AlphaTECH™ LED STRIP LIGHT

UL CERTIFIED SAFETY | **DIMMABLE** | **24VDC** | **DRY/WET LOCATION** | **IP68**

Item #

Project

SPECIFICATIONS

DI-24V-TE-AT2-FL-FR	
Voltage/Wattage	24VDC, 2.88W/ft.
CRI	90+
Lumens[1] 2400K	94 Lm/ft.
2700K	108 Lm/ft.
2850K	117 Lm/ft.
3000K	109 Lm/ft.
3300K	111 Lm/ft.
3500K	109 Lm/ft.
3800K	109 Lm/ft.
4200K	111 Lm/ft.
4400K	123 Lm/ft.
5000K	118 Lm/ft.
6000K	113 Lm/ft.

*WARNING: NOT FOR USE IN POOL OR SPA APPLICATIONS

FEATURES

- Fully customizable
- Elegant design
- Engineered for rugged environments
- Lightweight, durable, and flexible
- Perfect for both indoor and outdoor applications

SPECIFICATIONS (CONT.)

DI-24V-TE-AT2-FL-FR	
Dimmable	Yes
Custom Produced	2 in. Increments
Field Cuttable	No
Certification	UL 2108
Warranty	5 years
Max Run[2]	16'
Environment*	Indoor / Outdoor, IP68

SKU Builder	DI	24V	TE	AT2	FL	FR	CSTM[3]
		Voltage	Orientation (Top emitting)	Model	Type (Flexible)	Diffuser (Frosted)	CCT & Length

*Example: **DI-24V-TE-AT2-FL-FR-4400-8'2"** = Diode, 24 Volt, Top emitting, AlphaTECH™ Type 2, Flexible, Frosted, 4400 CCT, 8 feet 2 inches, with 96" lead*

SPECIFICATIONS (CONT.)

- Material: UV/IR resistant TPU
- Luminous Efficacy[4] (lm/w): Various
- Mounting: Bottom U-Clip, 3M VHB adhesive tape (Indoor use only)
- Connections: Various Leads: 22/2 AWG
- Ambient Temp[5]:-4 - 122°F (-20 ~ 50°C)
- Operating Temp[6]:-4 - 176°F (-20 ~ 80°C)
- Flammability[7]: Flame retardant

COMPLIANCE & REGULATORY APPROVALS

Safety

- UL Listed 2108 Low Voltage Lighting System / Low Voltage Luminaire. UL 1598 / CSA 250.0-08, UL 8750. UL 879 / CAN/CSA-C22.2 no. 207-M89. Certified for United States and Canada. File # E469769.
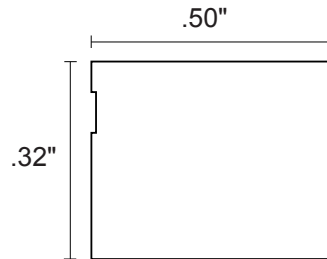
Performance

- LED chip data measured in accordance to IES LM-80-08.
- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Elemental LED's Innovation Lab.

MECHANICAL DIAGRAMS

AlphaTECH™ AT2
Top emitting

.50"

.32"

COMPATIBLE DRIVERS

Additional information on compatible Drivers can be found on page 3-7 or on the Diode LED web site at: www.DiodeLED.com.

