



FLEX STP 20 IP67 is a high performance flexible LED fixture distinguished by its extremely tight LED pitch and ability to blend in shallow channels, making it perfect for direct view applications.

ELECTRICAL

Input Voltage	24VDC
Dimming Options	<ul style="list-style-type: none"> • PURE DC™ • MLV • 0-10V • DMX • Lutron (2-WIRE, 3-WIRE, EcoSystem)
Power Consumption	2.0 Watts per foot
Wire Size	20AWG, 2 wire
Regulatory	<p>ETL - Conforms to UL Std. 2108; Certified to CSA Std. C22.2 No. 9.0</p> <p>Title 24 - Selected models are JA8 2016 compliant when used with 0-10V, DMX, or Lutron Premier dimming.</p>

PHYSICAL

Field Cuttable	Every 0.90" (22.86mm)
Operating Temperature	-20° C (-40°F) to +50°C (+122°F)
Environment	IP67 - Wet Location
Maximum Run Length	40.00'
Dimensions (WxH)	0.47" (11.94mm) x 0.21" (5.33mm)
	Endcaps - 0.50" (12.70mm) x 0.31" (7.87mm)

ACCESSORIES

Channels	Optic Arts® Channel (pg. 3-6)
Mounting Clips	FLEXMNT.SIL.EXT12 (pg. 7)
Connectors	LC-O2P-F, LC-O2P-M (pg. 7)
Strain Relief	FLEX.ZIP (pg. 7)

LUMEN OUTPUT

NOMINAL CCT	CCT w/IP67 JACKET
1800K	1760K: 107.00 lm/ft 53.50 lm/Watt
2350K	2260K: 142.20 lm/ft 71.10 lm/Watt
2750K¹	2620K: 159.30 lm/ft 79.65 lm/Watt
2930K¹	2820K: 170.10 lm/ft 85.05 lm/Watt
3550K¹	3410K: 170.10 lm/ft 85.05 lm/Watt

Note: Stated lumen values have a tolerance of +/- 10%.

1: JA8 2016 when used with 0-10V, DMX, or Lutron Premier dimming.

PERFORMANCE

CRI	2350-3550K = 95+, 1800K = 90+
Binning Tolerance	+/- 100K
Warranty	5 years

PART NUMBER BUILDER

SERIES	+	IP RATING	+	COLOR	+	VOLTAGE	+	WATTAGE	+	CONFIGURATION	+	LENGTH
FLEXSTP		67 = IP67 - Wet Location		18 = 1800K 23 = 2350K 27 = 2750K ¹ 29 = 2930K ¹ 35 = 3550K ¹		24 = 24 VDC		20 = 2.0W		FLC1 = FLEX Config 1 FLC2 = FLEX Config 2 FLC3 = FLEX Config 3		XX = Custom Length

1: JA8 2016 when used with 0-10V, DMX, or Lutron Premier dimming.

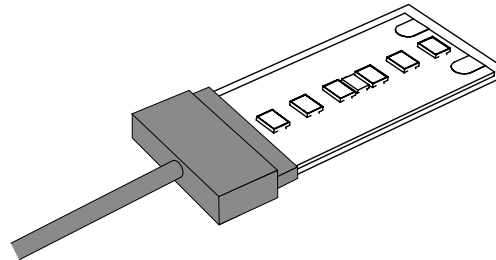
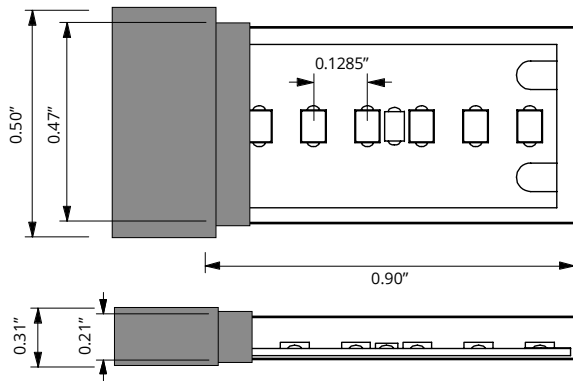


DIMENSIONS

Optic Arts® cuts all FLEX STP and Channel products to length per customer specifications. Each length of FLEX STP is fitted with a 6' wire lead (custom lengths available upon request) and packaged on a reel in an anti-static bag. Bags are labeled with fixture type, length and location (if applicable). Each piece of channel is labeled with fixture type, length and location (if applicable), and is bundled by fixture type.

- Due to the nature of the FLEX STP product, specific lengths may not fall exactly on a cutting point. In this case, Optic Arts® will always cut to the smaller dimension unless otherwise specified.
- Unless otherwise specified, channel is cut 15mm longer than FLEX STP.
- Some on-site assembly required. See installation guides for details.

