FLEXFIRELEDs

Outdoor IP65

UltraBright Architectural™

CRI93+ Series

Product Data Sheet

15 Year Warranty

RoHS COMPLIANT

C E

c(UL)us LISTED
(LOW VOLTAGE LUMINAIRE)
E362522

TITLE 24 REQUIREMENTS

Title 24 is regulated for lamps with color temperatures 4000k and below

Description

The Outdoor UltraBright™ Architectural Series LED strip lights are the most popular series of strip lights offered at Flexfire LEDs. Their high brightness of up to 503 lumens per foot and efficacy of up to 113 lm/W, coupled with their long run length capability of 65' make this strip a must-have lighting tool for an architect, designer, OEM, contractor, or homeowner. The IP65 silicone cover protection not only allows the lights to be protected from a range of outdoor elements and withstand jets of water, but also makes them extremely easy to clean. The very high lumen output, excellent color rendering and consistency, and flexible design of LED strips means that beautiful lighting can be installed in basically any space you can imagine.

Product Features

- High CRI of 93+
- High R9 (82) & R13 (97) values
- Up to 503 Lumen/ft (1,636/Meter)
- Fully dimmable
- Highest quality components and premium packaged 3014 LEDs
- Single BIN LED selection to ensure color consistency (3-Step MacAdam)
- 3M 9731 adhesive for a strong bond to the weatherproof silicone sleeve
- 120° Beam Angle
- Efficiency up to 113 Lumen/W

- Only 1/2" (12mm) strip width
- Short LED pitch of 1/4" (6.3mm)
- Available in 12V, 24V and 48V DC Input
- 12V can be cut every 1" (25mm)
- 24V can be cut every 2" (51mm)
- 48V can be cut every 4" (101mm)
- 49 LEDs / Foot (160/Meter)
- Thick double layer 4oz copper PCB for excellent thermal management
- Operating Temperature -4°F to 104°F (-20°C to 40°C)
- Maximum run length in series: 12V (16ft / 5m), 24V (42ft / 13m), 48V (65ft / 20m)
- IP65 Rated with non-yellowing and UV resistant silicone sleeve

Product Specific Specifications

Product. SKU	Color* (CCT)	Watts / foot (Meter)	Lumen / foot (Meter)	Luminous efficacy (Lumens / Watt)	CRI	Gamut Score Rg (Color Sat.)	Relative Fidelity Score (RF)	TLCI (Qa)	CQS
UB-AS-24K90C	2400K	4.4 W/ft 14.4 W/m	329 lm/ft (1,079 lm/m)	74 lm/W	97	99	93	97	96
UB-AS-27K90C	2700K	4.4 W/ft 14.4 W/m	456 lm/ft (1,496 lm/m)	106 lm/W	94	96	89	87	93
UB-AS-30K90C	3000K	4.4 W/ft 14.4 W/m	466 lm/ft (1,530 lm/m)	107 lm/W	95	100	90	89	94
UB-AS-35K90C	3500K	4.4 W/ft 14.4 W/m	503 lm/ft (1,636 lm/m)	110 lm/W	96	99	90	91	94
UB-AS-40K90C	4000K	4.4 W/ft 14.4 W/m	485 lm/ft (1,591 lm/m)	110 lm/W	95	98	89	92	93
UB-AS-50K90C	5000K	4.4 W/ft 14.4 W/m	496 lm/ft (1,630 lm/m)	113 lm/W	95	99	89	94	92

*CCT may be +/-100K but always ordered from same bin and will present no noticeable differences perceived by the human eye.
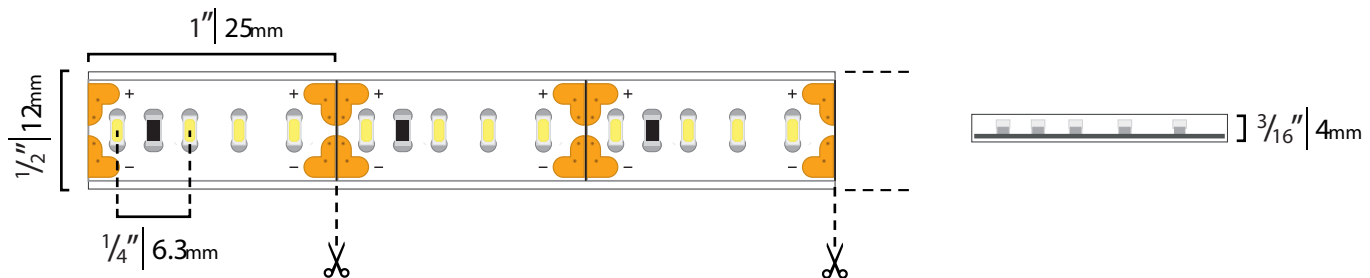
Ordering Code