1. Lumen value measured in accordance to IES LM-80-08. LED chips have a luminous flux range with a tolerance of +/- 5%.
2. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
3. Requests for custom lengths of Strip Light will be cut to the nearest (lower) cut point. (Example: *DI-24V-TE-AT2-FL-FR-4400-8' 3"* would be cut to 98 inches (ie. 8' 2")
4. Actual efficacy value is dependent to specified LED driver (power supply). An estimated efficacy value can be calculated as follows: Lumen value divided by average power consumption per foot.
5. Do not install product in an environment outside the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, lumen output, and/or adversely impact color consistency and materials.
6. Operating temperature is measured according to the minimum and maximum ambient temperature environment.
7. This product has been tested and passed glow-wire flammability tests (GWFI index) at 650°C/1200°F, providing an extra level of safety for common areas, hospitality, and areas of high risk fire.
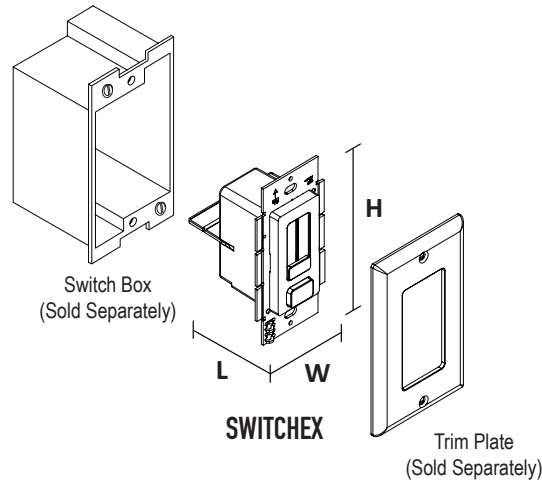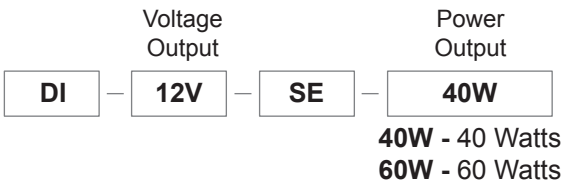
AlphaTECH™ LED STRIP LIGHT

SPECIFICATION SHEET

LED DRIVERS (Required)

The following Listed LED Drivers are recommended to meet NEC code when installed according to specifications. For additional LED Driver options see Diode LED's product page at: https://www.diodeled.com/products/led-power-supplies.html

SWITCHEX® DRIVER + DIMMER SWITCH

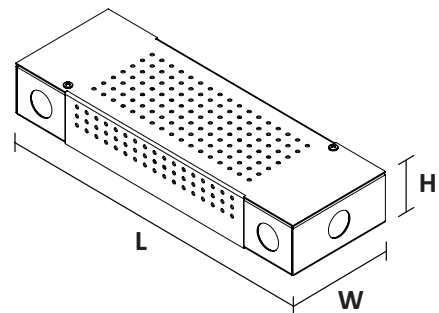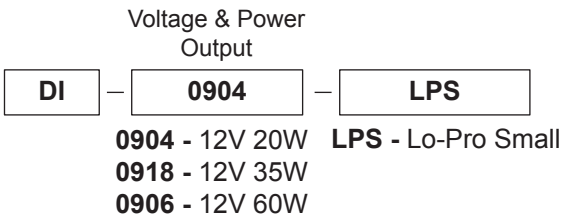SWITCHEX combines an LED driver and LED dimmer switch into a single integrated unit. Fits into standard switch boxes.

DI	–	12V	–	SE	–	40W

Voltage Output

Power Output

40W - 40 Watts
60W - 60 Watts

SKU	L – LENGTH W – WIDTH H – HEIGHT
DI-12V-SE-40W	Fits in Standard Switch Box
DI-12V-SE-60W	

Switch Box (Sold Separately)

SWITCHEX

Trim Plate (Sold Separately)

c(UL)us LISTED

LO–PRO® JUNCTION BOX & DRIVER COMBO - 12V CONSTANT VOLTAGE LED DRIVER

Use Constant Voltage Drivers to power your low voltage tape light. Compatible with Standard 120VAC On/Off Switches, REIGN® 12-24V Low Voltage Dimmers, TOUCHDIAL™ Control System, DMX Decoders, and PWM Controls.
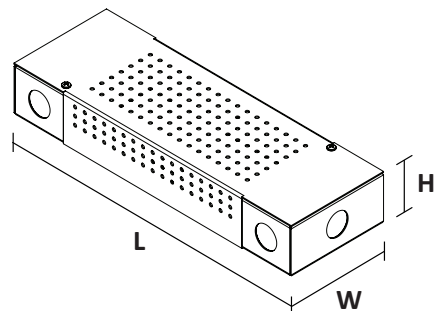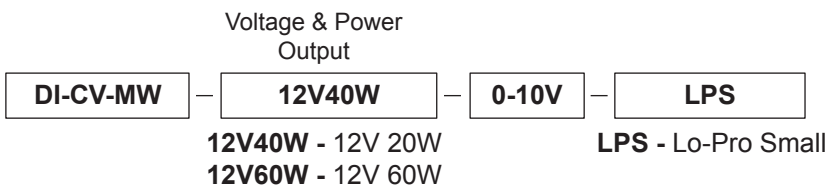
DI	–	0904	–	LPS

Voltage & Power Output

0904 - 12V 20W   **LPS -** Lo-Pro Small
0918 - 12V 35W
0906 - 12V 60W

SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-0904-LPS			
DI-0918-LPS	11.25 in.	3.75 in.	1.90 in.
DI-0906-LPS			

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LO–PRO® JUNCTION BOX & DRIVER COMBO - 12V COMMERCIAL GRADE 0-10V LED DIMMABLE DRIVER

Compatible with 0-10V controls and dimmer systems.

