

# 24VDC OMNIDRIVE<sup>®</sup> 2 ELECTRONIC DIMMABLE DRIVER

## SPECIFICATION SHEET



### OVERVIEW

24VDC OMNIDRIVE 2 Electronic Dimmable Driver is the next generation of Diode LED's best selling OMNIDRIVE. This enhanced driver features a 0% minimum wattage load and provides a wider dimming range. Like the previous version, OMNIDRIVE 2 offers superior dimming performance when paired with the following dimming controls: TRIAC dimmers, magnetic low voltage (MLV), electronic low voltage (ELV), incandescent/halogen dimmer switches, and on/off switching.

### FEATURES

- No minimum load
- Superior dimming range down to 5%
- Built-in Junction Box
- Class 2 models available
- Fanless design, cooling by free air convection
- Dimmable with compatible forward phase and reverse phase dimmers
- Suitable indoor/outdoor wet locations
- ETL Listed US/CA power supply

Item #	
Project	

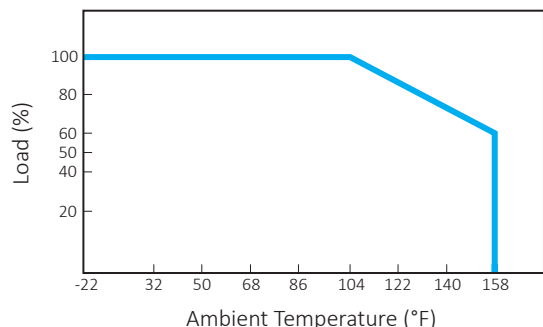
## SPECIFICATIONS - 120VAC Models (24VDC Output)

<b>Input Voltage / Frequency:</b>	100~130VAC / ~50/60Hz
<b>Dimmability<sup>1</sup> :</b>	Yes (forward phase and reverse phase dimming). <i>See the 'OMNIDRIVE 2 Electronic Dimmable Driver Compatibility List' for a full list of compatible controls.</i>
<b>Ambient Temp<sup>2</sup> :</b>	-40 ~ +140°F (-40 ~ +60°C). See Derating Curve
<b>Operating Temp<sup>3</sup> :</b>	-40 ~ +176°F (-40 ~ +80°C)
<b>Environment:</b>	Indoor / dry location
<b>Working Humidity:</b>	20 ~ 90% RH non-condensing
<b>Housing / Cooling:</b>	Black powder coated steel enclosure, cooling by free-air convection
<b>Certifications:</b>	<b>ETL Listed 4001928. Class 2 Models:</b> Conforms to UL Std. 8750 Certified to CSA Std. C22.2 No. 250.13. Conforms to UL Std. 1310 Certified to CSA Std. C22.2 No. 223. <b>Non-Class 2 Models:</b> Conforms to UL Std. 1012 Certified to CSA Stand. C22.2 No. 107.1. <b>All Models:</b> FCC Compliant, RoHS Compliant.