Outdoor

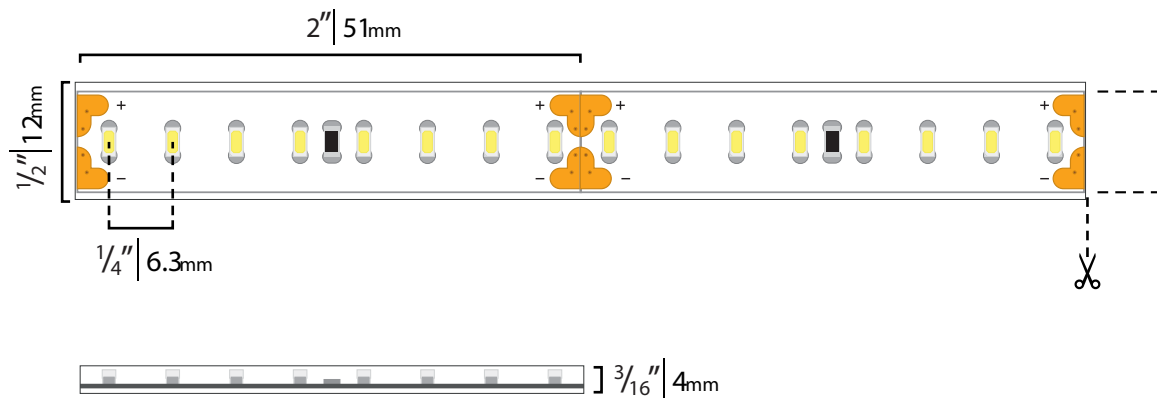| IP Protection	Brand	Series	CCT	Voltage	Length
IP65 - Weatherproof	**UB -** UltraBright	**AS -** Architectural Series	**24K90C** - 2400K/90+ CRI	**12V-**	**08FT** - 8ft Reel**
			27K90C - 2700K/90+ CRI	**24V -**	**16FT** - 16ft Reel
			30K90C - 3000K/90+ CRI	**48V -**	
			35K90C - 3500K/90+ CRI		
			40K90C - 4000K/90+ CRI		
			50K90C - 5000K/90+ CRI		
			62K90C - 6200K/90+ CRI*		