DI-CV-MW	–	12V40W	–	0-10V	–	LPS

Voltage & Power Output

12V40W - 12V 20W   **LPS -** Lo-Pro Small
12V60W - 12V 60W

SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-CV-MW-12V40W-0-10V-LPS			
DI-CV-MW-12V60W-0-10V-LPS	11.25 in.	3.75 in.	1.90 in.

c(UL)us LISTED

AlphaTECH™ LED STRIP LIGHT

LED DRIVERS   (Required)

The following Listed LED Drivers are recommended to meet NEC code when installed according to specifications. For additional LED Driver options see Diode LED's product page at: https://www.diodeled.com/products/led-power-supplies.html
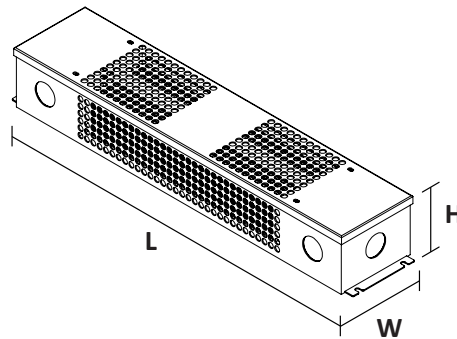
OMNIDRIVE® 2 ELECTRONIC DIMMABLE LED DRIVER

OMNIDRIVE 2 features a zero minimum load and 100-5% dimming range. Compatible with Forward Phase and Reverse Phase Dimmers.

Voltage & Power Output

| DI | — | OD2 | — | 12V24W |

12V24W - 12V 24W
12V60W - 12V 60W
12V120W - 12V 120W
12V200W - 12V 200W

SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-OD2-12V24W	13.75 in.	3.00 in.	1.60 in.
DI-OD2-12V60W	13.75 in.	3.00 in.	1.60 in.
DI-OD2-12V120W	15.00 in.	3.10 in.	2.40 in.
DI-OD2-12V200W	16.10 in.	3.40 in.	2.40 in.

LUTRON HI-LUME 1% LED DIMMABLE DRIVER

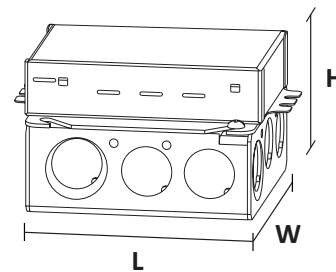Hi-lume 1% LED driver has a minimum load of 5W and Dims from 100-1%.

Voltage & Power Output

3-Wire or 2-Wire Dimmers

| DI-DM | — | 12V40W | — | L3D |

12V40W - 12V 40W

L3D - Lutron Hi-lume 1% EcoSystem /3-WireVoltage LED Driver
LTE - Lutron Hi-lume 1% 2-Wire LED Driver (120V Forward Phase Only)

SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-DM-12V40W-L3D			
DDI-DM-12V40W-LTE	4.89 in.	4.00 in.	2.62 in.

LUTRON HI-LUME PREMIER 0.1% LED DIMMABLE DRIVER

Hi-Lume Premier 0.1% LED driver has a minimum load of 5W and Dims from 100-0.1%.

Voltage & Power Output

| DI-DM | — | 24V96W | — | L3D |

12V40W - 12V 40W

L3D - Lutron Hi-lume Premier 0.1% EcoSystem/3-Wire LED Driver
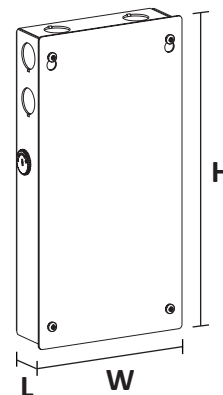
SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-DM-24V96W-L3D	5.50 in.	2.20 in.	10.50 in.

