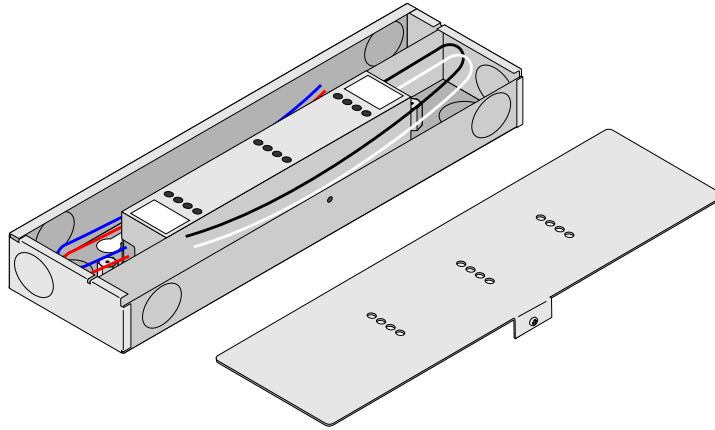




12VDC	24VDC	48VDC	IP20
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Item #	
Project	



**LO-PRO Combo SKU Builder**

**VLM**

Wattage

-

Voltage

-

**LPM**

Junction Box

60W	12*
100W	24
	48

\* 12V LO-PRO COMBO only available in 60W

## OVERVIEW

The VLM 12VDC, 24VDC, and 48VDC Constant Voltage LED Drivers are an excellent choice to pair with On/Off switches. These hard-wired drivers are available in multiple form factors and voltage/wattage combinations to meet your low-voltage LED lighting needs.

## FEATURES

- For use with 120VAC or 277VAC installations.
- Available in 12, 24, or 48VDC output versions.
- Short circuit, over current, over voltage, and over temperature protections
- Class 2
- UL Certified
- Nema1 Enclosure
- 5-Year Warranty

## COMPATIBLE DRIVER OPTIONS

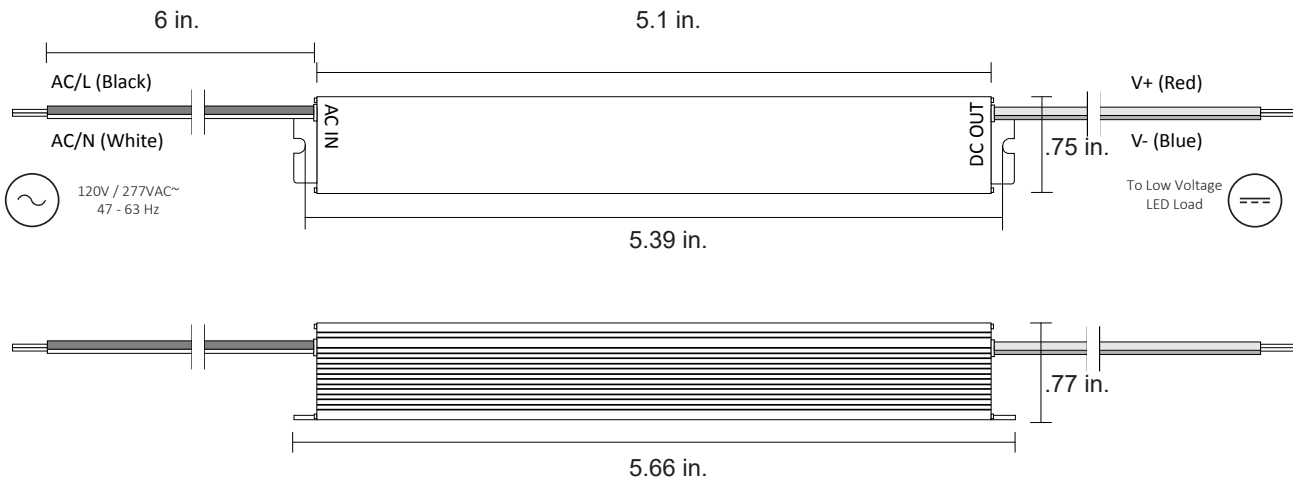
OUTPUT VOLTAGE	WATTAGE	INPUT VOLTAGE
12VDC	60W	120 / 277VAC
24VDC	60W	120 / 277VAC
24VDC	100W	120 / 277VAC
48VDC	60W	120 / 277VAC
48VDC	100W	120 / 277VAC