*Special Order
** Only available in 12V and 24V

Dimensions 12V

Dimensions 24V

Dimensions 48V

4″ | 101mm

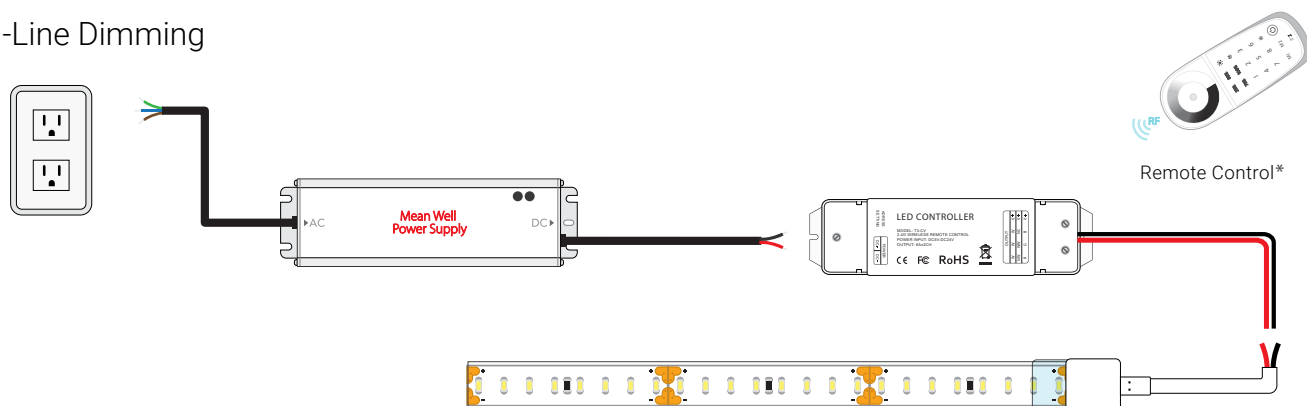½″ | 12mm

¼″ | 6.3mm

3/16″ | 4mm
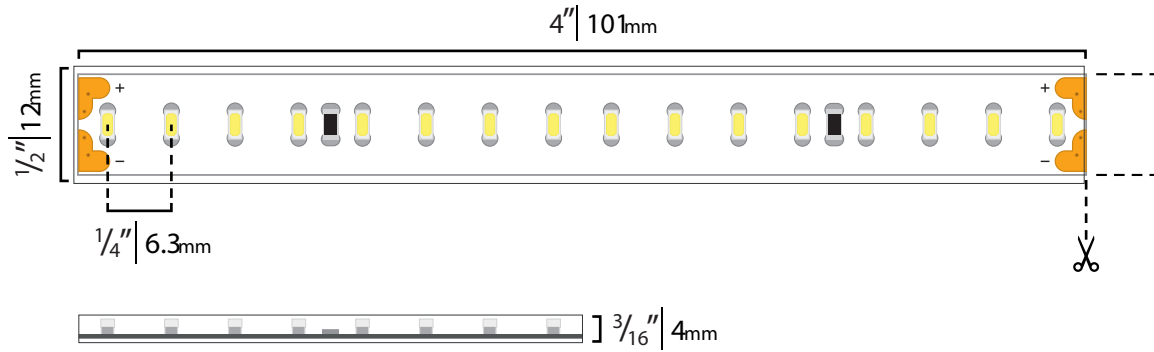
Dimming Options

Lutron Style Wall Dimmer

120V AC Magnetic/Electronic
Low Voltage Dimmer Switch

120V AC
Power

Input		
Color	Symbol	Type
Green	⏚	Ground Wire
Black	L	Line (hot)
White	N	Neutral

Output		
Color	Symbol	Type
Black	−	Negative
Red	+	Positive

In-Line Dimming

Mean Well
Power Supply

AC

DC

LED CONTROLLER

MODEL: T3-CV
2.4G WIRELESS REMOTE CONTROL
POWER INPUT: DC5V-DC24V
OUTPUT: 3Ax4CH

CE FC RoHS
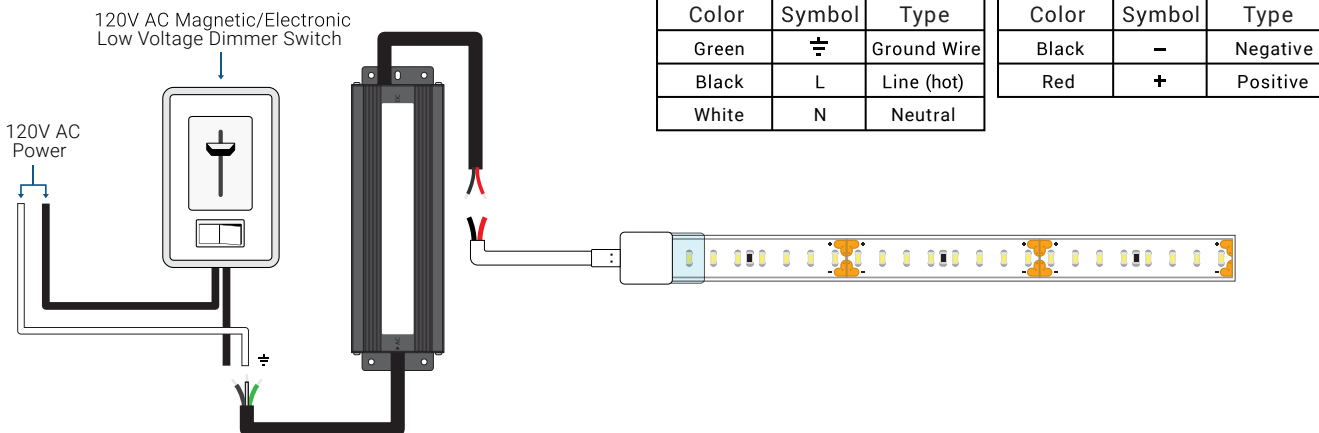
Remote Control*
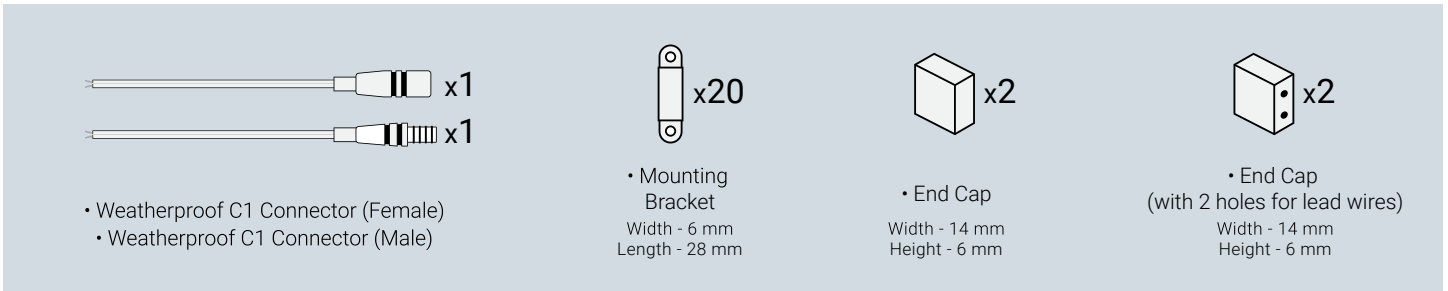
*Remote Control (SKU: SC-MZ-CTRL) can be paired to 8 total receivers. Multiple remotes cannot be paired to a single receiver (max 1)