AlphaTECH™ LED STRIP LIGHT

SPECIFICATION SHEET

LED DRIVERS (Required)

The following Listed LED Drivers are recommended to meet NEC code when installed according to specifications. For additional LED Driver options see Diode LED's product page at: https://www.diodeled.com/products/led-power-supplies.html
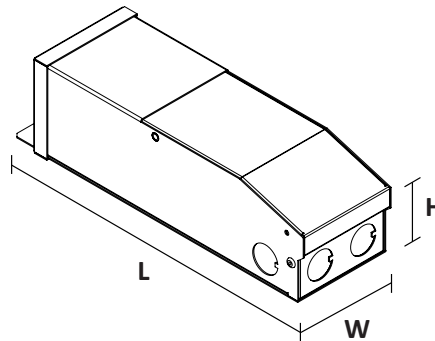
MAGNETIC DIMMABLE DRIVERS
Compatible with 120VAC MLV (Magnetic Low Voltage) Dimmer Switches

Voltage & Power Output

| DI | — | 0920 |

0920 - 12V 20W
DM-12V40W - 12V 40W
0922 - 12V 60W
0925 - 12V 100W
DM-12V120W-MT - 12V 120W (2x 60W Taps)
DM-12V180W-MT - 12V 120W (3x 60W Taps)
0923 - 12V 200W
DM-12V300W-MT - 12V 120W (5x 60W Taps)

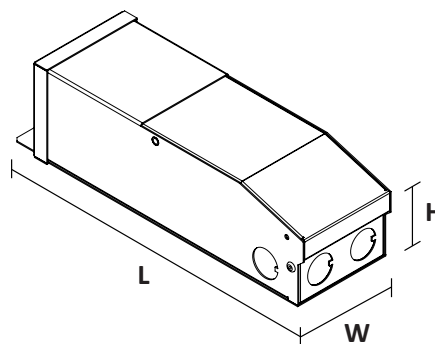| SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-0920	5.60 in.	2.00 in.	2.14 in.
DI-DM-12V40W	5.60 in.	2.00 in.	2.14 in.
DI-0922	6.55 in.	2.25 in.	2.55 in.
DI-0925	9.80 in.	3.00 in.	3.00 in.
DI-DM-12V120W-MT	9.80 in.	4.20 in.	3.20 in.
DI-DM-12V180W-MT	9.80 in.	4.20 in.	3.20 in.
DI-0923	9.80 in.	3.00 in.	3.00 in.
DI-DM-12V300W-MT	9.80 in.	4.20 in.	3.20 in.

MAGNETIC DIMMABLE DRIVERS (277VAC INPUT)
Compatible with 277VAC MLV (Magnetic Low Voltage) Dimmer Switches

Voltage & Power Output

| DI | — | DM-12V20W-277 |

DM-12V20W-277 - 12V 20W
DM-12V60W-277 - 12V 60W
DM-12V100W-277 - 12V 100W
DM-12V200W-277 - 12V 200W
DM-12V300W-277 - 12V 300W

SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-DM-12V20W-277	5.60 in.	2.00 in.	2.14 in.
DI-DM-12V60W-277	6.55 in.	2.25 in.	2.55 in.
DI-DM-12V100W-277	9.80 in.	3.00 in.	3.00 in.
DI-DM-12V200W-277	9.80 in.	4.20 in.	3.50 in.
DI-DM-12V300W-MT	9.80 in.	4.20 in.	3.50 in.

LED DRIVERS (Required)

The following Listed LED Drivers are recommended for compatibility and to meet NEC code when installed according to specifications. For additional LED Driver options see Diode LED's product page at: https://www.diodeled.com/products/led-power-supplies.html
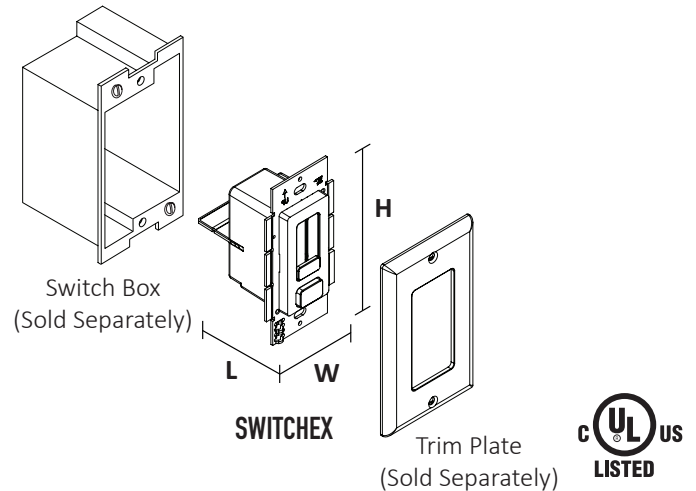
SWITCHEX® DRIVER + DIMMER SWITCH

SWITCHEX combines an LED driver and LED dimmer switch into a single integrated unit. Fits into standard switch boxes.

