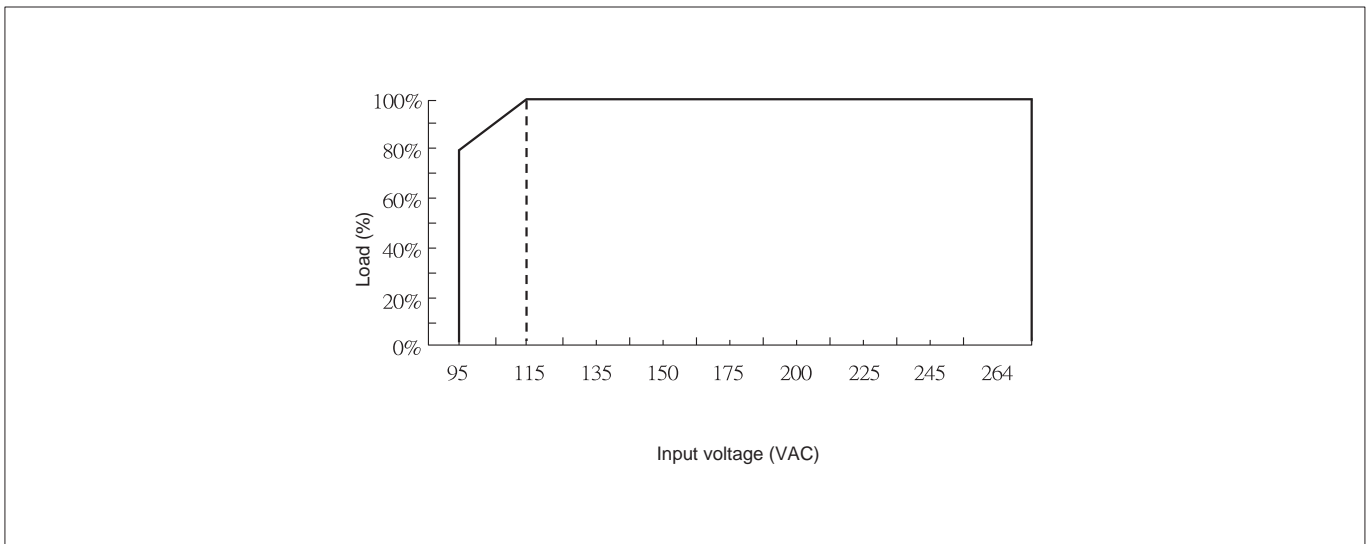
Unit: mm [inch]; tolerance not specified is ±0.5 [±0.020]

Terminal Pin No. Assignment

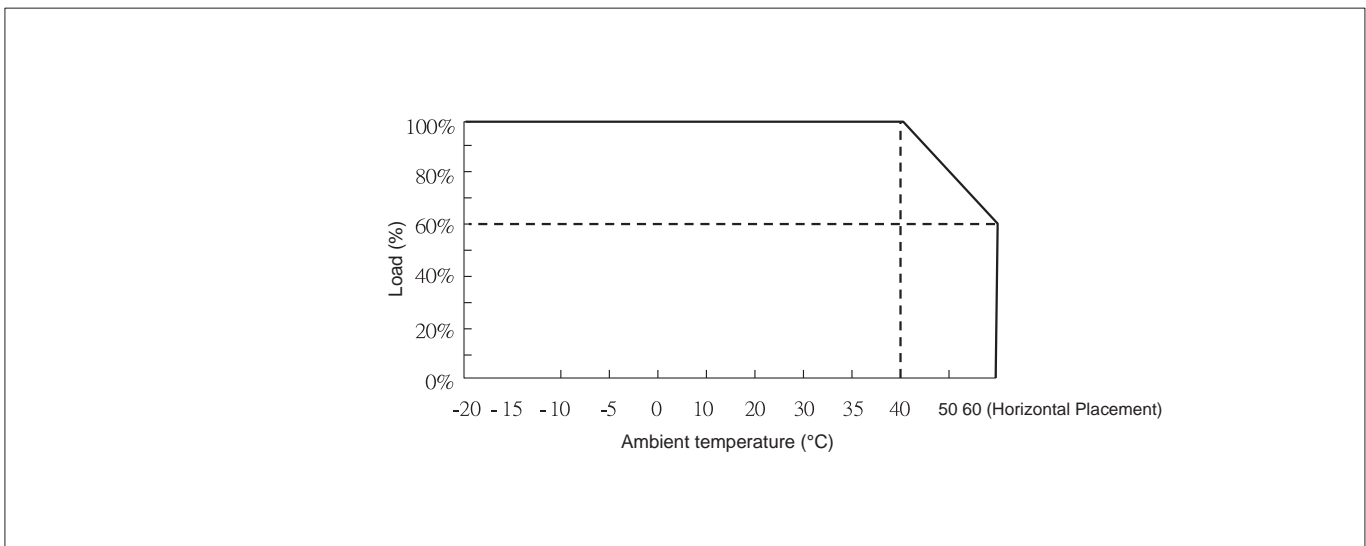
| Input(black three core) |            | Output(black two core) |              |
|-------------------------|------------|------------------------|--------------|
| Brown                   | AC/L       | Brown                  | DC OUTPUT +V |
| Blue                    | AC/N       | Blue                   | 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.