Included Accessories

x1
x1
• Weatherproof C1 Connector (Female)
• Weatherproof C1 Connector (Male)

x20
• Mounting Bracket
Width - 6 mm
Length - 28 mm

x2
• End Cap
Width - 14 mm
Height - 6 mm

x2
• End Cap
(with 2 holes for lead wires)
Width - 14 mm
Height - 6 mm

Strip Light Connectors

SKU	Description	Wire Gauge	Amperage** Limit	Diagram
IP65-GRIP-SC-C1-10-40	Outdoor IP65 Grip Connector with 40" wire	20 AWG		
IP65-GRIP-SC-C2-10-08	Outdoor IP65 Grip Jumper Connector with 8" wire	20 AWG	5 Amps	
IP65-GRIP-SC-C3-10-0	Outdoor IP65 Grip Jumper Connector	20 AWG		

* Calculate max length of LED strip to follow the solderless connector based on an amperage draw of 0.36 A/ft (1.2 A/m) at 12 volts, 0.18 amps per foot (0.6 A/m) at 24 volts, and of 0.09 A/ft (0.3 A/m) at 48 volts.
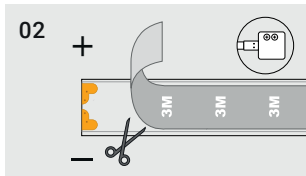
** Be sure no more than 5 amps is drawn after any solderless connector.
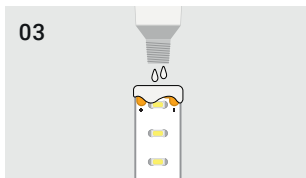
C1   C3   C2
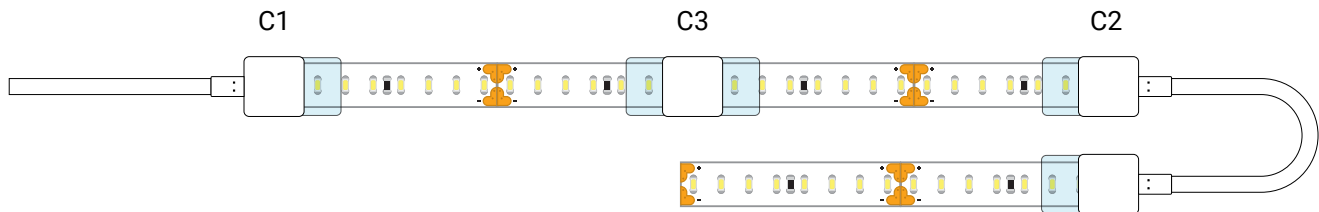
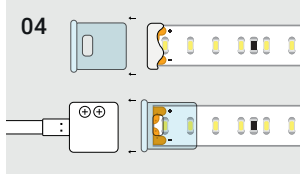# Solderless Connection Guide
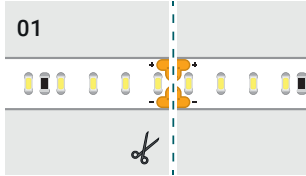
01 Cut the LED strip light and the silicone sleeve on the cutting point you want to install the connector.
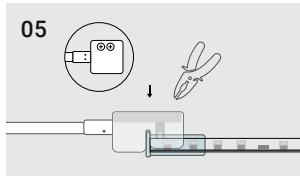
02 Check the polarity and remove 2" of the adhesive tape and its backer from the back of the LED Strip light.