DI	–	24V	–	SE	–	60W

Voltage Output: 24V
Power Output: 60W

SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-24V-SE-60W	1.40 in.	2.10 in.	4.10 in.
DI-24V-SE-100W	1.40 in.	2.10 in.	4.10 in.

Fits in Standard Switch Box

Switch Box (Sold Separately)

SWITCHEX

Trim Plate (Sold Separately)

C UL US LISTED

LO–PRO® JUNCTION BOX & DRIVER COMBO - 24V CONSTANT VOLTAGE LED DRIVER

Use Constant Voltage Drivers to power your lighting system. Compatible with Standard 120VAC On/Off Switches, REIGN® Low Voltage Dimmers, TOUCHDIAL™ Control System, DMX Decoders, and PWM Controls.

DI	–	0970	–	LPS

Voltage & Power Output: 0970
Junction Box: LPS
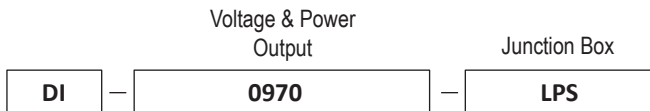
| SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-0970-LPS	11.25 in.	3.75 in.	1.90 in.
DI-CV-MW24V60W-277-LPS	11.25 in.	3.75 in.	1.90 in.
DI-CV-MW24V90W-277-LPS	11.25 in.	3.75 in.	1.90 in.
DI-0954-LPL	13.5 in.	4.5 in.	2.37 in.

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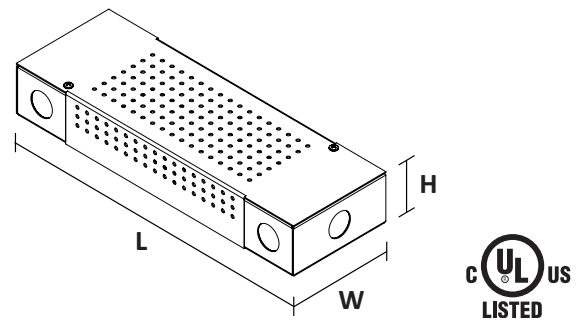
LO–PRO® JUNCTION BOX & DRIVER COMBO - 24V COMMERCIAL GRADE 0-10V LED DIMMABLE DRIVER

Compatible with 0-10V controls and dimming systems.

DI-DM	–	MW24V60W	–	0-10V	–	LPS

Voltage & Power Output: MW24V60W
Junction Box: LPS
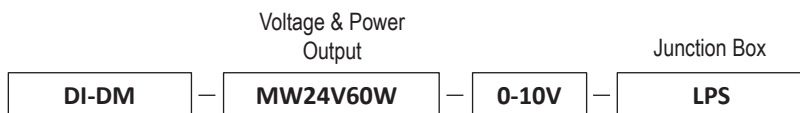
SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-DM-MW-24V60W-0-10V-LPS	11.25 in.	3.75 in.	1.90 in.
DI-DM-MW-24V90W-0-10V-LPL	13.5 in.	4.5 in.	2.37 in.

C UL US LISTED
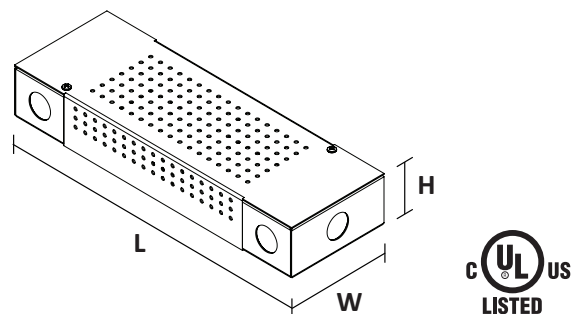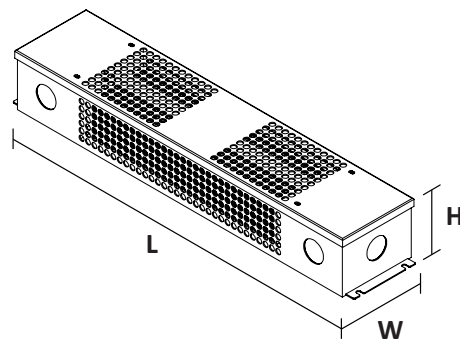
LED DRIVERS Cont. (Required)