	DI-OD2-24V24W	DI-OD2-24V60W	DI-OD2-24V96W	DI-OD2-24V120W	DI-OD2-24V200W
<b>Power / Max Load</b>	24W / 1.00A (See Derating Curve)	60W / 2.50A (See Derating Curve)	96W / 4.00A (See Derating Curve)	120W / 5.00A (See Derating Curve)	200W / 8.30A (See Derating Curve)
<b>Class 2</b>	Yes	Yes	Yes	No	No
<b>Minimum Load</b>	<b>No Dimmer:</b> None <b>Dimmer:</b> <i>See 'OMNIDRIVE 2 Electronic Dimmable Driver Compatibility List' for minimum loads.</i>				
<b>Input Current Full Load</b>	0.84A	0.75A	1.90A	2.10A	3.20A
<b>Output Full Load</b>	24VDC	24VDC	24VDC	24VDC	24VDC
<b>Primary Leads</b>	Screw Down Terminal Block. Fits up to 12AWG Solid Core.	Screw Down Terminal Block. Fits up to 12AWG Solid Core.	SJOW 600V 3C #18	SJOW 600V 3C #18	SJOW 600V 3C #18
<b>Secondary Leads</b>	Screw Down Terminal Block. Fits up to 12AWG Solid Core.	Screw Down Terminal Block. Fits up to 12AWG Solid Core.	SJOW 600V 2C #16	SJOW 600V 2C #16	2X SJOW 600V 2C #16
<b>Voltage Boost<sup>3</sup></b>	No				
<b>Circuit Breakers</b>	Auto Reset hiccup mode. Recovers automatically after fault condition is removed. Short circuit and over current protection.				
<b>Efficiency / Power Factor Full Load</b>	0.69	0.69	0.68	0.68	0.69
<b>THD Full Load</b>					
<b>Dimensions</b>	13.75 x 3 x 1.6 in. (L x W x H)	13.75 x 3 x 1.6 in. (L x W x H)	15 x 3.1 x 2.4 in. (L x W x H)	15 x 3.1 x 2.4 in. (L x W x H)	16.1 x 3.4 x 2.4 in. (L x W x H)
<b>Weight</b>	1.7 lbs (27.2 oz.)	2.2 lbs (35 oz.)	3.6 lbs. (57.6 oz.)	3.6 lbs. (57.6 oz.)	4.8 lbs. (76.8 oz.)

## DERATING CURVE

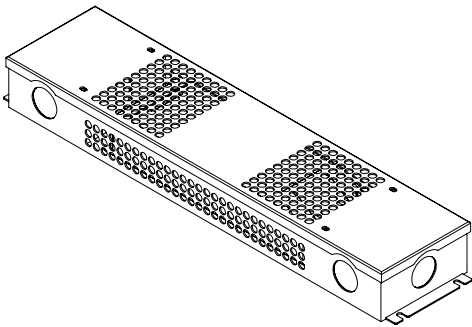
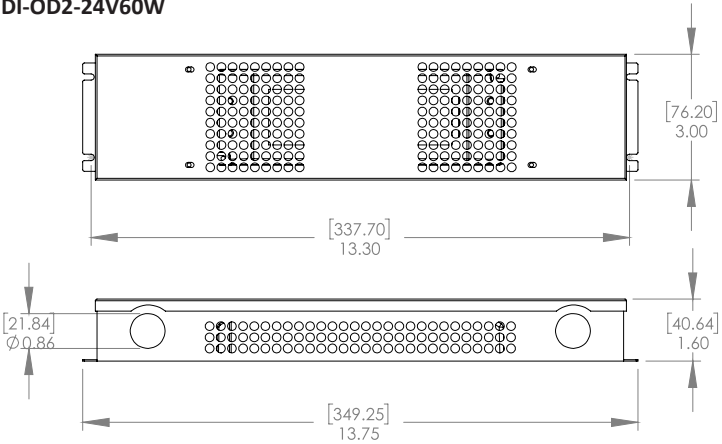
When installing in ambient temperatures that may reach over 100°F, refer to the Derating Curve to avoid overheating and damage to the driver.



