

Features

Banner's WLS27 Segmented LED Strip Light has a sturdy aluminum housing and is encased in a shatterproof, UV-stabilized, copolyester shell, making it ideal for harsh indoor and outdoor applications.

- Ultra-bright, multi-segment indicator
- Models with 2 or 3 segments available in two different segment sizes
- Rugged, water-resistant IP69K per ISO 20653 rating
- Four available lengths: 285 mm, 430 mm, 570 mm, or 850 mm
- Daisy chain power to multiple lights
- Heavy diffused housing option provides softer, more uniform light

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 WLS27 Segmented 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 WLS27 Segmented LED Strip Light, disponibles en múltiples idiomas, para detalles del uso adecuado, aplicaciones, advertencias, y las instrucciones de instalación de estos dispositivos.

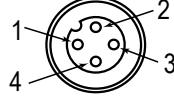
IMPORTANT: Lisez les instructions suivantes avant d'utiliser le luminaire. Veuillez télécharger la documentation technique complète des WLS27 Segmented LED Strip Light sur notre site www.bannerengineering.com pour les détails sur leur utilisation correcte, les applications, les notes de sécurité et les instructions de montage.

Models

Family	Cascadable	Color Segments and Length	—	Window	Construction	Voltage	Connector ⁽¹⁾
WLS27	X	GYR3S-0859	—	D	S	24	Q
	C = Cascadable X = Non-cascadable	GRX2S-0285 = Two 145 mm segments; Green, Red GRX2S-0570 = Two 285 mm segments; Green, Red GYR3S-0430 = Three 145 mm segments; Green, Yellow, Red GYR3S-0850 = Three 285 mm segments; Green, Yellow, Red		D = Diffused H = Heavy diffused	S = Sealed	24 = 24 V DC	Q = Integral 4-pin M12 male quick-disconnect connector

⁽¹⁾ Models with a quick-disconnect connector require a mating cordset.

Wiring

4-pin M12 Male	4-pin M12 Female	Pin	Wire Color	Description
		1	Brown	Input 1
		2	White	Input 3
		3	Blue	DC common
		4	Black	Input 2

Two Segment Strip Lights

Input 1: Pin 1 Brown Wire	Input 2: Pin 4 Black Wire	LED Color
-	-	Light OFF
+24 V DC	-	Segment 1 ON
-	+24 V DC	Segment 2 ON
+24 V DC	+24 V DC	Segment 1 and 2 ON

Three Segment Strip Lights

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	-	-	Segment 1 ON
-	+24 V DC	-	Segment 2 ON
+24 V DC	+24 V DC	-	Segment 1 and 2 ON
-	-	+24 V DC	Segment 3 ON
+24 V DC	-	+24 V DC	Segment 1 and 3 ON
-	+24 V DC	+24 V DC	Segment 2 and 3 ON
+24 V DC	+24 V DC	+24 V DC	Segment 1, 2, and 3 ON

Specifications

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Mounting

Bracket LMBWLS27EC included (2 for lights up to 570 mm or 3 for 850 mm lights)

Connections

Integral 4-pin M12 male quick-disconnect connector

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.

Construction

Clear anodized aluminum inner housing and FDA-grade copolyester outer housing

Environmental Rating

IP66, IP67, and 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)

Certifications



Banner Engineering BV
Park Lane, Culliganlaan 2F bus 3
1831 Diegem, BELGIUM



Turck Banner LTD Blenheim House
Blenheim Court
Wickford, Essex SS11 8YT
GREAT BRITAIN