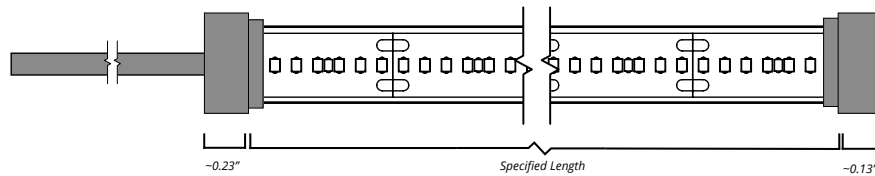
OUTDOOR FLEX STP 20



DIMENSIONS

Width	0.47" (11.94mm)
Height	0.21" (5.33mm)
Width (Endcap)	0.50" (12.70mm)
Height (Endcap)	0.31" (7.87mm)
Cuttable Segment Length	0.90" (22.86mm)
Pitch Length	0.1285" (3.26mm)
Max Run Length	40.00' (12192.00mm)

OUTDOOR FLEX STP 20



MOUNTING OPTIONS - COMPATIBLE CHANNELS

[Click to access CHANNEL ACCESSORIES CATALOGUE >](#)

KEY

CHANNEL PART NUMBER BREAKDOWN:

CHS	+	R	+	1208
SERIES		APPLICATION		DIMENSIONS
CHS = Slim Channel CHW = Wide Channel		S = Surface Mount R = Recessed Mount C = Corner Mount H = Hanging Mount		XXXX = W x H (mm)

CHS-R-1208



• Click on channel titles below to access complete channel cut sheets



Not Blended

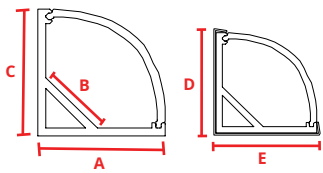


Blended w/Milky Lens



Center Blend

CHS-C-1616



Mounting Clip

- A: 0.63" (16.00mm)
- B: 0.39" (10.00mm)
- C: 0.63" (16.00mm)
- D: 0.70" (17.78mm)
- E: 0.70" (17.78mm)

MATERIAL

Anodized Aluminum

DESCRIPTION

Slim corner mount channel with rounded lens.

LENGTH

2 meter

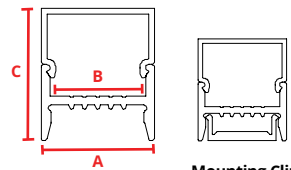
LENS TYPES

Frosted CHS-C-1616-CF
Milky CHS-C-1616-CM

ACCESSORIES

Endcap CHS-C-1616-EC
Endcap w/hole CHS-C-1616-ECH
Mounting Clip CHS-C-1616-MC

CHS-S-1922S



Mounting Clip

- A: 0.77" (19.50mm)
- B: 0.65" (16.50mm)
- C: 0.86" (21.80mm)

MATERIAL

Anodized Aluminum

DESCRIPTION

Slim surface mounted channel with square wrap around lens. Mounting clip is fully concealed within fixture base.

LENGTH

2 meter

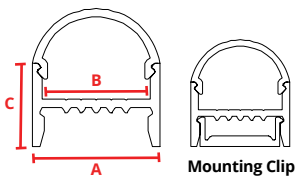
LENS TYPES

Milky CHW-S-1922S-CM

ACCESSORIES

Endcap CHS-S-1922S-EC
Endcap w/hole CHS-S-1922S-ECH
Mounting Clip CHS-S-1922S-MC

CHS-S-1922R



Mounting Clip

- A: 0.77" (19.50mm)
- B: 0.65" (16.50mm)
- C: 0.86" (21.80mm)

MATERIAL

Anodized Aluminum

DESCRIPTION

Slim surface mounted channel with rounded wrap around lens. Mounting clip is fully concealed within fixture base.

LENGTH

2 meter

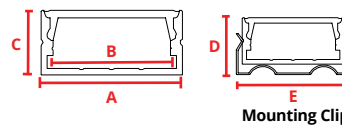
LENS TYPES

Milky CHW-S-1922R-CM

ACCESSORIES

Endcap CHS-S-1922R-EC
Endcap w/hole CHS-S-1922R-ECH
Mounting Clip CHS-S-1922R-MC

CHW-S-2010



Mounting Clip

- A: 0.93" (23.50mm)
- B: 0.78" (20.00mm)
- C: 0.39" (10.00mm)
- D: 0.48" (12.19mm)
- E: 1.02" (25.80mm)

MATERIAL

Anodized Aluminum

DESCRIPTION

Low profile surface mounted channel.

LENGTH

2 meter

LENS TYPES

Clear CHW-S-2010-CC
Frosted CHW-S-2010-CF
Milky CHW-S-2010-CM

ACCESSORIES

Endcap CHW-S-2010-EC
Endcap w/hole CHW-S-2010-ECH
Mounting Clip CHW-S-2010-MC
Rotating Mounting Clip CHW-S-2010-MCR



Not Blended



Blended w/Milky Lens



Centered Blend

CHW-R-2010



MATERIAL

Anodized Aluminum

DESCRIPTION

Recessed wide-profile channel.

LENGTH

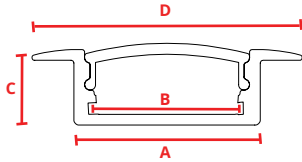
2 meter

LENS TYPES

Clear CHW-R-2010-CC
Frosted CHW-R-2010-CF
Milky CHW-R-2010-CM

ACCESSORIES

Endcap CHW-R-2010-EC
Endcap w/hole CHW-R-2010-ECH



- A:** 0.93" (23.50mm)
- B:** 0.78" (20.00mm)
- C:** 0.39" (10.00mm)
- D:** 1.19" (30.24mm)

CHW-C-3030



MATERIAL

Anodized Aluminum

DESCRIPTION

45 degree channel with rounded lens.