# LO-PRO MINI JUNCTION BOX & VLM DRIVER COMBO

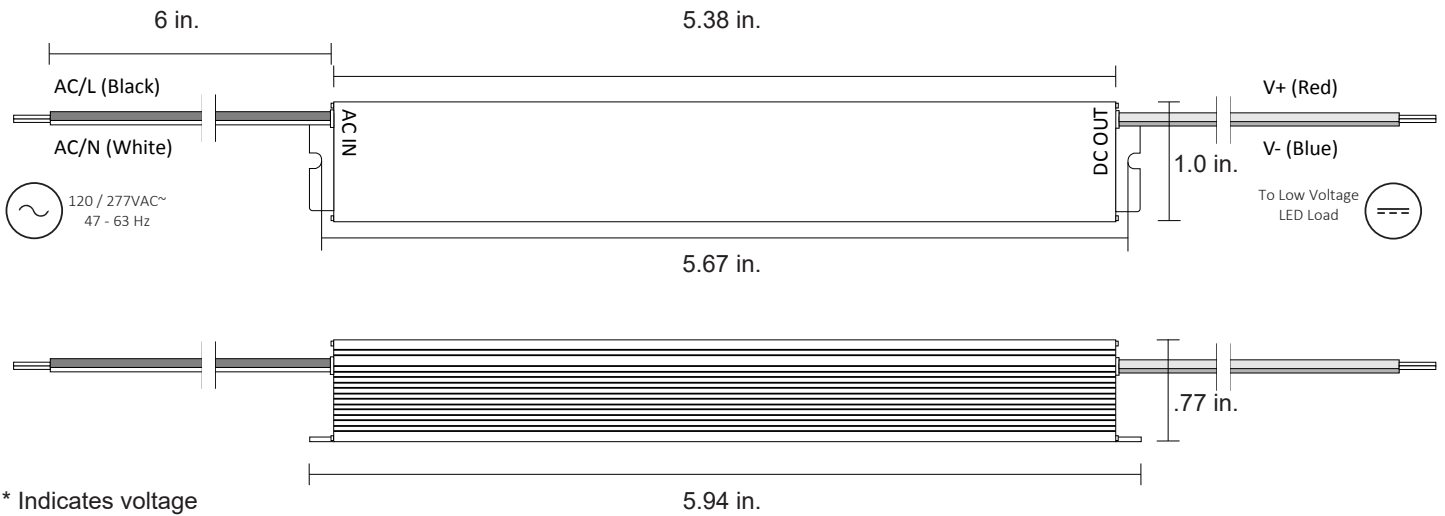
SPECIFICATION SHEET

## MEASUREMENTS

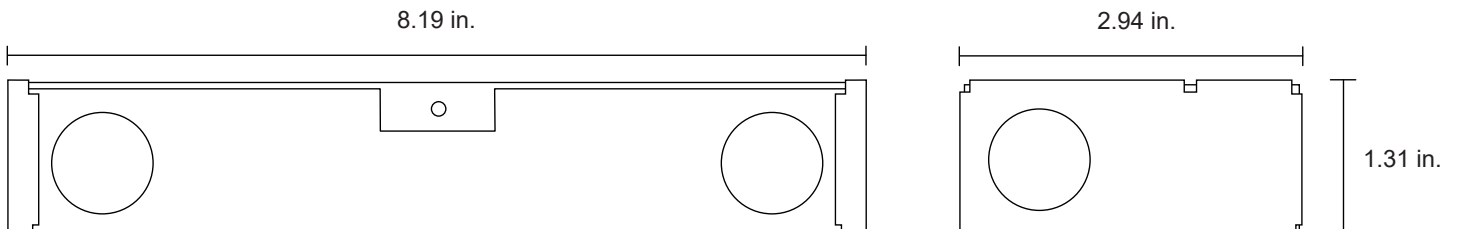
### 60W MODELS - VLM60W-\*



### 96W MODELS - VLM100W-\*



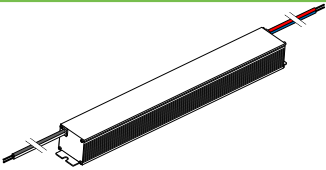
## JUNCTION BOX



# LO-PRO MINI JUNCTION BOX & VLM DRIVER COMBO

SPECIFICATION SHEET

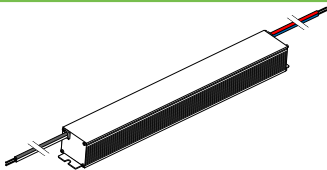
## SPECIFICATIONS - 12VDC MODELS

	VLM60W-12-LPM
	
<b>Input Voltage / Frequency<sup>1</sup></b>	120 / 277VAC / 47 - 63Hz (Refer to 'Static Characteristics Curve')
<b>Max Load</b>	60W / 5A (See Derating Curve)
<b>Class 2 Certified</b>	Yes
<b>Output Voltage</b>	12VDC
<b>Ambient Temperature<sup>2</sup></b>	-22 - 158°F (-30 - +70°C)
<b>Operating Temperature<sup>3</sup></b>	-4 - 122°F (-20 - +50°C)
<b>Minimum Load</b>	None
<b>Dimmability</b>	PWM
<b>Input Current Full Load</b>	1.16A@120VAC / 277VAC
<b>Primary Leads</b>	UL 1015 18/2AWG, AC/L (Black), AC/N (White)
<b>Secondary Leads</b>	UL 1007 18/2AWG, V+(Red), V-(Blue)
<b>Voltage Boost</b>	No
<b>Circuit Breakers</b>	Auto Reset Hiccup
<b>Efficiency / Power Factor Full Load</b>	93% / PF>0.9
<b>Environment<sup>4</sup></b>	Indoor / Damp
<b>Working Humidity</b>	5 - 95% RH non-condensing
<b>Housing / Cooling</b>	IP20-rated case with silicone-based potting
<b>Dimensions</b>	5.1 x 0.75 x 0.77 in. (L x W x H)
<b>Warranty</b>	5 Years
<b>Certifications</b>	E343741 cULus R/C 8750, CAN/CSA C22.2 No. 250.13-14. CE Certified. Class 2. Class P Driver. (VLM60W-12-LPS: patent pending)

# LO-PRO MINI JUNCTION BOX & VLM DRIVER COMBO

SPECIFICATION SHEET

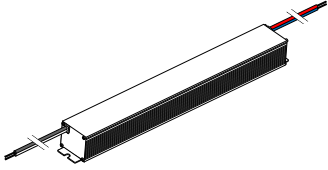
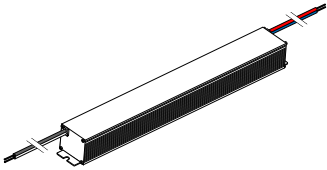