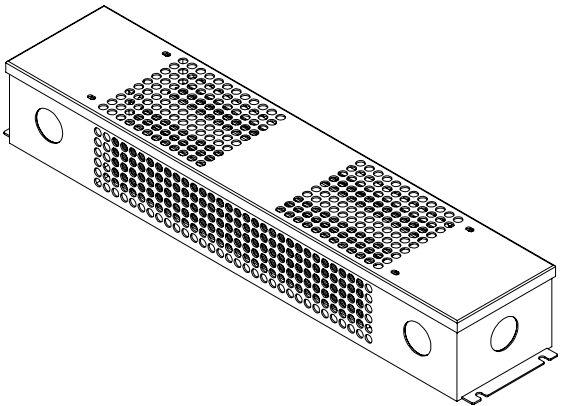
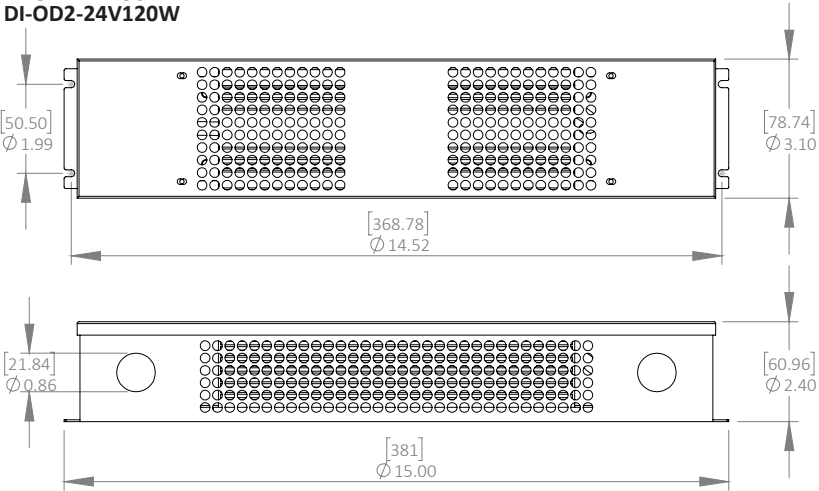
1. Not compatible with PWM dimming controls.
2. Refer to the 'Derating Curve' if nearing max. ambient temperature to properly derate the power supply load. Do not install product in an environment outside the listed ambient temperature.
3. Operating temperature is measured according to the minimum and maximum ambient temperature environment. Operating temperature is measured according to the minimum and maximum ambient temperature environment.

MECHANICAL DIAGRAMS

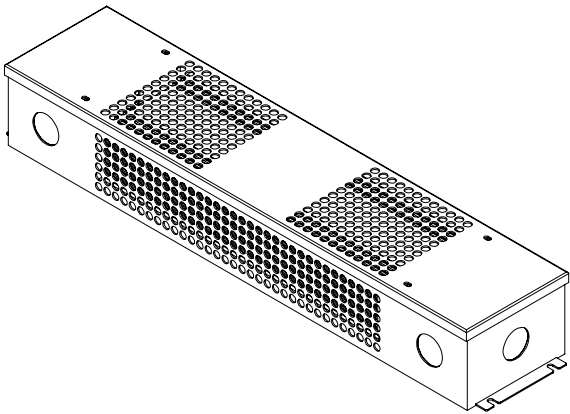
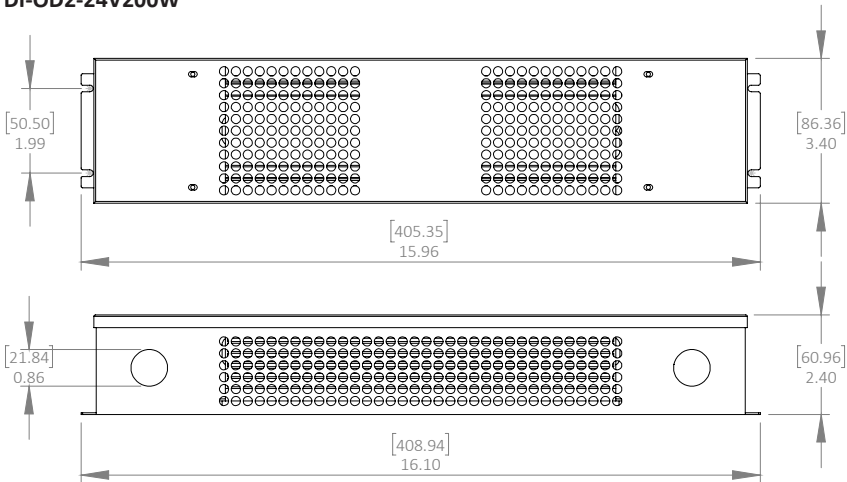
DI-OD2-24V24W  
DI-OD2-24V60W