LENGTH

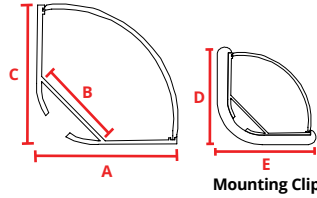
2 meter

LENS TYPES

Clear CHW-C-3030-CC
Frosted CHW-C-3030-CF
Milky CHW-C-3030-CM

ACCESSORIES

Endcap CHW-C-3030-EC
Endcap w/hole CHW-C-3030-ECH
Mounting Clip CHW-C-3030-MC



- A:** 1.18" (30.00mm)
- B:** 0.78" (20.20mm)
- C:** 1.18" (30.00mm)
- D:** 1.29" (32.77mm)
- E:** 1.29" (32.77mm)

CHW-C-3030S



MATERIAL

Anodized Aluminum

DESCRIPTION

45 degree channel with square lens.

LENGTH

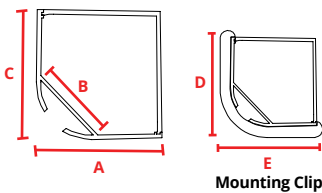
2 meter

LENS TYPES

Clear CHW-C-3030S-CC
Frosted CHW-C-3030S-CF
Milky CHW-C-3030S-CM

ACCESSORIES

Endcap CHW-C-3030S-EC
Endcap w/hole CHW-C-3030S-ECH
Mounting Clip CHW-C-3030S-MC



- A:** 1.18" (30.00mm)
- B:** 0.78" (20.20mm)
- C:** 1.18" (30.00mm)
- D:** 1.29" (32.77mm)
- E:** 1.29" (32.77mm)

CHW-S/H-3535



MATERIAL

Anodized Aluminum

DESCRIPTION

Wide and deep surface mounted or hanging channel. Eliminates visible LED nodes for most FLEXDC products when used with a milky lens.

LENGTH

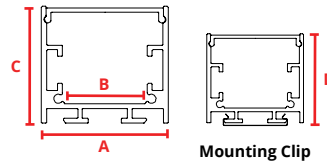
2 meter

LENS TYPES

Frosted CHW-35mm-CF
Milky CHW-35mm-CM

ACCESSORIES

Endcap CHW-S-3535-EC
Endcap w/hole CHW-S-3535-ECH
Mounting Clip CHW-S-3535-MC
Hanging Hardware CHW-SH-3535-MW
Bracket Straight CHW-S-XX35-B5
Bracket 90° Flat CHW-S-XX35-B90F
Bracket 90° Raised CHW-S-XX35-B90R
End Cap for FLEX AC CHW-S-3535-ECAC
Mounting Clip for FLEX AC CHW-S-3535-MCAC
VHB Tape VHBTAPE.AC



- A:** 1.39" (35.25mm)
- B:** 0.96" (24.50mm)
- C:** 1.39" (35.25mm)
- D:** 1.54" (39.00mm)

*Must specify for hanging or surface mount application.

CHW-R-4435



MATERIAL

Anodized Aluminum

DESCRIPTION

Wide and deep recessed channel. Eliminates visible LED nodes for most FLEXDC products when used with a milky lens. Can be securely and conveniently mounted with CHW-R-4435-SC spring clip.

LENGTH

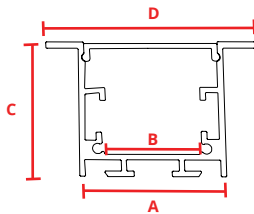
2 meter

LENS TYPES

Frosted CHW-35mm-CF
Milky CHW-35mm-CM

ACCESSORIES

Endcap CHW-R-4435-EC
Endcap w/hole CHW-R-4435-ECH
Mounting Clip CHW-R-4435-SC
Bracket Straight CHW-S-XX35-B5
Bracket 90° Flat CHW-S-XX35-B90F
Bracket 90° Raised CHW-S-XX35-B90R
End Cap for FLEX AC CHW-R-4435-ECAC
Mounting Clip for FLEX AC CHW-R-4435-MCAC
VHB Tape VHBTAPE.AC



- A:** 1.39" (35.25mm)
- B:** 0.96" (24.50mm)
- C:** 1.39" (35.25mm)
- D:** 2.00" (51.04mm)

CHW-S/H-2027



MATERIAL

Anodized Aluminum

DESCRIPTION

Small surfaced mounted or hanging channel with wrap around lens.

LENGTH

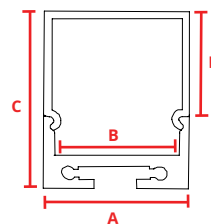
2 meter

LENS TYPES

Clear CHW-SH-2027-CC
Frosted CHW-SH-2027-CF
Milky CHW-SH-2027-CM

ACCESSORIES

Endcap CHW-SH-2027-EC
End Cap w/hole CHW-SH-2027-ECH
Hanging Hardware CHW-SH-MW
Bracket Straight CHW-SH-B5
Bracket 90° Flat CHW-SH-B90F
Bracket 90° Raised CHW-SH-B90R



- A:** 0.79" (20.30mm)
- B:** 0.66" (16.70mm)
- C:** 1.06" (27.00mm)
- D:** 0.76" (19.50mm)

*Must specify for hanging or surface mount application.