03 Apply Silicone sealant liberally inside of the silicone sleeve until ensuring it is completely sealed.

04 Slide the transparent case of your Outdoor IP65 Grip connector into the sleeve, until making sure that the strip is making proper contact.

05 Grab the white plastic part of your connector and push the metal contacts through the window of the transparent case. Adjust it with pliers until you hear a click, and then let the sealant cure according to its own instructions.
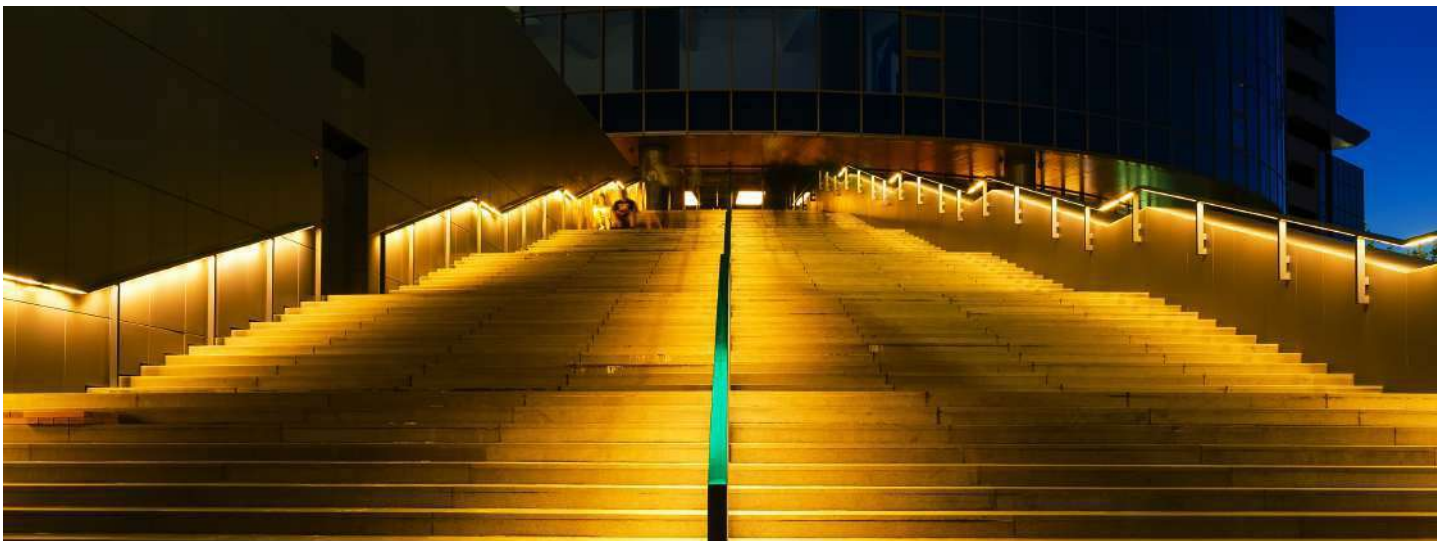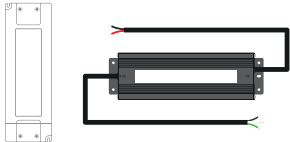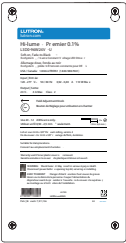
Compatible Drivers (12V)

