PRODUCT DATA SHEET

UltraBright™ Design Series

15 Year Warranty  RoHS  CE  UL Listed

www.FlexfireLEDs.com
Description

The Outdoor UltraBright™ Design Series LED strip lights are 16 ft 5 in or 8 ft reels of high intensity LED chips on flexible strips of printed circuit boards (PCBs) with a strong 3M adhesive backing. UltraBright™ Design Series LED strips are very bright and can emit over 465 lumens per foot while having an efficacy up to 107 lm/W. It is easy to see why these LED strips are commonly used by architects and lighting designers in professional installations. 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 80+
- Highest Brightness - Up to 469 Lumen/ft (1,539/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 107 lm/W

- Only 1/2” (12mm) strip width
- Short LED pitch of 5/16” (8mm)
- 12V DC Input
- Can be cut every 1” (25.4mm)
- 36 LEDs / Foot (120 / Meter)
- Thick double layer 2 oz copper PCB for excellent thermal management
- Operating Temperature -4°F to +104°F (-20°C to 40°C)
- Maximum Length in Series 16ft 5in (5 Meters)
- IP65 Rated with non-yellowing and UV resistant silicone sleeve

Product Specific Specifications

<table>
<thead>
<tr>
<th>Product SKU</th>
<th>Color* (CCT)</th>
<th>Watts / foot (Meter)</th>
<th>Lumen / foot (Meter)</th>
<th>Luminous efficacy (Lumens / Watt)</th>
<th>CRI</th>
<th>Gamut Score Rg (Color Sat.)</th>
<th>Relative Fidelity Score (RF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP65-DS-24K</td>
<td>2400K</td>
<td>4.4 W/ft 14.4 W/m</td>
<td>340 lm/ft (1,115 lm/m)</td>
<td>77 lm/W</td>
<td>82</td>
<td>Coming Soon</td>
<td>Coming Soon</td>
</tr>
<tr>
<td>IP65-DS-27K</td>
<td>2700K</td>
<td>4.4 W/ft 14.4 W/m</td>
<td>344 lm/ft (1,128 lm/m)</td>
<td>78 lm/W</td>
<td>82</td>
<td>92.6</td>
<td>82.3</td>
</tr>
<tr>
<td>IP65-DS-30K</td>
<td>3000K</td>
<td>4.4 W/ft 14.4 W/m</td>
<td>375 lm/ft (1,230 lm/m)</td>
<td>85 lm/W</td>
<td>85</td>
<td>95.5</td>
<td>82.5</td>
</tr>
<tr>
<td>IP65-DS-42K</td>
<td>4200K</td>
<td>4.4 W/ft 14.4 W/m</td>
<td>413 lm/ft (1,355 lm/m)</td>
<td>94 lm/W</td>
<td>83</td>
<td>93.4</td>
<td>82.3</td>
</tr>
<tr>
<td>IP65-DS-62K</td>
<td>6200K</td>
<td>4.4 W/ft 14.4 W/m</td>
<td>469 lm/ft (1,538 lm/m)</td>
<td>107 lm/W</td>
<td>83</td>
<td>94.7</td>
<td>81</td>
</tr>
</tbody>
</table>

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

**OUTDOOR**

<table>
<thead>
<tr>
<th>IP Protection</th>
<th>Brand</th>
<th>Series</th>
<th>CCT</th>
<th>Voltage</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP65 - Weatherproof</td>
<td>UB - UltraBright</td>
<td>DS - Design</td>
<td>24K - 2400K</td>
<td>12V</td>
<td>08 FT - 8 ft Reel</td>
</tr>
<tr>
<td>IP68 - Waterproof</td>
<td></td>
<td></td>
<td>27K - 2700K</td>
<td>24V - (Special)</td>
<td>16 FT - 16 ft Reel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30K - 3000K</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>42K - 4200K</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>62K - 6200K</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Dimensions

- **16'5" 5m (Reel)**
- **1" 25mm**
- **1/2" 12mm**
- **5/16" 8mm**
- **3/16" 4mm**
Example Installation and Layout

**IN SERIES**

- AC Outlet (or AC source)
- Transformer
- Dimmer / Controller (Optional)
- LED Strip

**IN PARALLEL**

- AC Outlet (or AC source)
- Transformer
- Dimmer / Controller (Optional)
- LED Strips
Dimming Options

Lutron Style Wall Dimmer

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Symbol</td>
</tr>
<tr>
<td>Green</td>
<td>G</td>
</tr>
<tr>
<td>Black</td>
<td>L</td>
</tr>
<tr>
<td>White</td>
<td>N</td>
</tr>
</tbody>
</table>