MOUNTING OPTIONS - COMPATIBLE CHANNELS



Not Blended

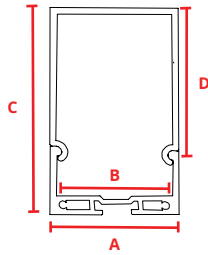


Blended w/Milky Lens



Centered Blend

CHW-S/H-3561



- A:** 1.38" (35.00mm)
- B:** 1.24" (31.40mm)
- C:** 2.43" (61.70mm)
- D:** 1.57" (39.90mm)

*Must specify for hanging or surface mount application.

MATERIAL

Anodized Aluminum

DESCRIPTION

Large surface mounted or hanging channel with wrap around lens.

LENGTH

2 meter

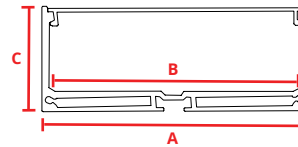
LENS TYPES

Milky CHW-SH-3561-CM

ACCESSORIES

Endcap CHW-SH-3561-EC
 End Cap w/hole CHW-SH-3561-ECH
 Hanging Hardware CHW-SH-MW
 Bracket Straight CHW-SH-BS
 Bracket 90° Flat CHW-SH-B90F
 Bracket 90° Raised CHW-SH-B90R

CHW-S/H-7532



- A:** 2.95" (75.00mm)
- B:** 2.52" (64.00mm)
- C:** 1.26" (32.00mm)

*Must specify for hanging or surface mount application.

MATERIAL

Anodized Aluminum

DESCRIPTION

Wide surface mounted or hanging channel with flat lens.

LENGTH

2 meter

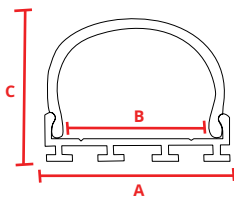
LENS TYPES

Frosted CHW-SH-7532-CF

ACCESSORIES

Endcap CHW-SH-7532-EC
 Endcap w/hole CHW-SH-7532-ECH
 Hanging Hardware CHW-SH-MW
 Bracket Straight CHW-SH-BS
 Bracket 90° Flat CHW-SH-B90F
 Bracket 90° Raised CHW-SH-B90R

CHW-S-2623



- A:** 1.03" (26.20mm)
- B:** 0.80" (20.35mm)
- C:** 0.89" (22.76mm)

MATERIAL

Anodized Aluminum

DESCRIPTION

Surface mounted channel with wrap around lens.

LENGTH

2 meter

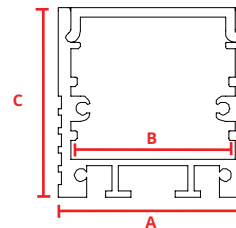
LENS TYPES

Milky CHW-S-2623-CM

ACCESSORIES

Endcap CHW-S-2623-EC
 Endcap w/hole CHW-S-2623-ECH

CHW-S/H-3030



- A:** 1.18" (30.00mm)
- B:** 1.01" (25.60mm)
- C:** 1.18" (30.00mm)

*Must specify for hanging or surface mount application.

MATERIAL

Anodized Aluminum

DESCRIPTION

Wide and deep surface mounted or hanging channel with flat lens for even blending.

LENGTH

2 meter

LENS TYPES

Milky CHW-SH-3030-CM

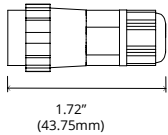
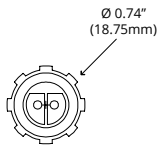
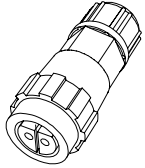
ACCESSORIES

Endcap CHW-SH-3030-EC
 Endcap w/hole CHW-SH-3030-ECH
 Hanging Hardware CHW-SH-MW
 Bracket Straight CHW-SH-BS
 Bracket 90° Flat CHW-SH-B90F
 Bracket 90° Raised CHW-SH-B90R
 End Cap for FLEX AC CHW-SH-3030-ECAC
 Mounting Clip for FLEX AC CHW-SH-3030-MCAC
 VHB Tape VHBTAPE.AC

ACCESSORIES

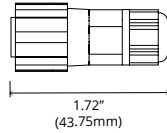
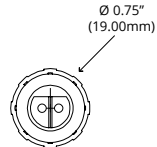
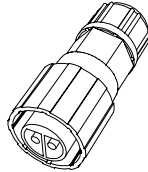
LC-O2P-F

Outdoor Lead Connector
(Female)



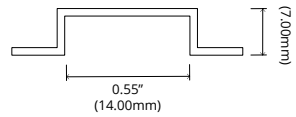
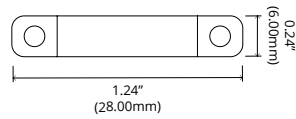
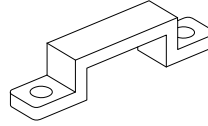
LC-O2P-M

Outdoor Lead Connector
(Male)



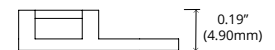
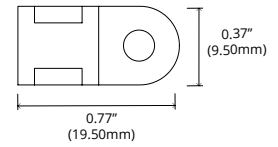
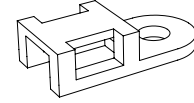
FLEXMNT.SIL.EXT12