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

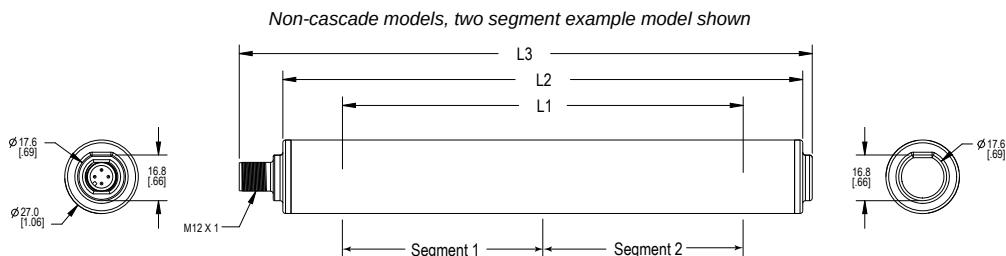
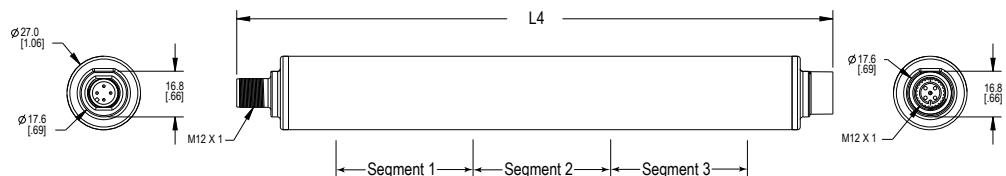
Lighted Length	Segments	Typical Current (A) at 25° C per Segment (2)	Typical Current (A) at 25 °C for all Segments	Maximum Current (A)
285 mm	2	0.155	0.36	0.4
430 mm	3	0.155	0.54	0.6
570 mm	2	0.315	0.63	0.8
850 mm	3	0.315	0.945	1.2

Light Characteristics

Color	Dominant Wavelength (nm) or Color Temperature	Lighted Length Lumens (Typical at 25 °C) ⁽²⁾	
		285 and 430 mm	570 and 850 mm
Green	525 nm	150	400
Yellow	580 nm	215	570
Red	625 nm	70	185

Dimensions

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

*Cascade models, three segment example model shown*

Models	L1	L2	L3	L4	Segment 1	Segment 2	Segment 3
WLS27..0285..	286 mm (11.3 in)	332 mm (13.1 in)	351.5 mm (13.8 in)	360 mm (14.2 in)	143 mm (5.7 in)	143 mm (5.7 in)	-
WLS27..0430..	427 mm (16.8 in)	473 mm (18.6 in)	492.5 mm (19.4 in)	501 mm (19.7 in)	143 mm (5.7 in)	143 mm (5.7 in)	143 mm (5.7 in)
WLS27..0570..	568 mm (22.4 in)	614 mm (24.2 in)	633.5 mm (24.9 in)	642 mm (25.3 in)	286 mm (11.3 in)	286 mm (11.3 in)	-
WLS27..0850..	850 mm (33.5 in)	896 mm (35.3 in)	915.5 mm (36 in)	924 mm (36.4 in)	286 mm (11.3 in)	286 mm (11.3 in)	286 mm (11.3 in)

Accessories**Cordsets**

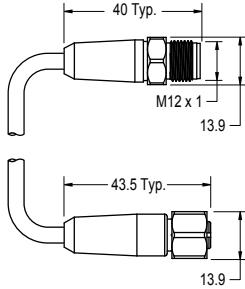
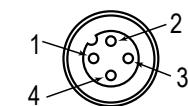
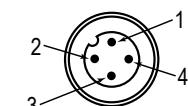
Use single-ended cordsets between the power source and the quick-disconnect connection of a stand-alone light or the first light in a cascade. Use double-ended cordsets between lights in a cascade.

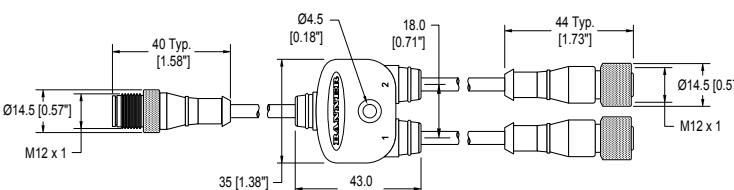
⁽²⁾ Values are shown at 25 °C. Current and lumen values decrease 0.4% per 1 °C from the ambient temperature. For example, an 850 mm unit will have a maximum current of 0.851 A at -40 °C and 1.2 A at +50 °C.

