# EZ-STATUS® WLS28-2 Multicolor LED Strip Light

## Features

Banner's WLS28-2 Multicolor LED Strip Lights have sturdy aluminum housings, shatterproof windows, and environmental ratings that make it ideal for harsh indoor and outdoor applications.

- EZ-STATUS combines lighting and indication in one device to illuminate an area or machine, and show status change
- Models with 3 or 5 colors available, all with only 3 inputs
- Four available lengths from 285 mm to 1130 mm
- Daisy chain power to multiple lights



**Stand-Alone Light or End Light in a Cascade**



**First or Middle of a Cascade**

Available as stand-alone models, or as cascade models that can be daisy-chained together for a continuous length of lighting, with a minimum of wiring.

Stand-alone models have a male quick disconnect at one end for power connection and no connections at the opposite end. A stand-alone model may be used as the last model in the cascade series.

Cascade models have a male quick disconnect at one end for power connection, and a female quick disconnect at the opposite end for connecting to other lights in the cascade. A double-ended accessory cordset must be used between each pair of lights in a cascade.

**IMPORTANT:** Read the following instructions before operating the light. Please download the complete EZ-STATUS® WLS28-2 Multicolor LED Strip Light technical documentation, available in multiple languages, from www.bannerengineering.com for details on the proper use, applications, Warnings, and installation instructions of this device.

**IMPORTANT:** Lea el siguiente instructivo antes de operar el luminario. Por favor descargue desde www.bannerengineering.com toda la documentación técnica de los EZ-STATUS® WLS28-2 Multicolor LED Strip Light , disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

**IMPORTANT:** Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des EZ-STATUS® WLS28-2 Multicolor LED Strip Light sur notre site www.bannerengineering.com pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

## Models

| Family | Cascadable | Colors 1-5 and Control | — | Lighted Length (mm) | Window | Construction | Voltage | Connector[1] |
|---|---|---|---|---|---|---|---|---|
| **WLS28-2** | **X** | **WGRXX** | **—** | **0285** | **D** | **X** | **24** | **Q** |
| | C = Cascadeable<br>X = Non-cascadeable | WGRXX3 = White, Green, and Red with override control<br>GYRXX3 = Green, Yellow, and Red with override control<br>WYRXX3 = White, Yellow, and Red with override control<br>WGRYB5 = White, Green, Red, Yellow, and Blue with binary control<br>WGRXX6 = White, Green, and Red with I/O Block control<br>WYRXX6 = White, Yellow, and Red with I/O Block control<br>GYRXX6 = Green, Yellow, and Red with I/O Block control | | 0285<br>0570<br>0850<br>1130 | Blank = Clear plastic<br>D = Diffused plastic<br>L25 = 25° lensed window | X = Not sealed<br>S = Sealed | 24 = 24 V | Blank = 2 m (6.5 ft) integral PVC-jacketed cable<br>Q = Integral 4-pin M12 male quick-disconnect connector |

[1] Models with a quick-disconnect connector require a mating cordset.

Original Instructions
15-Sep-25

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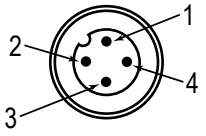
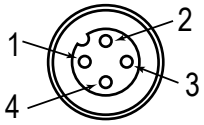
204557
p/n: 204557 Rev. D

ПРОМЭЛЕКТРОНИКА/ sales@prom-elec.com

# Wiring

| Male | Female | Pin | Wire Color | Description |
|---|---|---|---|---|
|  |  | 1 | Brown | Input 1 |
| | | 2 | White | Input 3 |
| | | 3 | Blue | DC common |
| | | 4 | Black | Input 2 |

*3 Color Override Control (Color 3 overrides Colors 1 and 2, Color 2 overrides Color 1)*

| Input 1: Pin 1 Brown Wire | Input 2: Pin 4 Black Wire | Input 3: Pin 2 White Wire | LED Color |
|---|---|---|---|
| — | — | — | Light OFF |
| +24 V DC | — | — | Color 1 ON |
| — | +24 V DC | — | Color 2 ON |
| +24 V DC | +24 V DC | — | Color 2 ON |
| — | — | +24 V DC | Color 3 ON |
| +24 V DC | — | +24 V DC | Color 3 ON |
| — | +24 V DC | +24 V DC | Color 3 ON |
| +24 V DC | +24 V DC | +24 V DC | Color 3 ON |