Outdoor Mounting Clip



FLEX.ZIP

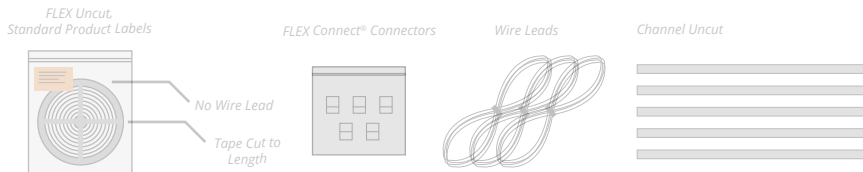
Strain Relief Clip



CONFIGURATION TYPES

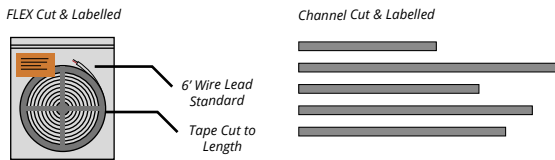
1 [NOT COMPATIBLE] FLEX cut to length with FLEX Connect® Power Feeds for Field Termination, Channel uncut for field cutting

- Specify **FLEXConfig-1**
- Specify FLEX type and channel type
- FLEX factory cut to length, but not terminated
- One FLEX Connect® power feed connector and 6' lead provided per FLEX run
 - Uncut rolls of lead wire can also be provided (see page 8 for part #)
- Channel shipped uncut for field cutting.
- Specify number of butt splices (not shown - see page 8)
- IP68 not available in **FLEXConfig-1**
- JA8 2016 not available in **FLEXConfig-1**
- **FLEXConfig-1** is quick ship if run lengths are provided at time of order. Take offs, if needed, will add lead time.
- The below channels are **NOT** compatible with FLEX Connect®:
 - Slim:**
 - CHS-R-1208
 - CHS-R-1715
 - CHS-C-1616
 - CHC-S-1921
 - Specialty:**
 - CHSP-R-2970
 - CHSP-S-1618
 - CHSP-STEP-8142



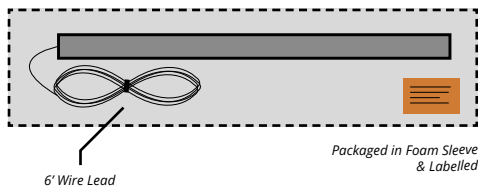
2 Cut To Length With Soldered Leads, Assemble On-Site^{1,2,3}

- Specify **FLEXConfig-2**
- Specify FLEX type and channel type
- Specify run lengths
- IP68 only available in **FLEXConfig-2**
- If no config is specified, and run lengths are provided, **FLEXConfig-2** will be used



3 Pre-Assembled Factory Finished Fixtures^{1,2}

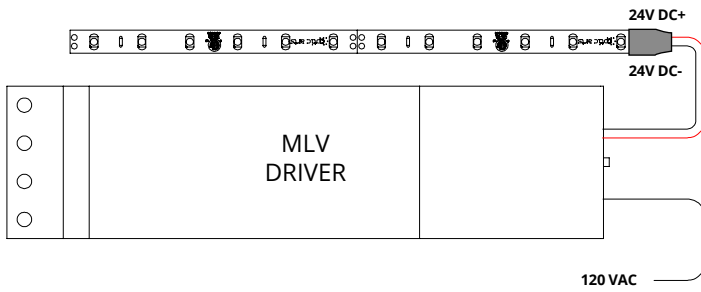
- Specify **FLEXConfig-3**
- Fully assembled fixture
- ETL stamped and listed as a fixture
- 6.50' max length
- Standard 6' power lead unless otherwise specified
- The below channels **CANNOT** be factory assembled:
 - Slim:**
 - CHS-R-1208
 - CHS-R-1715
 - Wide:**
 - CHW-R-2010
 - CHW-S-2027
 - CHW-S-7532
 - CHW-S-2623
 - CHW-S-3030
 - CHW-S-3561



NOTES:

1. Due to the nature of the FLEX DC® product, specific lengths may not fall exactly on a cutting point. In this case, Optic Arts® will always cut to the smaller dimension unless otherwise specified.
2. Unless otherwise specified, channel is cut 15mm longer than FLEX DC®.
3. Some on-site assembly required. See installation guides for details.

COMPATIBLE DRIVERS



MLV (MLV)

PART	DESCRIPTION
ML10S24VDC	10W 120VAC DIMMABLE DRIVER
ML20S24VDC	20W 120VAC DIMMABLE DRIVER
ML35S24VDC	35W 120VAC DIMMABLE DRIVER
ML35S24VDC-277	35W 277VAC DIMMABLE DRIVER
ML40S24VDC	40W 120VAC DIMMABLE DRIVER
ML50S24VDC	50W 120VAC DIMMABLE DRIVER
ML50S24VDC-277	50W 277VAC DIMMABLE DRIVER
ML60S24VDC	60W 120VAC DIMMABLE DRIVER
ML75S24VDC	75W 120VAC DIMMABLE DRIVER
ML75S24VDC-277	75W 277VAC DIMMABLE DRIVER
ML96S24VDC	96W 120VAC DIMMABLE DRIVER
ML96S24VDC-277	96W 277VAC DIMMABLE DRIVER
EM2-200S24DC	200W 120VAC DIMMABLE DRIVER, 2 96W CIRCUITS
EM3-300S24DC	300W 120VAC DIMMABLE DRIVER, 3 96W CIRCUITS
EM2-200S24DC-277	200W 120VAC DIMMABLE DRIVER, 2 96W CIRCUITS
EM3-300S24DC-277	288W 120VAC DIMMABLE DRIVER, 3 96W CIRCUITS