	Power Supply	LED Strip Length	SKU	Diagram
Non-Dimmable	**Wall Mounted Power Supply / Desktop Power Supply**	1- 2 ft 3 - 4 ft 5 - 8 ft 9 - 13 ft 14 - 17 ft	12V-WMPS-1 12V-DPS-2 12V-DPS-4 12V-DPS-6 12V-DPS-8	
	Mean Well™ HLG	1 - 8 ft 9 - 12 ft 13 - 24 ft 25 - 30 ft 31 - 39 ft 40 - 54 ft 55 - 98 ft	HLG-40H-12A HLG-80H-12A HLG-120H-12A HLG-150H-12A HLG-240H-12A HLG-320H-12A HLG-600H-12A	
	Mean Well™ LPV	1- 4 ft 5 - 7 ft 8 - 12 ft 13 - 20 ft	LPV-20-12 LPV-35-12 LPV-60-12 LPV-100-12	
Dimmable	**Zurik® EMLV**	1 - 6 ft 7 - 12 ft 13 - 24 ft 25 - 40 ft 41 - 61 ft	ZRK-EMLV2-30W-12VDC ZRK-EMLV2-60W-12VDC ZRK-EMLV2-120W-12VDC-J ZRK-EMLV2-200W-12VDC-J ZRK-EMLV2-300W-12VDC-J	
	Zurik® Universal Drivers	1 - 11 ft 12 - 22 ft 23 - 40 ft 41 - 62 ft 1 - 36 ft 37 - 62 ft	ZRK-UNV-60W-12VDC ZRK-UNV-120W-12VDC ZRK-UNV-200W-12VDC ZRK-UNV-300W-12VDC ZRK-UNV-C180W-12VDC ZRK-UNV-C300W-12VDC	

Compatible Drivers (24V)

	Power Supply	LED Strip Length	SKU	Diagram
Non-Dimmable	**Wall Mounted Power Supply / Desktop Power Supply**	1- 4 ft 5 - 11 ft 12 - 18 ft 19 - 22 ft	24V-WMPS-1 24V-DPS-2.5 24V-DPS-4 24V-DPS-5	
	Mean Well™ HLG	1 - 8 ft 9 - 12 ft 13 - 20 ft 21 - 25 ft 26 - 38 ft 39 - 49 ft 50 - 65 ft 66 - 123 ft	HLG-40H-24A HLG-60H-24A HLG-100H-24A HLG-120H-24A HLG-185H-24A HLG-240H-24A HLG-320H-24A HLG-600H-24A	
	Mean Well™ LPV	1- 4 ft 5 - 7 ft 8 - 12 ft	LPV-20-24 LPV-35-24 LPV-60-24	

Compatible Drivers (24V)

	Power Supply	LED Strip Length	SKU	Diagram
Dimmable	**Zurik® EMLV**	1 - 6 ft 7 - 12 ft 13 - 20 ft 21 - 25 ft 26 - 41 ft 42 - 61 ft	ZRK-EMLV2-30W-24VDC ZRK-EMLV2-60W-24VDC ZRK-EMLV2-96W-24VDC-J ZRK-EMLV2-120W-24VDC-J ZRK-EMLV2-200W-24VDC-J ZRK-EMLV2-300W-24VDC-J	
	Zurik® Universal Drivers	1 - 11 ft 12 - 18 ft 19 - 22 ft 23 - 40 ft 41 - 62 ft 1 - 38 ft 39 - 79 ft	ZRK-UNV-60W-24VDC ZRK-UNV-96W-24VDC ZRK-UNV-120W-24VDC ZRK-UNV-200W-24VDC ZRK-UNV-300W-24VDC ZRK-UNV-C192W-24VDC ZRK-UNV-C384W-24VDC	
	Lutron® Hi-Lume™ Premier 0.1% Constant Voltage Driver • **Dimming Range:** 0.1-100% • **Description:** Hi-Lume Premier 0.1% EcoSystem 24V constant voltage LED driver with Soft-on, Fade-to-Black dimming technology **⚙LUTRON.**	1 - 21 ft	L3D0-96W24V-U	

Compatible Drivers (48V)

	Power Supply	LED Strip Length	SKU	Diagram
Non-Dimmable	**Mean Well™ HLG**	1 - 20 ft 21 - 30 ft 31 - 65 ft 66 - 122 ft	HLG-100H-48A HLG-150H-48A HLG-320H-48A HLG-600H-48A	
	Mean Well™ LPV	1 - 12 ft	LPV-60-48	
Dimmable	**Zurik® Universal Drivers**	1 - 37 ft (up to 18 ft per channel) 38 - 55 ft (up to 27 ft per channel)	ZRK-UNV-C192W-48VDC ZRK-UNV-C288W-48VDC	

Compatible Aluminum Extrusions

KLUS GIZA Anodized Extrusion   (SKU: KL-B5556ANODA-1m)

Note: This extrusion only fits the IP65 Architectural Series CRI93+ without cover.