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)				

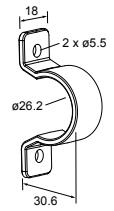
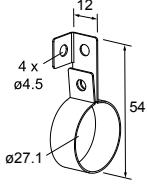
4-Pin Double-Ended M12 Female to M12 Male Cordsets					
Model	Length	Style	Dimensions	Pinout	
MQDEC-401SS	0.31 m (1 ft)	Male Straight/Female Straight			
MQDEC-403SS	0.91 m (2.99 ft)				
MQDEC-406SS	1.83 m (6 ft)				
MQDEC-412SS	3.66 m (12 ft)				
MQDEC-415SS	4.58 m (15 ft)				
MQDEC-420SS	6.10 m (20 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			
MQDC-WDSS-0415	5 m (16.4 ft)				
MQDC-WDSS-0430	9 m (29.5 ft)				

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)			
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)	Male Straight/Female Straight		  1 = Brown 2 = White 3 = Blue 4 = Black

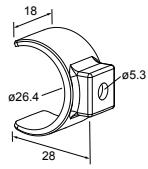
4-Pin Flat Junction M12 Female Branch to M12 Male Trunk Splitter Cordsets			
Model	Branches (Female)	Trunk (Male)	Pinout
CSB-M1240M1240	No branch	No trunk	
CSB-M1240M1241		No trunk	
CSB-M1241M1241		0.31 m (1 ft)	
CSB-M1248M1241	2 x 0.3 m (1 ft)	2.44 m (8 ft)	
CSB-M12415M1241		4.57 m (15 ft)	
CSB-M12425M1241		7.60 m (25 ft)	
CSB-UNT425M1241		7.60 m (25 ft) Unterminated	
CSB-M1243M1243	2 x 1 m (3.28 ft)	1 m (3.28 ft)	

Brackets

LMBWLS27EC <ul style="list-style-type: none"> Clear copolyester Clearance for M5 or #10 hardware 	
LMBWLS27H <ul style="list-style-type: none"> 300 series stainless steel mounting brackets M4 stainless steel hardware included 	

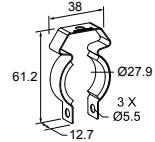
LMBWLS27SP

- Clear copolyester
- Clearance for M5 or #10 hardware
- Snap bracket for light-duty applications



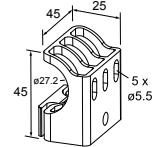
LMBWLS27T

- Stainless steel mounting brackets with rubber grips
- M5 stainless steel hardware included
- Clearance for M5 or #10 hardware



LMBWLS27U

- Clear copolyester
- Clearance for M5 or #10 hardware
- Clamps securely around the light body



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.

THIS LIMITED WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES WHETHER EXPRESS OR IMPLIED (INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), AND WHETHER ARISING UNDER COURSE OF PERFORMANCE, COURSE OF DEALING OR TRADE USAGE.

This Warranty is exclusive and limited to repair or, at the discretion of Banner Engineering Corp., replacement. **IN NO EVENT SHALL BANNER ENGINEERING CORP. BE LIABLE TO BUYER OR ANY OTHER PERSON OR ENTITY FOR ANY EXTRA COSTS, EXPENSES, LOSSES, LOSS OF PROFITS, OR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES RESULTING FROM ANY PRODUCT DEFECT OR FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER ARISING IN CONTRACT OR WARRANTY, STATUTE, TORT, STRICT LIABILITY, NEGLIGENCE, OR OTHERWISE.**

Banner Engineering Corp. reserves the right to change, modify or improve the design of the product without assuming any obligations or liabilities relating to any product previously manufactured by Banner Engineering Corp. Any misuse, abuse, or improper application or installation of this product or use of the product for personal protection applications when the product is identified as not intended for such purposes will void the product warranty. Any modifications to this product without prior express approval by Banner Engineering Corp will void the product warranties. All specifications published in this document are subject to change. Banner reserves the right to modify product specifications or update documentation at any time. Specifications and product information in English supersede that which is provided in any other language. For the most recent version of any documentation, refer to: www.bannerengineering.com.

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

Mexican Importer

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

81 8363.2714