DIMENSIONS

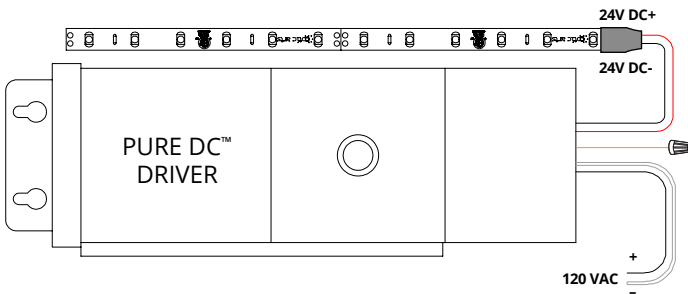
10W-50W	H 2.11"; W 7.38"; D 1.60"
60W-96W	H 3.93"; W 8.13"; D 1.59"
200-300W	H 5.69"; W 10.29"; D 3.13"

DIMMING PERFORMANCE

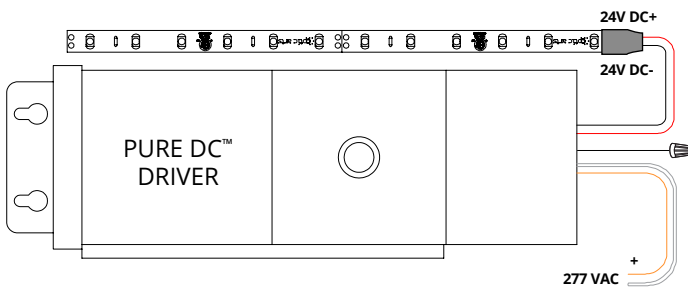
MLV DRIVER Dims to 20% on most MLV dimmers

NOTE: Must be loaded between 75%-100% of rated load to maintain FLEX DC® warranty

120 VAC WIRING



277 VAC WIRING



PURE DC™ MLV (PDC)

PART	DESCRIPTION
PDC.40.24	40W 120/277VAC PURE DC™ MLV DIMMABLE DRIVER
PDC.96.24	96W 120/277VAC PURE DC™ MLV DIMMABLE DRIVER

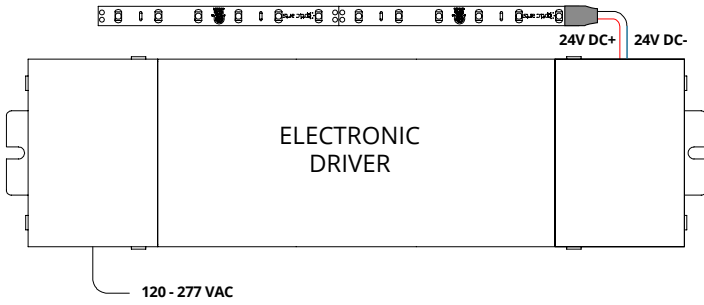
DIMENSIONS

40W	L 14.25"; W 3.00"; H 2.88"
96W	L 14.75"; W 4.31"; H 4.81"

DIMMING PERFORMANCE

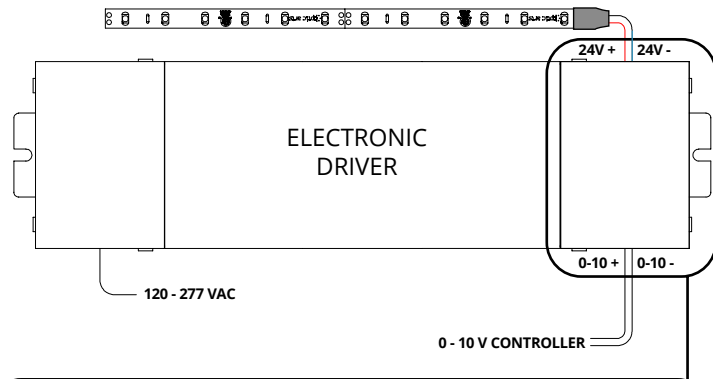
PURE DC™ DRIVER Dims to 0.1% on most MLV dimmers

COMPATIBLE DRIVERS



ELECTRONIC DRIVER - NON-DIM (ND)

PART	DESCRIPTION
GG100E-24-UNV	96W 120-277VAC ELECTRONIC DRIVER
DIMENSIONS	
ELECTRONIC DRIVER	H 3.00"; W 11.46"; D 1.30"
DIMMING PERFORMANCE	
ELECTRONIC DRIVER	Non-Dim



ELECTRONIC DRIVER W/0-10V MODULE (010)

