

# LED Constant Voltage Driver Specification Data Sheet

Model: LD300-2H24V

## Product Features

- Aluminum Enclosure
- Operates at ultra-low temperatures as low as -30°C
- Lightweight design for easy installation
- High efficiency reaching up to 86%
- Exceptional reliability
- Supports a wide input voltage range of 180~264Vac



## Technical Specification:

### Input

- Efficiency: 86% @ 220VAC, Full load
- Input Voltage: 200-240VAC
- Frequency: 50Hz
- Maximum Current: 3.0A @ 230VAC
- Inrush Current: <50A @ 230VAC, cold start
- Leakage Current: <0.75mA @ 240VAC

### Output

- Current: 12.5A
- Voltage: 24VDC
- Power: 300W
- Ripple & Noise: 200mVp-p
- Output Voltage Range: 22.8V ~ 25.2V
- Channels: 2
- Line Regulation: 1%
- Load Regulation: 2%
- Voltage Tolerance:  $\pm 3\%$  Turn-On Delay Time: 1.5s, 20ms @ 230VAC

### Protection

- Short Circuit: Hiccup mode, auto-recovery
- Overload Protection: 110% ~ 150% of the rated load

### Safety

- Withstand Voltage:
- Input-FG: 1500VAC / 2121VDC
- Input-Output: 1500VAC / 2121VDC
- Output-FG: 500VAC / 707VDC

### Isolation Resistance

- Input-FG: >100M $\Omega$  @ 500VDC, 25°C & 70% RH
- Input-Output: >100M $\Omega$  @ 500VDC, 25°C & 70% RH
- Output-FG: >100M $\Omega$  @ 500VDC, 25°C & 70% RH

### Environmental Conditions

- Operating Temperature: -30°C to +60°C, 20% to 90% RH
- Storage Temperature & Humidity: -30°C to +70°C, 10% to 95% RH
- Maximum Case Temperature (Tc): 70°C

### Material and Design

- Material: Metal
- IP Rating: IP20
- Lifetime: 40,000 hours @ Tc 65°C
- Warranty: 2 years
- Switch Cycle: >15,000 cycles

### Dimensions

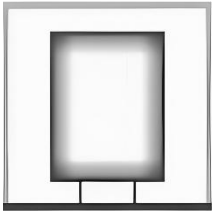
- Product Size: 286 x 53 x 22 mm (L x W x H)
- Net Weight: 460g  $\pm$  5% per unit

### Packing Details:

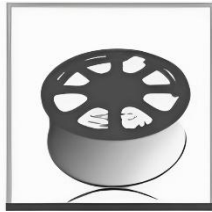
- 50 units per carton
- Carton Weight: 25.1kg  $\pm$  5%
- Carton Dimensions: 306 x 285 x 300 mm (L x W x H)



## Application



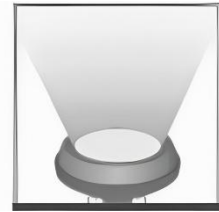
Light Box



LED Strip Light

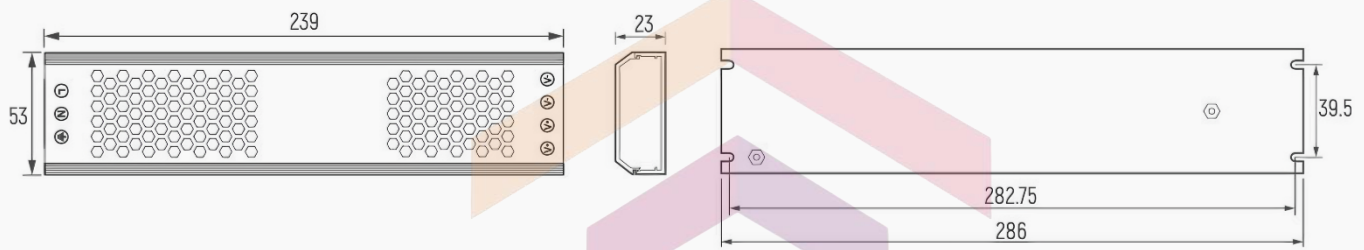


LED Tube

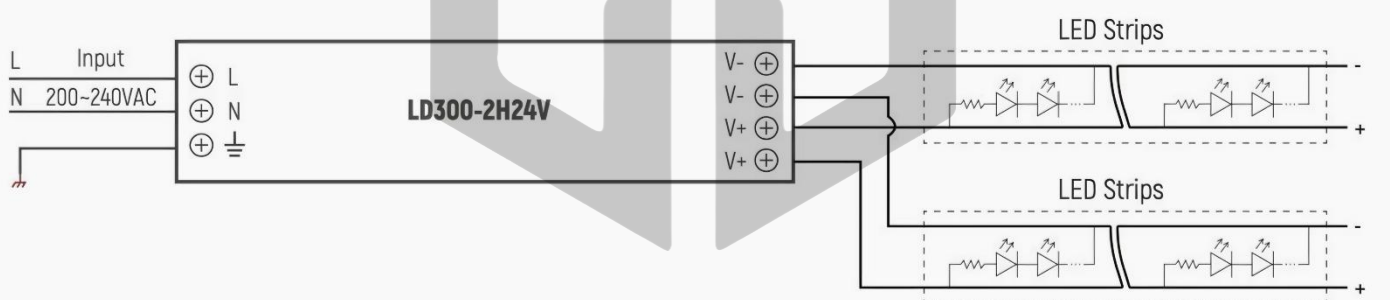


Astigmatism Source

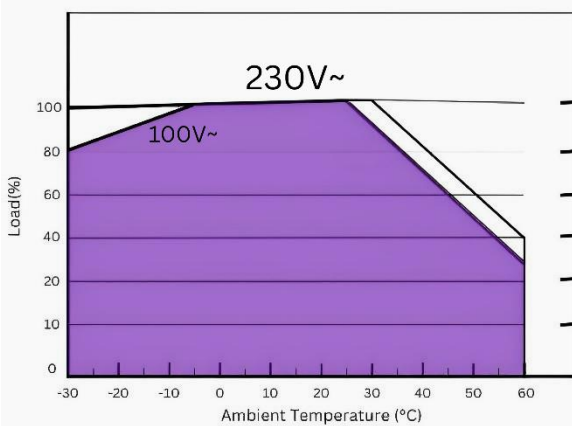
## Dimension(mm)



## Diagram Wiring



## Derating Curve



## PRECAUTIONS

- This product should only be installed and debugged by qualified professionals.
- This product is not waterproof. Avoid exposure to sunlight and rain. If used outdoors, ensure it is housed in a waterproof casing.
- Proper heat dissipation will extend the product's lifespan. Ensure installation in a well-ventilated area.
- Verify that the output voltage and current of the LED power supply meet the product's specifications.
- Ensure the wire diameter can handle the load of the connected LED lamps, and that the connections are secure to prevent overheating or loose connections, which could lead to accidents.
- Before testing, double-check all wire connections to avoid damage to the lamp caused by incorrect wiring.
- When installed on a metal surface, the power supply must be properly grounded to prevent electrical shocks or leakage.
- If a malfunction occurs, do not attempt to repair it yourself. Contact the supplier if any issues arise.

## Note

This manual may be updated without prior notice.

If the product's features differ from the instructions, the product's actual function will take precedence. Feel free to contact us for any inquiries.



**RoHS**