Covers
- KLUS - HS 22 Clear Cover (SKU: KL-17022-1m)
- KLUS LIGER 22 Frosted Cover
  (SKU: KL-17032-1m)

End Caps
- **KLUS GIZA End Cap (SKU: KL-24007)**

Mounting Accessories
- KLUS GP Surface Spring (SKU:KL-00293)
- KLUS Mounting Bracket (SKU: KL-24143)

KLUS LIPOD Anodized Extrusion   (SKU: KL-B5554ANODA-1m)

Covers
- KLUS LIGER 22 Frosted Cover
  (SKU: KL-17032-1m)

End Caps
- KLUS LIPOD-MET End Cap (SKU: KL-24051)

Mounting Accessories
- KLUS Mounting Bracket (SKU: KL-24143)

KLUS KOPRO Anodized Extrusion   (SKU: KL-B6367ANODA-1m)

Covers
- KLUS KOPRO L Cover (SKU: KL-17092-1m)

End Caps
- KLUS KOPRO L End Cap (SKU: KL-24116)

Mounting Accessories
- KLUS GP Surface Spring (SKU: KL-00293)

KLUS SILER Anodized Extrusion   (SKU: KL-B9325ANODA-1m)

Covers
- KLUS SILER Frosted Cover
  (SKU: KL-17039-1m)

End Caps
- KLUS SILER End Cap (SKU: KL-24236)

Mounting Accessories
- KLUS 45-STN Mounting Bracket
  (SKU: KL-24144)

Safety And Disclosures

1. Installation must be in accordance with local and national electrical code regulations.

2. To ensure safety and correct installation, our strips are intended to be installed by a qualified, licensed electrician.

3. Only install with a Class 2 DC Constant Voltage LED driver to meet UL requirements.

4. Do not install in environment where excessive heat may exist.

5. LED strip lights must be handled with care. Excessive handling, bending, and pressure may damage the product, voiding the warranty.

6. Do not install indoor LED tape light products in outdoor / wet location environments. Only use copper wiring. Use wires rated for at least 176°F (80°C) and certified for use with external connection of electrical equipment.

7. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.

8. Make sure the appropriate gauge wire is installed between driver, LEDs, and any dimmers. When choosing wire, calculate voltage drop, maximum amperage rating, and the location ratings on the wire. Improper wire selection and installation could overheat wires, and cause fire.

9. Do not modify product beyond instructions or warranty will be void.

10. We reserve the right to modify and improve the design of our fixtures without prior notice. Although we try our best to order the same colors every time, due to changes in technology and phosphors over time, we cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

Warranty Information

Limited Warranty

This product has a 15 year limited warranty from the date of shipment. This warranty only includes the main product outlined in this specification sheet and does not include the additional accessories that are used as a reference. Complete warranty details for fixtures and additional accessories are available at https://www.flexfireleds.com/warranties/ within the Policies section. For warranty related questions please contact product support team at (support@flexfireleds.com).

Consumer's Acknowledgment

Flexfire LEDs, Inc. stands behind its products when they are used properly and according to our specifications. When you purchase our products, you are agreeing to the terms and conditions outlined in our warranty section. We try our best to make recommendations, but the burden of proper installation, design, and maintenance relies on the purchaser.

This limited warranty does not include product failures that are the result of:

Not using a voltage regulated power supply to connect the LED product or controls; Connecting LED products to the wrong output voltage; Improper connection of power supplies, LED products, or controls; Connecting LED products or controls directly to any AC power source if they are stated for DC only input; Connecting power supplies backwards to an AC power source; Products used in an inappropriate location or in environmental conditions (temperature, humidity, moisture, etc.) outside the normal specified range; Water damage to products not specifically sold as waterproof products; Electrical power surges and spikes; Damage from hail, flooding, tornado, fire, wind, earthquake, lightning, electrical storm, or any other natural disasters or "force majeure" incidences; Damage caused by a vehicle or other accident; Damage caused when transporting the item; Damage to any products that were modified by the user, used for purposes other than as intended or directed, or connected to LED systems or components not purchased from Flexfire LEDs; Products that have been subjected to misuse, mishandling, misapplication or accident. Products used in connection with any components, devices or systems other than those explicitly approved as compatible with Company's products and listed on Company's website. Excessive wear and tear and/or physical or accidental abuse, loss, or theft. Improper repairs or warranty services performed by someone other than Flexfire LEDs will void this warranty.