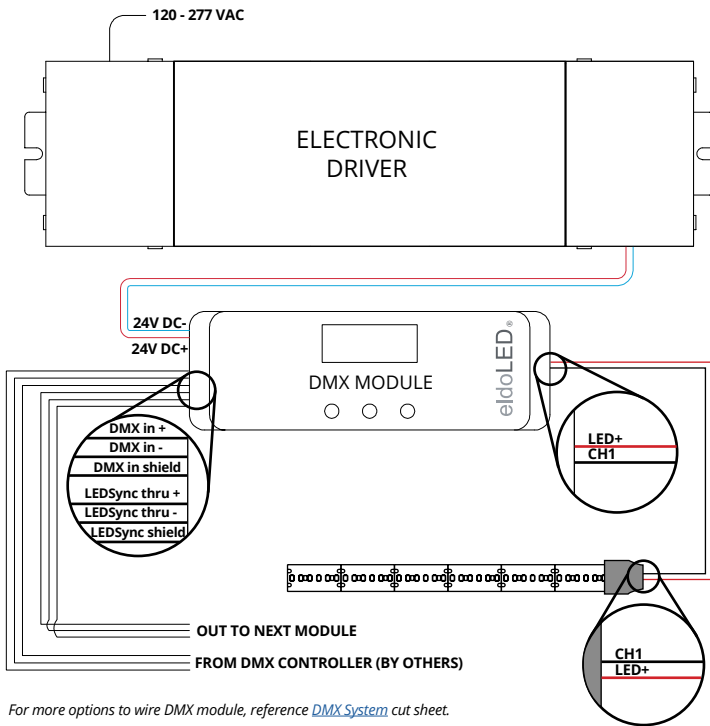
PART	DESCRIPTION
GG100E-24-UNV-010V	96W 120-277VAC ELECTRONIC DRIVER WITH 0-10V DIMMING MODULE (SINK)
DIMENSIONS	
ELECTRONIC DRIVER - 0-10V	H 3.00"; W 11.46"; D 1.30"
DIMMING PERFORMANCE	
ELECTRONIC DRIVER - 0-10V	Dims below 1% on most 0-10V dimmers

FIELD INSTALLED IN LOW VOLTAGE WIRING COMPARTMENT

- Install DIM-010V Module in low voltage wiring compartment.
- Max number of 25 modules on one dimmer. Consult dimmer datasheet for maximum device limitation of a specific controller.



COMPATIBLE DRIVERS



For more options to wire DMX module, reference [DMX System](#) cut sheet.

ELECTRONIC DRIVER W/DMX MODULE (DMX)

PART	DESCRIPTION
GG100E-24-UNV-DMX	96W 120-277VAC ELECTRONIC DRIVER WITH eldoLED DMX DIMMING MODULE

DIMENSIONS

96W	H 3.00"; W 11.46"; D 1.30"
DMX MODULE	H 1.97"; W 6.02"; D 0.91"

*Must be installed in UL box (by others)

DIMMING PERFORMANCE

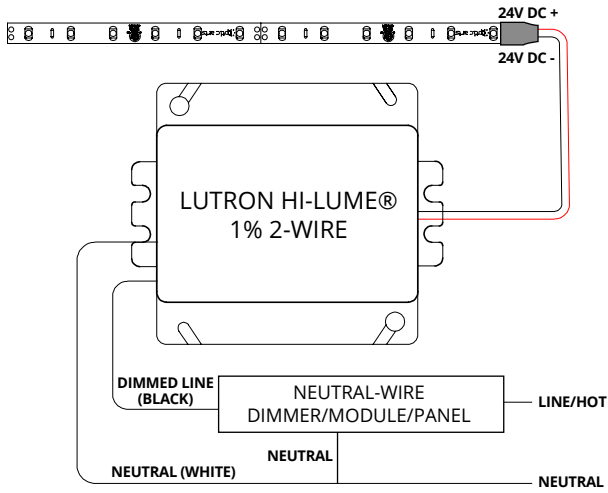
ELECTRONIC DRIVER - DMX MODULE Dims to 0.1% on most DMX systems

FLEX STP 20 IP67

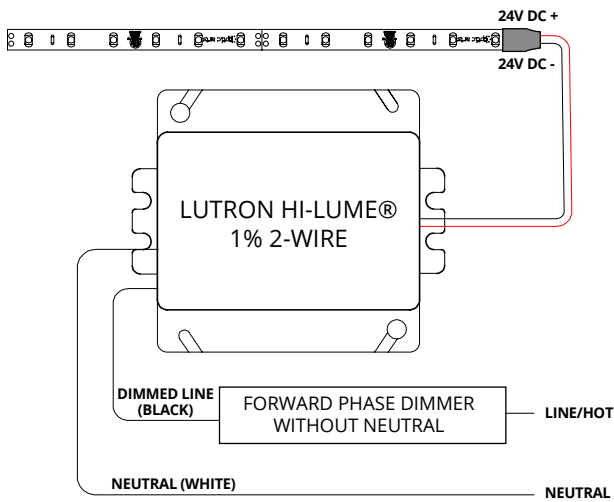
Specification Sheet

COMPATIBLE DRIVERS

DIMMER WITH NEUTRAL



DIMMER WITHOUT NEUTRAL



LUTRON HI-LUME® 1% 2-WIRE: 2-WIRE CONTROL FORWARD PHASE



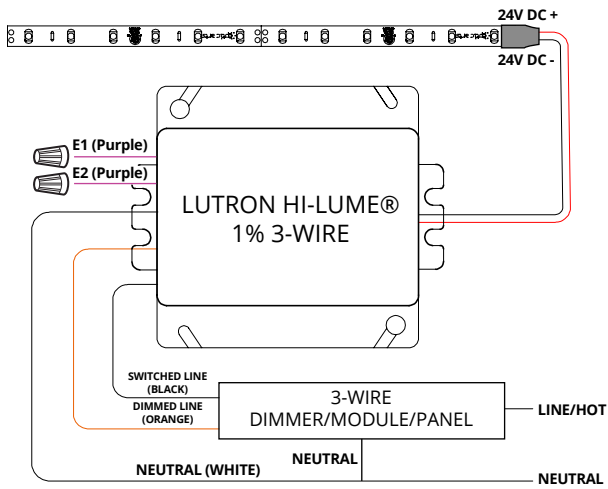
PART	DESCRIPTION
LTEA4U1UKL-CV240	5-40W, 120VAC, 2-WIRE FORWARD PHASE DRIVER
DIMENSIONS	
HI-LUME® 1% 2-WIRE	H 4.00"; W 4.89"; D 2.62"
DIMMING PERFORMANCE	
LUTRON HI-LUME® 1% 2-WIRE	Dims to 1% with compatible Lutron controls

