



Outdoor IP65
Outline™ Series
LED Strip Light

Product Data Sheet

 Please read all instructions carefully before installation.

Description

Less is more with our Outdoor (IP65) UltraBright™ Outline Series. These elegant, weatherproof lights fill the specific need for a lower-output strip with remarkable color accuracy that's guaranteed to make an unforgettable first impression. Not only does the IP65 silicone cover ensures complete protection against dust and can withstand powerful streams of water, but it also makes the strips very easy to clean. Longer run lengths also gives you liberated, uninterrupted design as you get creative with larger projects. From adorning your balcony and bar to outlining commercial windows and kitchens, the IP65-rated Outline™ Series promises the sophistication that is difficult to achieve in outdoor settings

15 Year
Warranty



TITLE
24
REQUIREMENTS

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

Product Features

CRI	High CRI of up to 97
R9 and R13 Values	High R9 (99) and R13 (97)
Lumens	Up to 132 lm/ft (434 lm/m)
Efficacy	Up to 84 lm/W
Voltage	24V DC Input
LEDs/Foot	37 LEDs/ft (120/m)
Beam Angle	120° Beam Angle
Ambient Temp	-4°F to 113°F (-20°C to 45°C)
PCB	4 oz copper PCB
LED Pitch	5/16" (8 mm)
Strip Width	1/2" (12 mm)
Cutting Points	2" (50 mm)
Max Run Length in Series	82 ft (25 m)
LED Size	2216
Adhesive Type	3M VHB 9495 tape (IP65)
Dimmable	Yes
IP65 Protection	Non-yellowing UV resistant silicone sleeve

Product Specifications

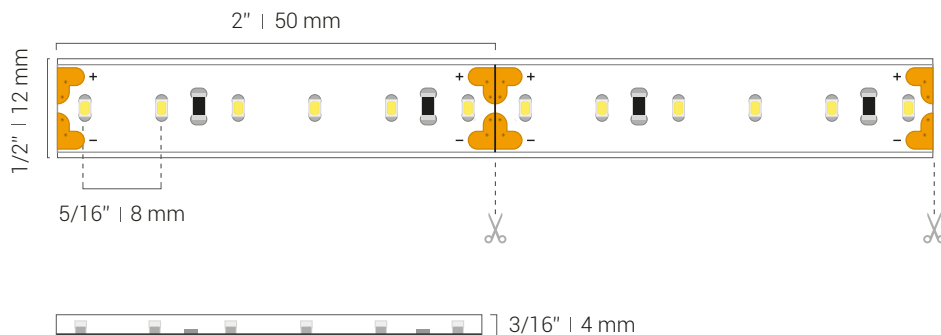
Product SKU	Color* (CCT)	Watts / Foot (Meter)	Lumen / Foot (Meter)	Luminous Efficacy (Lumens / Watt)	CRI	Gamut Score Rg (Color Sat.)	Relative Fidelity Score (RF)	TLCI (Qa)	CQS
IP65-UB-OL-27K97C	2700K	1.5 W/ft (4.8 W/m)	123 lm/ft (402 lm/m)	78	97	105	95	95	96
IP65-UB-OL-30K97C	3000K	1.5 W/ft (4.8 W/m)	122 lm/ft (399 lm/m)	83	97	103	96	98	97
IP65-UB-OL-35K97C	3500K	1.5 W/ft (4.8 W/m)	129 lm/ft (423 lm/m)	83	97	103	96	98	98
IP65-UB-OL-40K95C	4000K	1.5 W/ft (4.8 W/m)	130 lm/ft (427 lm/m)	85	97	103	96	98	98
IP65-UB-OL-50K95C	5000K	1.5 W/ft (4.8 W/m)	132 lm/ft (434 lm/m)	86	96	103	96	99	98