*3 Color I/O Block Control (Input 1 is always ON through the block)*

| Input 1: Pin 1 Brown Wire | Input 2: Pin 4 Black Wire | Input 3: Pin 2 White Wire | LED Color |
|---|---|---|---|
| +24 V DC | — | — | Light OFF |
| +24 V DC | +24 V DC | — | Color 1 ON |
| +24 V DC | — | +24 V DC | Color 2 ON |
| +24 V DC | +24 V DC | +24 V DC | Color 3 ON |

*5 Color Binary Control (Binary input state controls color)*

| Input 1: Pin 1 Brown Wire | Input 2: Pin 4 Black Wire | Input 3: Pin 2 White Wire | LED Color |
|---|---|---|---|
| — | — | — | Light OFF |
| +24 V DC | — | — | Color 1 ON |
| — | +24 V DC | — | Color 2 ON |
| — | — | +24 V DC | Color 3 ON |
| +24 V DC | +24 V DC | — | Color 4 ON |
| +24 V DC | — | +24 V DC | Color 5 ON |
| — | +24 V DC | +24 V DC | Light OFF |
| +24 V DC | +24 V DC | +24 V DC | Light OFF |

# Specifications

**Supply Protection Circuitry**

Protected against reverse polarity and transient voltages

**Supply Voltage**

24 V DC (+ 20% / - 10%)

Use only with suitable Class 2 power supply (UL) or a SELV power supply (CE)

See electrical characteristics on product label

| Lighted Length | Typical Current (A) at 25° C[2] | Maximum Current (A) |
|---|---|---|
| 285 mm | 0.315 | 0.4 |
| 570 mm | 0.63 | 0.8 |
| 850 mm | 0.945 | 1.2 |
| 1130 mm | 1.26 | 1.6 |

**Leakage Current Immunity**

400 µA

[2] Values shown at 25 °C - current and lumen values decrease 0.4% per 1 °C from ambient. For example, a 1130 mm unit will have a maximum current of 1.600 A at -40 °C and 1.134 A at +50 °C.

**LED Lifetime**

Lumen Maintenance - $L_{70}$

When operating within specifications, output decreases less than 30% after 50,000 hours

**Mounting**

2 SMBWLS28RA swivel brackets and 4 screws included

**Connections**

Integral 4-pin M12 male quick-disconnect connector

**Construction**

Clear anodized aluminum housing; painted zinc end caps; polycarbonate window on clear and diffuse plastic models; acrylic window on L25 models; zinc plated steel brackets

**Environmental Rating**

Non-sealed models: IP50

Sealed models: IP65, IP67, IP69K per ISO 20653

**Vibration and Mechanical Shock**

Vibration: 10 Hz to 55 Hz, 1.0 mm peak-to-peak amplitude per IEC 60068-2-6

Shock: 15G 11 ms duration, half sine wave per IEC 60068-2-27

**Operating Temperature**

–40 °C to +50 °C (–40 °F to +122 °F)

**Storage Temperature:** –40 °C to +70 °C (–40 °F to +158 °F)

**Application Notes**

When connecting cascadable lights in series it is important not to exceed maximum current limitations:

Maximum length of light at 24 V dc: 3.0 m (9.8 ft)

Do not spray cable with high-pressure sprayer, or cable damage will result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**Certifications**

