

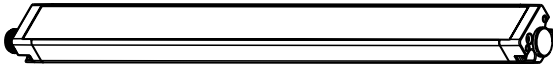
EZ-STATUS® WLS28-2 Multicolor LED Strip Light



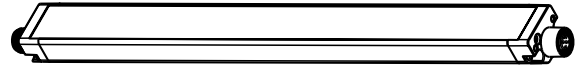
Datasheet

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



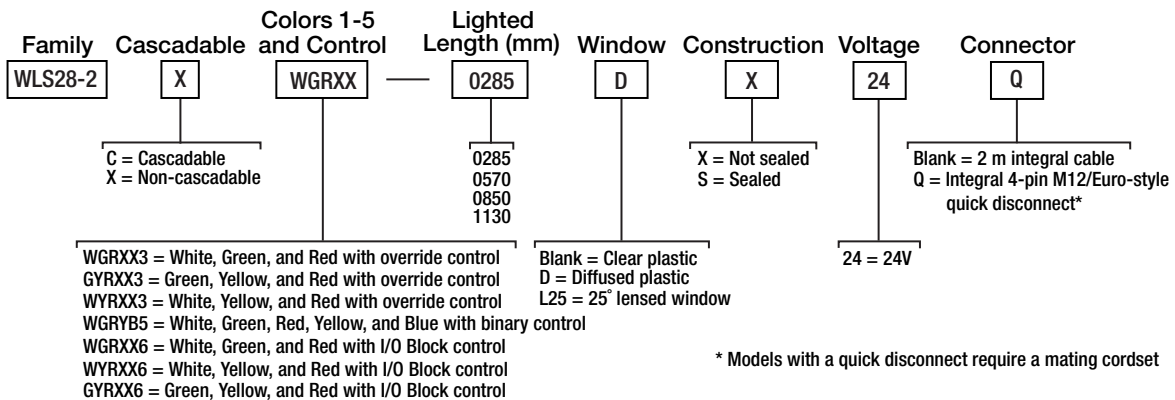
First or Middle of a Cascade

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.

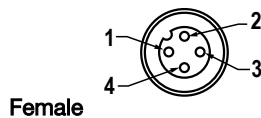
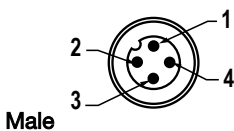
Stand-alone models have a male quick disconnect at one end for power connection and no connections at the opposite end. A stand-alone model may be used as the last model in the cascade series.

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.

Models



Wiring Diagrams



Key

- Pin-1 Brown: Input 1
- Pin-2 White: Input 3
- Pin-3 Blue: DC Common
- Pin-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

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

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

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)

Lighted Length	Typical Current (A) at 25° C ¹	Maximum Current (A)
285 mm	0.315	0.400
570 mm	0.630	0.800
850 mm	0.945	1.200
1130 mm	1.260	1.600

Leakage Current Immunity

400 µA

LED Lifetime

Lumen Maintenance - L₇₀

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/Euro-style quick disconnect

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

¹ 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.

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) ²			
		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

Environmental Rating

Non-sealed models: IEC IP50
 Sealed models: IEC IP65, IEC IP67, DIN IP69K

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 cascading lights in series it is important not to exceed maximum current limitations:

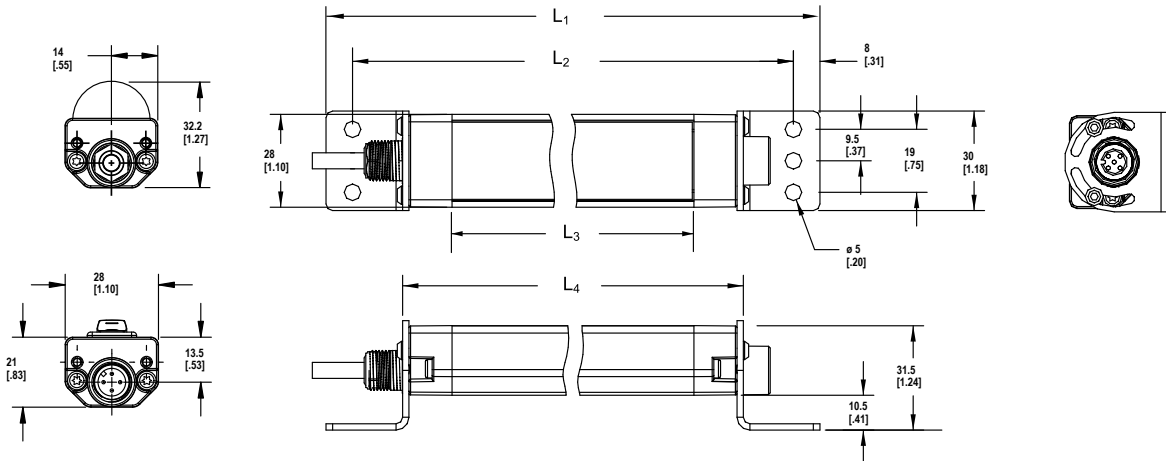
Maximum length of light at 24 V dc: 3.0 m (9.8 ft)

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

Certifications



Dimensions



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)

All measurements are listed in millimeters [inches], unless noted otherwise.

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.

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.

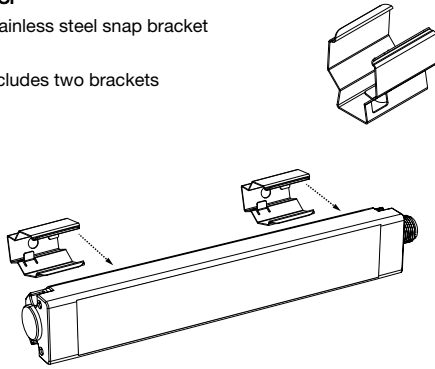
4-Pin Threaded M12/Euro-Style Cordsets				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-406	1.83 m (6 ft)	Straight		
MQDC-415	4.57 m (15 ft)			
MQDC-430	9.14 m (30 ft)			
MQDC-450	15.2 m (50 ft)			
MQDC-406RA	1.83 m (6 ft)	Right-Angle		<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDC-415RA	4.57 m (15 ft)			
MQDC-430RA	9.14 m (30 ft)			
MQDC-450RA	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Cordsets—Double Ended				
Model	Length	Style	Dimensions	Pinout
MQDEC-401SS	0.31 m (1 ft)	Male Straight/ Female Straight		Female
MQDEC-403SS	0.91 m (3 ft)			
MQDEC-406SS	1.83 m (6 ft)			Male
MQDEC-412SS	3.66 m (12 ft)			
MQDEC-420SS	6.10 m (20 ft)			<p>1 = Brown 2 = White 3 = Blue 4 = Black</p>
MQDEC-430SS	9.14 m (30 ft)			
MQDEC-450SS	15.2 m (50 ft)			

4-Pin Threaded M12/Euro-Style Cordsets—Washdown, Stainless Steel				
Model	Length	Style	Dimensions	Pinout (Female)
MQDC-WDSS-0406	1.83 m (6 ft)	Straight		
MQDC-WDSS-0415	4.57 m (15 ft)			
MQDC-WDSS-0430	9.14 m (30 ft)			

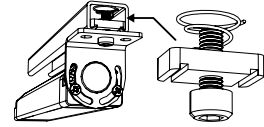
SMBWLS28SP

- Stainless steel snap bracket kit
- Includes two brackets

**SMH1316**

This kit allows the light to be mounted to a 13/16-inch Unistrut channel. The kit includes:

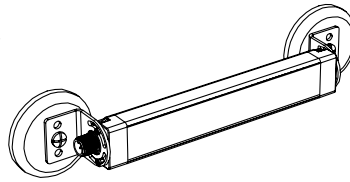
- #10-32 spring nuts (qty 2)
- #10-32 socket head cap screws (qty 2)
- #10 lock washers (qty 2)

**SMBWLSMAG**

Magnetic mounting bracket for easy attachment to steel surfaces

SMBWLSMAGR

Protective cover also available to prevent scratches to painted surfaces



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