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

Ordering Code

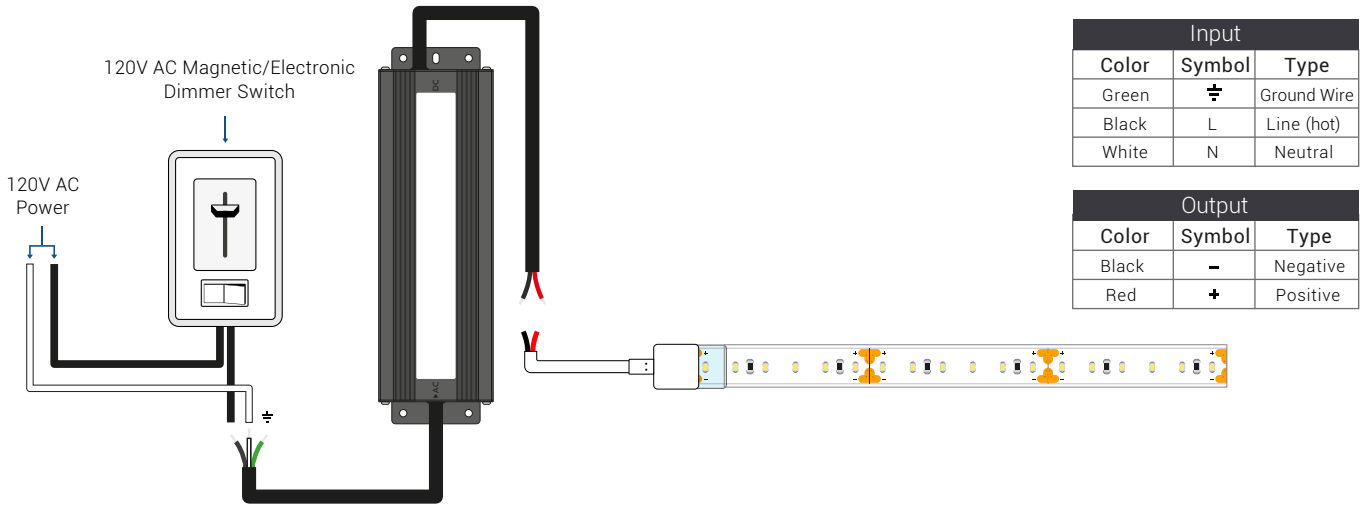
IP Protection	Brand	Series	CCT	Voltage	Length
IP65	UB	OL		24V	
Weatherproof	UltraBright	Outline™ Series	27K97C - 2700K/97+ CRI 30K97C - 3000K/97+ CRI 35K97C - 3500K/97+ CRI 40K95C - 4000K/95+ CRI 50K95C - 5000K/95+ CRI		16FT - 16.4 ft Reel 32FT - 32.8 ft Reel

Dimensions

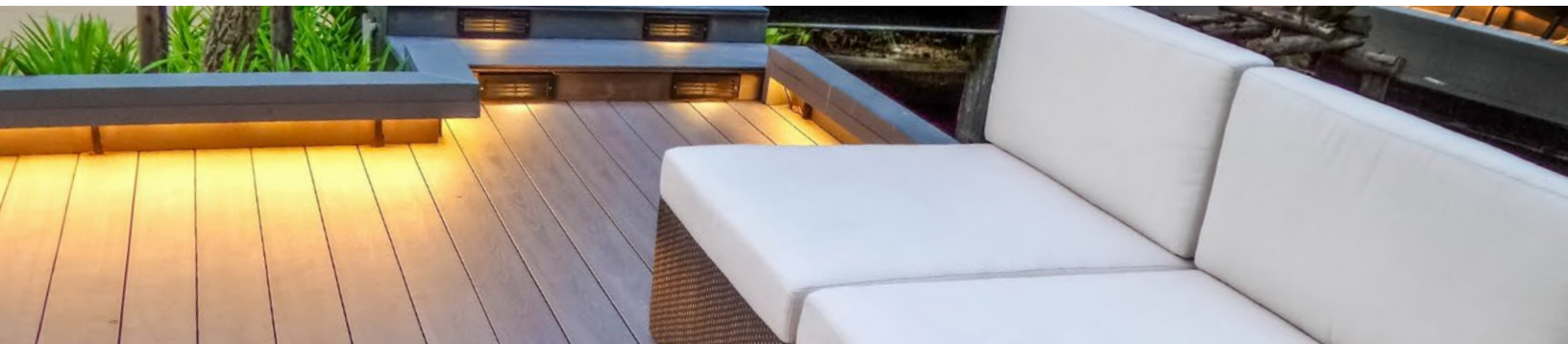
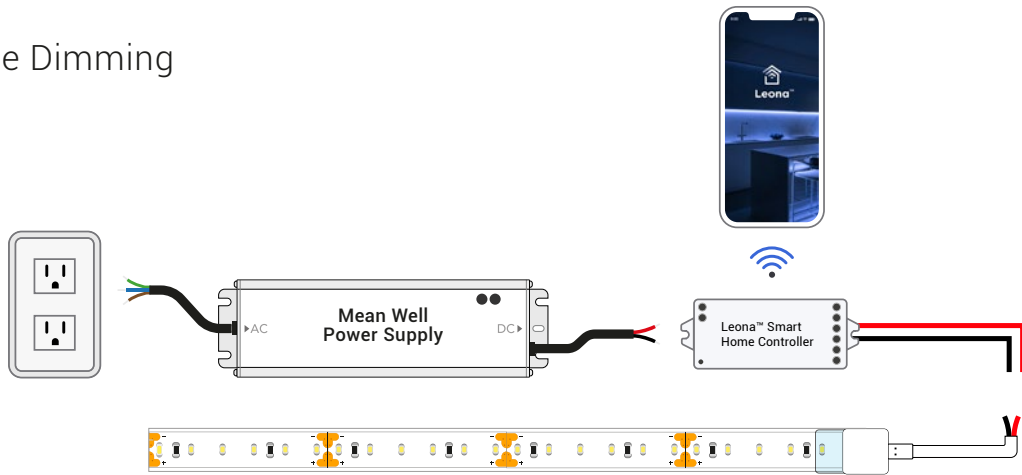