FLEX STP 20 IP67

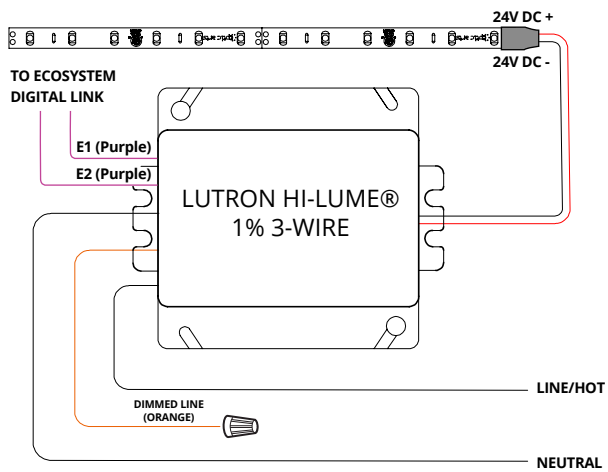
Specification Sheet

COMPATIBLE DRIVERS

3-WIRE



ECOSYSTEM

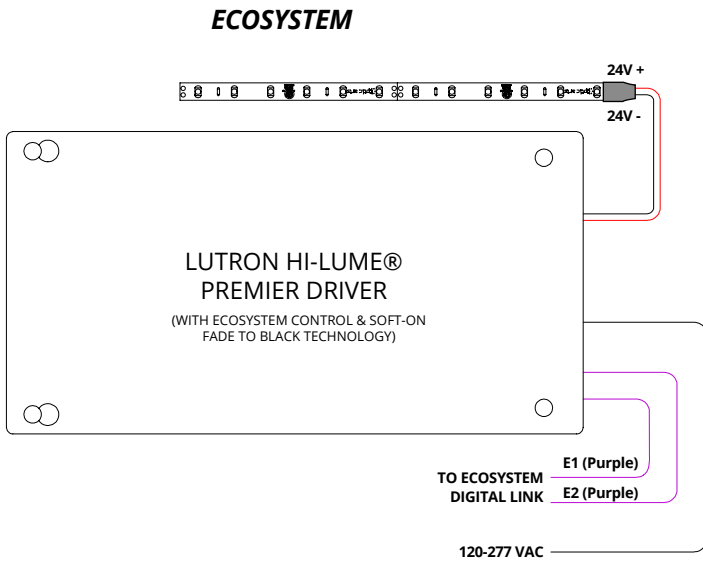
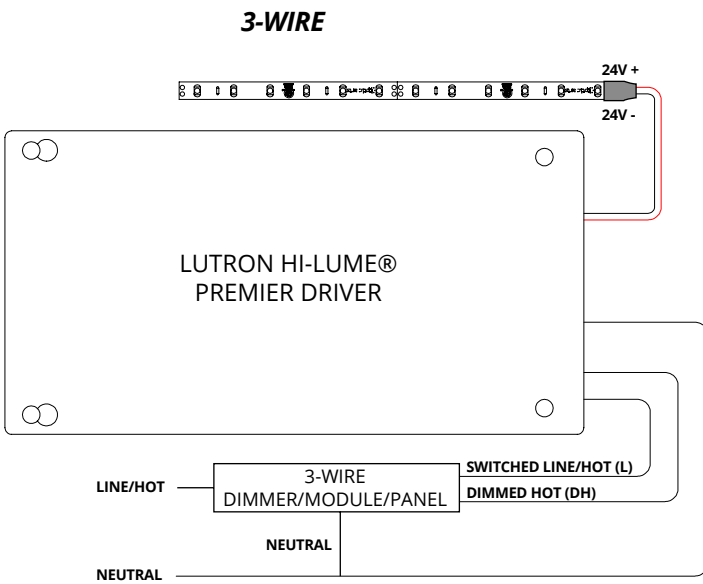


LUTRON HI-LUME® 1%: 3-WIRE/ECOSYSTEM



PART	DESCRIPTION
L3DA4U1UKL-CV240	5-40W, 120-277VAC, 3-WIRE/ECOSYSTEM DRIVER
DIMENSIONS	
HI-LUME® 1%	H 4.00"; W 4.89"; D 2.62"
DIMMING PERFORMANCE	
LUTRON HI-LUME® 1% 3-WIRE/ECOSYSTEM	Dims to 1% with compatible Lutron controls

COMPATIBLE DRIVERS



LUTRON HI-LUME® PREMIER:
3-WIRE/ECOSYSTEM



PART	DESCRIPTION
L3D0-96W24V-U	2-96W, 120-277VAC, 3-WIRE/ECOSYSTEM DRIVER

DIMENSIONS	
HI-LUME® PREMIER	H 5.5"; W 10.5"; D 2.0"

DIMMING PERFORMANCE	
LUTRON HI-LUME® PREMIER	Dims to 0.1% with compatible Lutron controls
<i>NOTE: Lutron soft-on, fade to black technology available with Ecosystem Digital Control only.</i>	