## SPECIFICATIONS - 24VDC MODELS

	VLM60W-24-LPM	VLM100W-24-LPM
		
<b>Input Voltage / Frequency<sup>1</sup></b>	120 / 277VAC / 47 - 63Hz (Refer to 'Static Characteristics Curve')	120 / 277VAC / 47 - 63Hz (Refer to 'Static Characteristics Curve')
<b>Max Load</b>	60W / 2.5A (See Derating Curve)	96W / 4A (See Derating Curve)
<b>Class 2 Certified</b>	Yes	Yes
<b>Output Voltage</b>	24VDC	24VDC
<b>Ambient Temperature<sup>2</sup></b>	-22 - 158°F (-30 - +70°C)	-22 - 158°F (-30 - +70°C)
<b>Operating Temperature<sup>3</sup></b>	-4 - 122°F (-20 - +50°C)	-4 - 122°F (-20 - +50°C)
<b>Minimum Load</b>	None	None
<b>Dimmability</b>	PWM	PWM
<b>Input Current Full Load</b>	1.16A@120VAC / 277VAC	1.16A@120VAC / 277VAC
<b>Primary Leads</b>	UL 1015 18/2AWG, AC/L (Black), AC/N (White)	UL 1015 18/2AWG, AC/L (Black), AC/N (White)
<b>Secondary Leads</b>	UL 1007 18/2AWG, V+(Red), V-(Blue)	UL 1007 18/2AWG, V+(Red), V-(Blue)
<b>Voltage Boost</b>	No	No
<b>Circuit Breakers</b>	Auto Reset Hiccup	Auto Reset Hiccup
<b>Efficiency / Power Factor Full Load</b>	93% / PF>0.9	93% / PF>0.9
<b>Environment<sup>4</sup></b>	Indoor / Damp	Indoor / Damp
<b>Working Humidity</b>	5 - 95% RH non-condensing	5 - 95% RH non-condensing
<b>Housing / Cooling</b>	IP20-rated case with silicone-based potting	IP20-rated case with silicone-based potting
<b>Dimensions</b>	5.1 x 0.75 x 0.77 in. (L x W x H)	5.38 x 1.0 x 0.77 in. (L x W x H)
<b>Warranty</b>	5 Years	5 Years
<b>Certifications</b>	E343741 cULus R/C 8750, CAN/CSA C22.2 No. 250.13-14. CE Certified. Class 2. Class P Driver. (VLM60W-24-LPS: patent pending)	E343741 cULus R/C 8750, CAN/CSA C22.2 No. 250.13-14. CE Certified. Class 2. Class P Driver. (VLM100W-24-LPS: patent pending)