Dimming Options

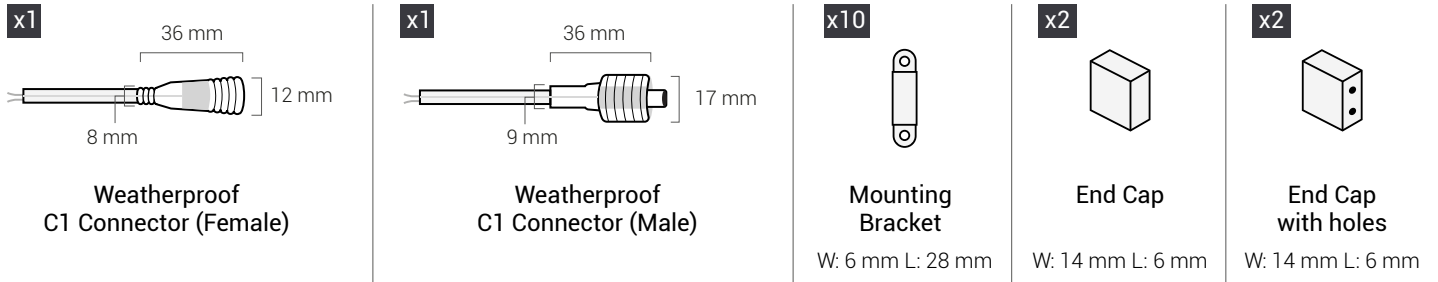
Lutron Style Wall Dimmer



In-Line Dimming



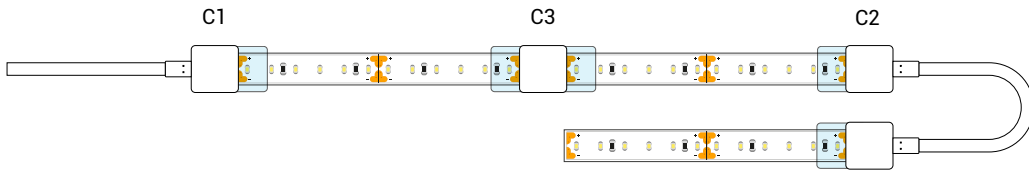
Included Accessories



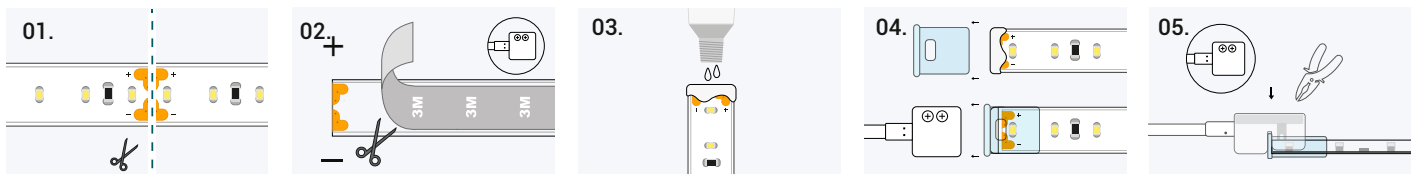
Strip Light Connectors

SKU	Description	Wire Gauge	Amperage** Limit	Diagram
IP65-GRIP-SC-C1-10-40	Outdoor IP65 Grip Connector with 40" wire	22 AWG	5 Amps	
IP65-GRIP-SC-C2-10-08	Outdoor IP65 Grip Jumper Connector with 8" wire	22 AWG		
IP65-GRIP-SC-C3-10-0	Outdoor IP65 Grip Jumper Connector			

*Calculate max length of LED strip to follow the solderless connector based on an amperage draw of 0.060 A/ft (0.20 A/m) at 24 volts.
 **Be sure no more than 5 amps is drawn after any solderless connector.

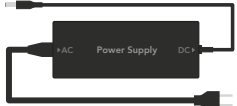
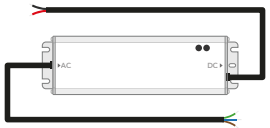
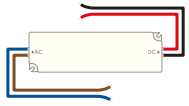

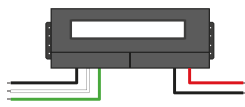
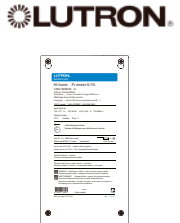


Solderless Connection Guide



1. Cut the LED strip light and the silicone sleeve on the cutting point you want to install the connector.
2. Check the polarity and remove 2" of the adhesive tape and its backer from the back of the LED Strip light.
3. Apply Silicone sealant liberally inside of the silicone sleeve until ensuring it is completely sealed.