The following Listed LED Drivers are recommended for compatibility and to meet NEC code when installed according to specifications. For additional LED Driver options see Diode LED's product page at: https://www.diodeled.com/products/led-power-supplies.html

OMNIDRIVE® 2 ELECTRONIC DIMMABLE LED DRIVER

OMNIDRIVE 2 features a zero minimum load and 100-5% dimming range. Compatible with Forward Phase and Reverse Phase Dimmers. Please see Diode LED's Compatibility List at: https://www.diodeled.com/custom/download/productFile/filename/DI-OD2-Compatibility%20List.pdf/

DI	—	OD2	—	Voltage & Power Output 24V24W

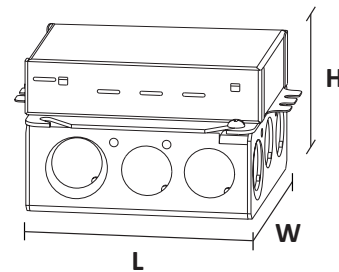| SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-OD2-24V24W	13.75 in.	3.00 in.	1.60 in.
DI-OD2-24V60W	13.75 in.	3.00 in.	1.60 in.
DI-OD2-24V96W	15.00 in.	3.10 in.	2.40 in.
DI-OD2-24V120W	15.00 in.	3.10 in.	2.40 in.
DI-OD2-24V200W	16.10 in.	3.40 in.	2.40 in.

LUTRON. Hi-lume 1% LED DIMMABLE DRIVER

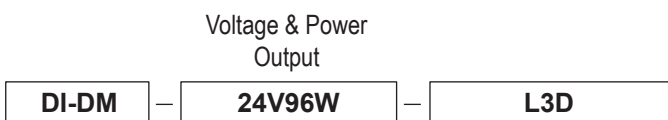Hi-lume 1% LED Driver has a minimum load of 5W and dims from 100-1%.

DI-DM	—	Voltage & Power Output 24V40W	—	3-Wire or 2-Wire Dimmers L3D
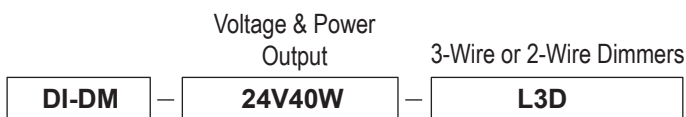
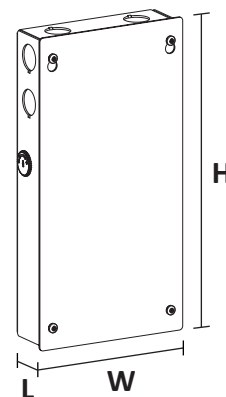| SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-DM-24V40W-L3D DI-DM-24V40W-LTE	4.89 in.	4.00 in.	2.62 in.

LUTRON. Hi-lume Premier 0.1% LED DIMMABLE DRIVER

Hi-Lume Premier 0.1% LED Driver has a minimum load of 5W and dims from 100-0.1%.

DI-DM	—	Voltage & Power Output 24V96W	—	L3D

SKU	L – LENGTH	W – WIDTH	H – HEIGHT
DI-DM-24V96W-L3D	5.50 in.	2.20 in.	10.50 in.

ADDITIONAL INFORMATION

- AlphaTECH™ LED STRIP LIGHT 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. Only install with a listed Class 2 DC LED Driver.
4. Not for use in or on walls of pools, fountains, or other partially or fully submersed locations.
5. Do not modify or disassemble product beyond instructions or this warranty will be void.
6. Actual color may vary from what is pictured above and on other print materials due to the limitations of photographic processes.
7. We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

WARRANTY

Limited Warranty
This product has a five (5) 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/ within the Policies section. For warranty related questions please contact product support.

Consumer's Acknowledgment
Elemental LED, Inc. 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. Elemental 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 Elemental 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 an Elemental 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 purchaser 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. Elemental LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Elemental 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 Elemental LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.