# LO-PRO MINI JUNCTION BOX & VLM DRIVER COMBO

SPECIFICATION SHEET

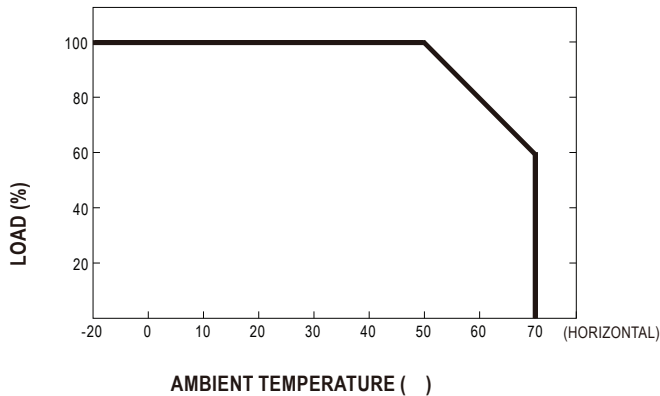
## SPECIFICATIONS - 48VDC MODELS

	VLM60W-48-LPM	VLM100W-48-LPM
		
<b>Input Voltage / Frequency<sup>1</sup></b>	120 / 277VAC / 47 - 63Hz (Refer to 'Static Characteristics Curve')	120 / 277VAC / 47 - 63Hz (Refer to 'Static Characteristics Curve')
<b>Max Load</b>	60W / 1.25A (See Derating Curve)	96W / 2A (See Derating Curve)
<b>Class 2 Certified</b>	Yes	Yes
<b>Output Voltage</b>	48VDC	48VDC
<b>Ambient Temperature<sup>2</sup></b>	-22 - 158°F (-30 - +70°C)	-22 - 158°F (-30 - +70°C)
<b>Operating Temperature<sup>3</sup></b>	-4 - 122°F (-20 - +50°C)	-4 - 122°F (-20 - +50°C)
<b>Minimum Load</b>	None	None
<b>Dimmability</b>	PWM	PWM
<b>Input Current Full Load</b>	1.16A@120VAC / 277VAC	1.16A@120VAC / 277VAC
<b>Primary Leads</b>	UL 1015 18/2AWG, AC/L (Black), AC/N (White)	UL 1015 18/2AWG, AC/L (Black), AC/N (White)
<b>Secondary Leads</b>	UL 1007 18/2AWG, V+(Red), V-(Blue)	UL 1007 18/2AWG, V+(Red), V-(Blue)
<b>Voltage Boost</b>	No	No
<b>Circuit Breakers</b>	Auto Reset Hiccup	Auto Reset Hiccup
<b>Efficiency / Power Factor Full Load</b>	93% / PF>0.9	93% / PF>0.9
<b>Environment<sup>4</sup></b>	Indoor / Damp	Indoor / Damp
<b>Working Humidity</b>	5 - 95% RH non-condensing	5 - 95% RH non-condensing
<b>Housing / Cooling</b>	IP20-rated case with silicone-based potting	IP20-rated case with silicone-based potting
<b>Dimensions</b>	5.1 x 0.75 x 0.77 in. (L x W x H)	5.38 x 1.0 x 0.77 in. (L x W x H)
<b>Warranty</b>	5 Years	5 Years
<b>Certifications</b>	E343741 cULus R/C 8750, CAN/CSA C22.2 No. 250.13-14. CE Certified. Class 2. Class P Driver. (VLM60W-48-LPS: patent pending)	E343741 cULus R/C 8750, CAN/CSA C22.2 No. 250.13-14. CE Certified. Class 2. Class P Driver. (VLM100W-48-LPS: patent pending)