DI-OD2-24V96W  
DI-OD2-24V120W



DI-OD2-24V200W



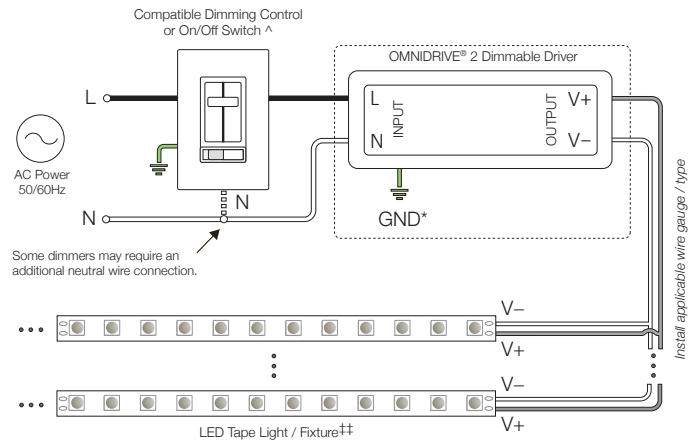
## SYSTEM DIAGRAMS

The following diagrams are provided as example system designs. Install in accordance with national and local electrical code regulations.

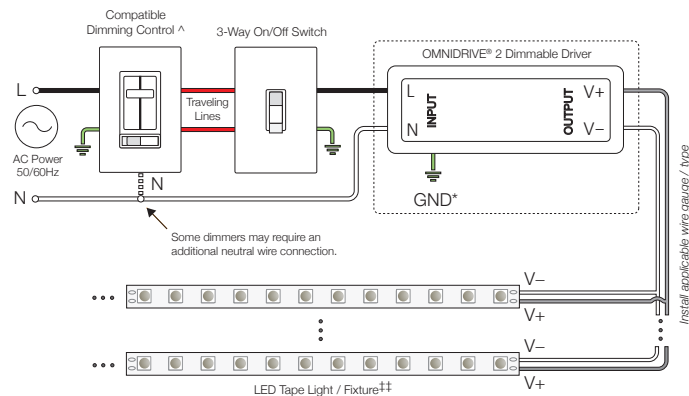
### DIAGRAM KEY

L = Line (Black)  
N = Neutral (White)  
GND = Ground (Green)  
V+ = Low Voltage Positive (Red)  
V- = Low Voltage Negative (Blue)

### STANDARD DRIVER/DIMMER DIAGRAM



### 3-WAY DRIVER/DIMMER DIAGRAM



\* Driver may not require a framed ground connection. Refer to driver specifications for additional information.

^ Install a compatible dimming control or switch. See the 'OMNIDRIVE 2 Dimmer Compatibility List' for compatible dimming controls. See the dimming control manufacturer installation guide for complete wiring instructions.

†† See fixture specifications for maximum series run limits.

## ADDITIONAL RESOURCES

OMNIDRIVE® 2 Specification Sheet (12V Models)

OMNIDRIVE® 2 Installation Guide

OMNIDRIVE® 2 Dimmer/Control Compatibility List

VOLTAGE DROP CHARTS

## SAFETY / WARNINGS / DISCLOSURES

1. This LED Driver is to be installed in accordance with the National Electrical Code or local code.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Install only in dry or damp locations. Do not install in wet locations.
4. Install in a well-ventilated area free from explosive gases and vapors.
5. This LED Driver must be grounded in accordance with the NEC or local codes. This driver must be grounded to the green grounding wire.
6. Only install compatible dimmable LED fixtures.
7. Ensure applicable wire is installed between driver and fixture. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause a fire.
8. See dimmer switch specifications for minimum load requirements.
9. Do not modify or disassemble this product beyond instructions or the warranty will be void.

## WARRANTY

### Limited Warranty

This product has a three (3) year limited warranty from the date of shipment. This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at [www.diodeled.com/limited-warranty/](http://www.diodeled.com/limited-warranty/) within the Policies section. For warranty related questions please contact product support.

### Consumer's Acknowledgment

Diode LED stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the correct components is essential. Diode LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Diode LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Diode LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgment that the products purchased are designed and configured correctly. The purchase agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Diode LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Diode LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Diode LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.



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