4. Slide the transparent case of your Outdoor IP65 Grip connector into the sleeve, until making sure that the strip is making proper contact.
5. 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

	Power Supply	LED Strip Length	Product SKU	Diagram	
Non-dimmable	Plug-In Power Supply	1 - 12 ft	24V-WMPS2-1		
		13 - 32 ft	24V-DPS2-2.5		
		33 - 51 ft	24V-DPS2-4		
		52 - 64 ft	24V-DPS2-5		
	Mean Well™ HLG		1 - 24 ft	HLG-40H-24A	
			25 - 36 ft	HLG-60H-24A	
			37 - 60 ft	HLG-100H-24A	
			61 - 72 ft	HLG-120H-24A	
			73 - 111 ft	HLG-185H-24A	
			112 - 144 ft	HLG-240H-24A	
		145 - 192 ft	HLG-320H-24A		
	193 - 360 ft	HLG-600H-24A			
Mean Well™ LPV		1 - 12 ft	LPV-20-24		
		13 - 21 ft	LPV-35-24		
		22 - 36 ft	LPV-60-24		
Dimmable	Zurik® EMLV	1 - 18 ft	ZRK-EMLV2-30W-24VDC		
		19 - 36 ft	ZRK-EMLV2-60W-24VDC		
		37 - 57 ft	ZRK-EMLV2-96W-24VDC-J		
		58 - 72 ft	ZRK-EMLV2-120W-24VDC-J		
		73 - 120 ft	ZRK-EMLV2-200W-24VDC-J		
		121 - 180 ft	ZRK-EMLV2-300W-24VDC-J		
	Zurik® Universal		1 - 31 ft	ZRK-UNV-60W-24VDC	
			32 - 51 ft	ZRK-UNV-96W-24VDC	
			52 - 63 ft	ZRK-UNV-120W-24VDC	
			64 - 110 ft	ZRK-UNV-200W-24VDC	
		111 - 172 ft	ZRK-UNV-300W-24VDC		
	Lutron® Hi-Lume™ Premier	1 - 60 ft	L3D0-96W24V-U		
	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		