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### Light Characteristics

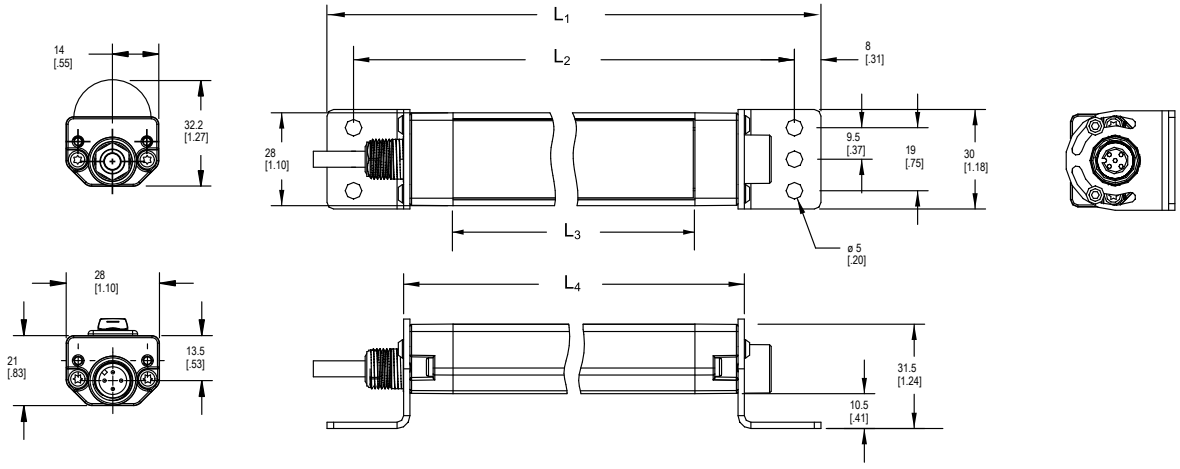
Daylight White Efficacy: 85 lumens/watt typical at 24 V DC at 25 °C (77 °F)

CRI: 80, minimum

| Color | Dominant Wavelength (nm) or Color Temperature | Lighted Length Lumens (Typical at 25 °C)[3] | | | |
|---|---|---|---|---|---|
| | | 285 mm | 570 mm | 850 mm | 1130 mm |
| Green | 525 nm | 400 | 800 | 1200 | 1600 |
| Red | 625 nm | 185 | 370 | 555 | 740 |
| Yellow | 580 nm | 570 | 1140 | 1710 | 2280 |
| Blue | 470 nm | 125 | 250 | 375 | 500 |
| Daylight White | 5000 K (±300 K) | 650 | 1300 | 1950 | 2600 |

## Dimensions

All measurements are listed in millimeters [inches], unless noted otherwise. The measurements provided are subject to change.




Dimensions are shown with the included SMBWLS28RA brackets.

| IP50 Models | IP67/IP69K Models | $L_1$ | $L_2$ | $L_3$ | $L_4$ |
|---|---|---|---|---|---|
| WLS28-2..0285 | WLS28-2..285S | 362 mm (14.3 in) | 346 mm (13.6 in) | 286 mm (11.26 in) | 316 mm (12.4 in) |
| WLS28-2..0570 | WLS28-2..570S | 644 mm (25.4 in) | 628 mm (24.7 in) | 568 mm (22.36 in) | 598 mm (23.5 in) |
| WLS28-2..0850 | WLS28-2..850S | 926 mm (36.5 in) | 910 mm (35.8 in) | 850 mm (33.46 in) | 880 mm (34.6 in) |
| WLS28-2..1130X | WLS28-2..1130S | 1208 mm (47.6 in) | 1192 mm (46.9 in) | 1132 mm (44.57 in) | 1162 mm (45.7 in) |

# Accessories

## Cordsets

Use single-ended cordsets between the power source and the quick-disconnect connection of a stand-alone light or the first light in a cascade. Use double-ended cordsets between lights in a cascade.

[3] Values shown at 25 °C - current and lumen values decrease 0.4% per 1 °C from ambient. For example, a 1130 mm unit will have a maximum current of 1.600 A at -40 °C and 1.134 A at +50 °C.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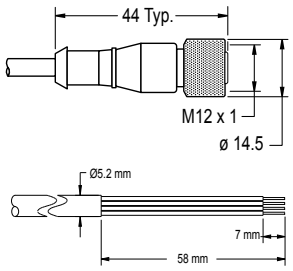
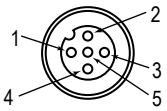
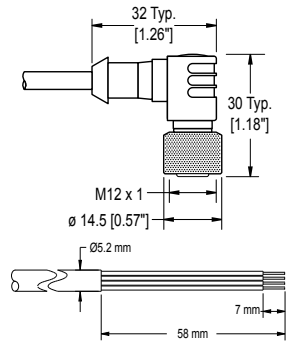
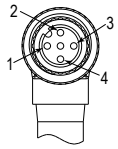
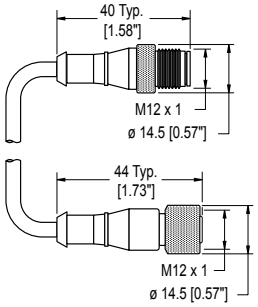
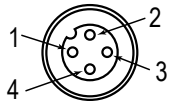
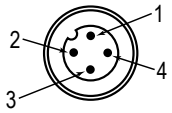
**4-Pin Single-Ended M12 Female Cordsets**