Remote Control (SKU: SC-MZ-CTRL) can be paired to 8 total receivers. Multiple remotes cannot be paired to a single receiver (max 1 remote per receiver).
Included Accessories

- Weatherproof C1 Connector (Female)
- Weatherproof C1 Connector (Male)
- Mounting Bracket
  Width: 6 mm
  Length: 28 mm
- End Cap
  Width: 14 mm
  Height: 6 mm
- End Cap
  (with 2 holes for lead wires)
  Width: 14 mm
  Height: 6 mm

Resealing Outdoor Strips

Sealing Outdoor Strips with End Caps

1. Find the cut line on the strip (between the solder pads).
2. Carefully cut the strip on the cut line.
3. Fill an end cap (without holes) with sealant and slide it over the end of the strip until it fits snugly.

Sealing Outdoor Strips with End Caps and a Solderless Connector

1. Cut the strip and remove the silicone covering just enough to expose the solder pads on the strip.
2. Carefully insert the strip into the connector and ensure it fits snugly.
3. Spread the wires on the connector and slide them through the holes in the end cap.
4. Fill the end cap (with holes) with sealant and slide carefully over the connector at the end of the strip.
compatible drivers (12v only)

wall mounted power supply / desktop power supply

<table>
<thead>
<tr>
<th>led strip length</th>
<th>sku</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2 ft</td>
<td>12v-wmps-1</td>
</tr>
<tr>
<td>3 - 5 ft</td>
<td>12v-dps-2</td>
</tr>
<tr>
<td>5 - 9 ft</td>
<td>12v-dps-4</td>
</tr>
<tr>
<td>8 - 13 ft</td>
<td>12v-dps-6</td>
</tr>
<tr>
<td>11 - 18 ft</td>
<td>12v-dps-8</td>
</tr>
</tbody>
</table>

mean well

<table>
<thead>
<tr>
<th>led strip length</th>
<th>sku</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - 4 ft</td>
<td>lpv-20-12</td>
</tr>
<tr>
<td>5 - 8 ft</td>
<td>hlg-40h-12a</td>
</tr>
<tr>
<td>7 - 12 ft</td>
<td>hlg-80h-12a</td>
</tr>
<tr>
<td>13 - 23 ft</td>
<td>hlg-120h-12a</td>
</tr>
<tr>
<td>17 - 29 ft</td>
<td>hlg-150h-12a</td>
</tr>
<tr>
<td>22 - 37 ft</td>
<td>hlg-240h-12a</td>
</tr>
<tr>
<td>30 - 51 ft</td>
<td>hlg-320h-12a</td>
</tr>
<tr>
<td>52 - 92 ft</td>
<td>hlg-600h-12a</td>
</tr>
</tbody>
</table>

zurik

<table>
<thead>
<tr>
<th>led strip length</th>
<th>sku</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 - 4 ft</td>
<td>zrk-20-12vdc</td>
</tr>
<tr>
<td>5 - 7 ft</td>
<td>zrk-40-12vdc</td>
</tr>
<tr>
<td>7 - 12 ft</td>
<td>zrk-60-12vdc</td>
</tr>
<tr>
<td>12 - 19 ft</td>
<td>zrk-100-12vdc</td>
</tr>
<tr>
<td>17 - 29 ft</td>
<td>zrk-150-12vdc</td>
</tr>
<tr>
<td>23 - 38 ft</td>
<td>zrk-200-12vdc</td>
</tr>
<tr>
<td>29 - 48 ft</td>
<td>zrk-250-12vdc</td>
</tr>
<tr>
<td>34 - 58 ft</td>
<td>zrk-300-12vdc</td>
</tr>
</tbody>
</table>
Compatible Aluminum Extrusions

» KLUS GIP Anodized Extrusion  
  (SKU: KL-B4574ANODA-1m)
  
  Covers
  - G-L Frosted Cover (SKU: KL-00413-1m)
  End Caps
  - GIP - L End Cap without Wire Hole (SKU: KL-00306)
  
  Mounting Accessories
  - GP Surface Spring (SKU: KL-00293)
  - Mounting Bracket (SKU: KL-24143)

» GIZA Anodized Extrusion  
  (SKU: KL-B5556ANODA-1m)
  
  Covers
  - HS 22 Clear Cover (SKU: KL-17022-1m)
  - HS 22 Frosted Cover (SKU: KL-17011-1m)
  End Caps
  - GIZA End Cap without Wire Hole (SKU: KL-24007)

  NOTE: Fits Without IP65 End Caps
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 occur.
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.