Compatible Aluminum Extrusions

Name	Type	Included Accessories	Covers	Kit SKU	Mockup
Ion™	Surface Mount	-	-	ION-CH-A-1M	
Titan™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover, 1 m (3' 3/8") Frosted Cover, 1 m (3' 3/8") Matte Cover, 1 m (3' 3/8")	TTN-CH-A-CVR-C-1M TTN-CH-A-CVR-F-1M TTN-CH-A-CVR-M-1M	
Gemini™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover, 1 m (3' 3/8") Frosted Cover, 1 m (3' 3/8") Matte Cover, 1 m (3' 3/8")	GEM-CH-A-CVR-C-1M GEM-CH-A-CVR-F-1M GEM-CH-A-CVR-M-1M	
Note: This extrusion only fits the Outdoor (IP65) Outline™ Series LED strip without connectors					
Nova™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Round Cover, 1 m (3' 3/8") Clear Square, 1 m (3' 3/8") Matte Round Cover, 1 m (3' 3/8") Matte Square Cover, 1 m (3' 3/8")	NOV-CH-A-CVR-C-RD-1M NOV-CH-A-CVR-C-SQ-1M NOV-CH-A-CVR-M-RD-1M NOV-CH-A-CVR-M-SQ-1M	
Note: This extrusion only fits the Outdoor (IP65) Outline™ Series LED strip without connectors					
Kepler™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover, 1 m (3' 3/8") Frosted Cover, 1 m (3' 3/8") Matte Cover, 1 m (3' 3/8")	KEP-CH-A-CVR-C-1M KEP-CH-A-CVR-F-1M KEP-CH-A-CVR-M-1M	
Note: This extrusion only fits the Outdoor (IP65) Outline™ Series LED strip without connectors					
Laika™	Surface Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover, 1 m (3' 3/8") Frosted Cover, 1 m (3' 3/8")	LAI-CH-A-CVR-C-1M LAI-CH-A-CVR-F-1M	
Note: This extrusion only fits the Outdoor (IP65) Outline™ Series LED strip without connectors					
Atlas™	Angled Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover, 1 m (3' 3/8") Frosted Cover, 1 m (3' 3/8") Matte Cover, 1 m (3' 3/8")	ATL-CH-A-CVR-C-1M ATL-CH-A-CVR-F-1M ATL-CH-A-CVR-M-1M	
Note: This extrusion only fits the Outdoor (IP65) Outline™ Series LED strip without connectors					
Calypso™	Recessed Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Frosted Cover, 1 m (3' 3/8") Matte Cover, 1 m (3' 3/8")	CAL-CH-A-CVR-F-1M CAL-CH-A-CVR-M-1M	
Phoenix™	Recessed Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Frosted Cover, 1 m (3' 3/8") Matte Cover, 1 m (3' 3/8")	PHO-CH-A-CVR-F-1M PHO-CH-A-CVR-M-1M	
Cassini™	Recessed Mount	2 Open End Caps 2 Closed End Caps 4 Metal Mounting Clips	Clear Cover, 1 m (3' 3/8") Frosted Cover, 1 m (3' 3/8") Matte Cover, 1 m (3' 3/8")	CAS-CH-A-CVR-C-1M CAS-CH-A-CVR-F-1M CAS-CH-A-CVR-M-1M	
Note: This extrusion only fits the Outdoor (IP65) Outline™ Series LED strip without connectors					

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 an 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 secure this product with any kind of staples, nails, or materials that could potentially damage the product in any way. Keep these instructions for future reference.
7. Do not cover this product with any kind of combustible material such as paper, fabrics, etc.
8. Do not install within 5 feet of a swimming pool or spa.
9. Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
10. Make sure the appropriate gauge wire is installed between the 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.
11. Do not modify the product beyond instructions or warranty will be void.
12. 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.
13. Do not install product with the majority of the product unsupported. Allowing the product to be suspended or dangling while installing may cause damage to the PCB due to the weight of the strip and/or spool.

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 the 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.

Contact Information



Toll Free Number:
1-844-353-9347



Local Number:
(925) 273-9080



info@flexfireleds.com



FLEXFIRELEDs

www.flexfireleds.com