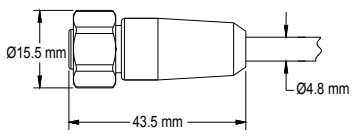
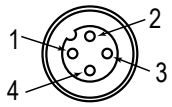
| Model | Length | Style | Dimensions | Pinout (Female) |
|---|---|---|---|---|
| MQDC-406 | 2 m (6.56 ft) | Straight |  |  |
| MQDC-415 | 5 m (16.4 ft) | | | |
| MQDC-430 | 9 m (29.5 ft) | | | |
| MQDC-450 | 15 m (49.2 ft) | | | |
| MQDC-406RA | 2 m (6.56 ft) | Right-Angle |  |  |
| MQDC-415RA | 5 m (16.4 ft) | | | |
| MQDC-430RA | 9 m (29.5 ft) | | | |
| MQDC-450RA | 15 m (49.2 ft) | | | |

1 = Brown
2 = White
3 = Blue
4 = Black
5 = Not used

**4-Pin Double-Ended M12 Female to M12 Male Cordsets**

| Model | Length | Style | Dimensions | Pinout |
|---|---|---|---|---|
| MQDEC-401SS | 0.31 m (1 ft) | Male Straight/Female Straight |  | Female  Male  1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black |
| MQDEC-403SS | 0.91 m (2.99 ft) | | | |
| MQDEC-406SS | 1.83 m (6 ft) | | | |
| MQDEC-412SS | 3.66 m (12 ft) | | | |
| MQDEC-415SS | 4.58 m (15 ft) | | | |
| MQDEC-420SS | 6.10 m (20 ft) | | | |
| MQDEC-430SS | 9.14 m (30.2 ft) | | | |
| MQDEC-450SS | 15.2 m (49.9 ft) | | | |

**4-Pin Single-Ended M12 Female Washdown, Stainless Steel Cordsets**

| Model | Length | Style | Dimensions | Pinout (Female) |
|---|---|---|---|---|
| MQDC-WDSS-0406 | 2 m (6.56 ft) | Straight |  |  1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black |
| MQDC-WDSS-0415 | 5 m (16.4 ft) | | | |
| MQDC-WDSS-0430 | 9 m (29.5 ft) | | | |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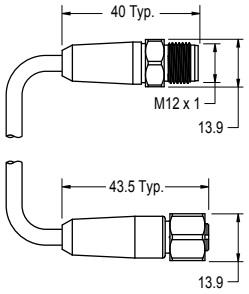
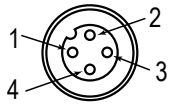
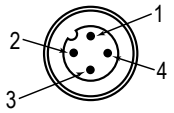
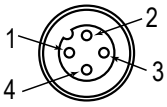
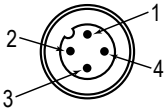
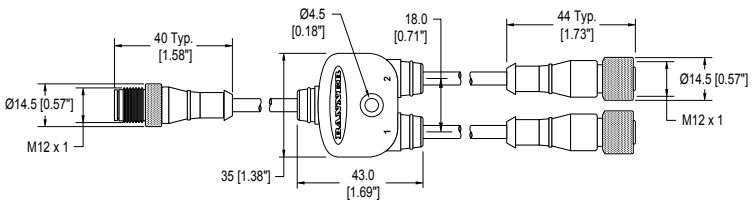
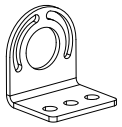
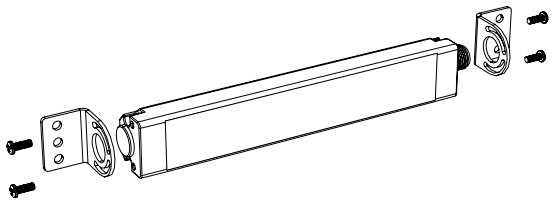
| 4-Pin Double-Ended M12 Female to M12 Male Washdown Stainless Steel Cordsets | | | | |
|---|---|---|---|---|
| **Model** | **Length** | **Style** | **Dimensions** | **Pinout** |
| **MQDEC-WDSS-401SS** | 0.31 m (1 ft) | Male Straight/Female Straight |  | Female<br><br>Male<br><br>1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black |
| **MQDEC-WDSS-403SS** | 0.91 m (2.99 ft) | | | |
| **MQDEC-WDSS-406SS** | 1.83 m (6 ft) | | | |
| **MQDEC-WDSS-412SS** | 3.66 m (12 ft) | | | |