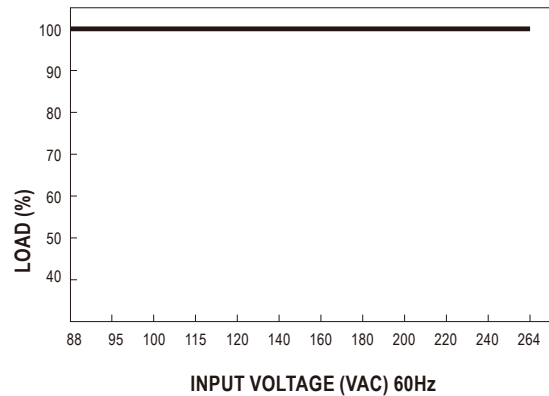
# LO-PRO MINI JUNCTION BOX & VLM DRIVER COMBO

SPECIFICATION SHEET

## DERATING CURVE



## STATIC CHARACTERISTIC CURVE



## Notes

1. Refer to the 'Static Characteristics Curve' if installing under low input voltage conditions to properly derate the power supply load
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.
4. Suitable for indoor / damp locations. NEC definition of damp location: Locations protected from weather and not subject to saturation with water or other liquids but subject to moderate degrees of moisture. Examples of such locations include partially protected locations under canopies, marquees, roofed open porches, and like locations, and interior locations subject to moderate degrees of moisture, such as some basements, some barns, and some cold-storage warehouses.

## COMPLIANCE & REGULATORY APPROVALS

LO-PRO MINI JUNCTION BOX HAS 3 UL CERTIFICATIONS TO COVER A VARIETY OF APPLICATIONS. #1 IS OPTIONAL AND APPLIES WHEN PURCHASING A LO-PRO MINI JUNCTION BOX & DRIVER COMBO. #2 AND #3 APPLY WHEN PURCHASING THE J-BOX ALONE.

### #1) UL 2108 (UL# E469769) LED LOW VOLTAGE POWER UNIT

CERTIFIED AS A LISTED LED LOW VOLTAGE POWER UNIT. *OPTIONAL - ONLY APPLIES WHEN PURCHASED AS A LO-PRO MINI JUNCTION BOX & DRIVER COMBO. A UL E469769 STICKER WILL BE PLACED ON THE OUTSIDE OF THE LO-PRO BOX CERTIFYING THE COMBO AS A UL LISTED LED LOW VOLTAGE POWER UNIT.*

### #2) UL 508A (UL# E486215) INDUSTRIAL CONTROL PANEL

TYPE 1 ENCLOSURE - INDOOR. CAN BE USED AS A STANDARD J-BOX FOR ANY COMPONENT. THIS CERT ALWAYS APPLIES TO THE LO-PRO BOX.

### #3) UL 1598 (UL# E485321) LUMINAIRE FITTING

CERTIFIED FOR FIELD INSTALLATION WITH CLASS 2 LED DRIVER MODELS. THIS CERT ALWAYS APPLIES TO THE LO-PRO BOX.

## SUITABLE FOR USE IN AIR HANDLING SPACES

Suitable for cabinet and surface mount use. Suitable for use in air handling spaces. Suitable for use in other environmental air spaces in accordance with Section 300.22 (C) of the National Electrical Code.

## NEMA1 Enclosure

# LO-PRO MINI JUNCTION BOX & VLM DRIVER COMBO

SPECIFICATION SHEET

## ADDITIONAL RESOURCES

VLM SERIES CONSTANT VOLTAGE DRIVER  
INSTALLATION GUIDE

## SAFETY / WARNINGS / DISCLOSURES

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. DO NOT modify product beyond instructions or warranty will be void.
4. Turn power OFF at main breaker before servicing or installing this product.
5. Proper heat dissipation will prolong the working lifespan of this product. Install in a well-ventilated area free from explosive gases and vapors.
6. Refer to the 'Static Characteristics Curve' if installing under low input voltage conditions to properly derate the power supply load
7. 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.
8. Ensure a compatible LED fixture with the correct operating voltage is installed with this product.
9. Drivers in this specification sheet are not compatible with 120VAC dimming controls.
10. To compensate for voltage drop, ensure applicable gauge in-wall rated wire is installed between driver and LED fixture.

## WARRANTY

### Limited Warranty

The five (5) year limited warranty of this product begins from the date of shipment. The warranty of each item can be found in the 'Specifications' chart under 'Warranty'. 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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Specifications are subject to change without notice.

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