| 4-Pin Flat Junction M12 Female Branch to M12 MaleTrunk Splitter Cordsets | | | |
|---|---|---|---|
| **Model** | **Branches (Female)** | **Trunk (Male)** | **Pinout** |
| **CSB-M1240M1240** | No branch | No trunk | Female<br><br>Male<br><br>1 = Brown<br>2 = White<br>3 = Blue<br>4 = Black |
| **CSB-M1240M1241** | 2 × 0.3 m (1 ft) | No trunk | |
| **CSB-M1241M1241** | | 0.31 m (1 ft) | |
| **CSB-M1248M1241** | | 2.44 m (8 ft) | |
| **CSB-M12415M1241** | | 4.57 m (15 ft) | |
| **CSB-M12425M1241** | | 7.60 m (25 ft) | |
| **CSB-UNT425M1241** | | 7.60 m (25 ft) Unterminated | |
| **CSB-M1243M1243** | 2 × 1 m (3.28 ft) | 1 m (3.28 ft) | |
|  | | | |

## Brackets

| | |
|---|---|
| **SMBWLS28RA**<br>The bracket kit is available as a replacement for the one that comes with the light or switch. The kit contains two end brackets and four screws. |  |
|  | |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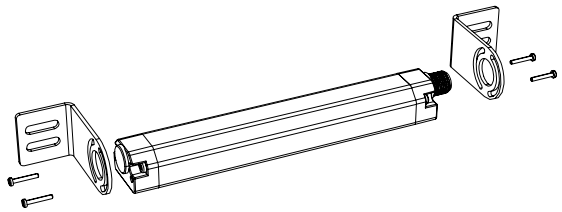
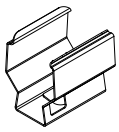
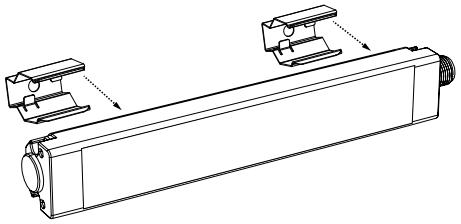
**SMBWLS28SM**
This kit allows the light or switch to be mounted at a right angle to the mounting surface. The kit contains two end brackets and four screws.



**SMBWLS28SP**

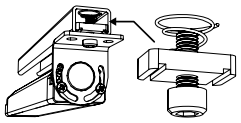
- Stainless steel snap bracket kit
- Includes two brackets





**SMH1316**
This kit allows the light or switch to be mounted to a 13/16-inch Unistrut channel. Light is shown. The kit includes:

- #10-32 spring nuts (qty 2)
- #10-32 socket head cap screws (qty 2)
- #10 lock washers (qty 2)

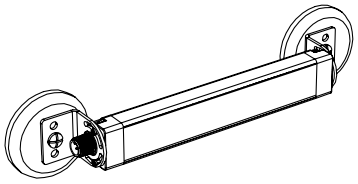


**SMBWLSMAG**

- Magnetic mounting bracket for easy attachment to steel surfaces

**SMBWLSMAGR**

- Protective cover also available to prevent scratches to painted surfaces



# Banner Engineering Corp Limited Warranty

Banner Engineering Corp. warrants its products to be free from defects in material and workmanship for one year following the date of shipment. Banner Engineering Corp. will repair or replace, free of charge, any product of its manufacture which, at the time it is returned to the factory, is found to have been defective during the warranty period. This warranty does not cover damage or liability for misuse, abuse, or the improper application or installation of the Banner product.

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For patent information, see www.bannerengineering.com/patents.

# Mexican Importer

Banner Engineering de Mèxico, S. de R.L. de C.V. | David Alfaro Siqueiros 103 Piso 2 Valle oriente | San Pedro Garza Garcia Nuevo Leòn, C. P. 66269

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