WLS27 LED Strip Light - PWM Dimmable



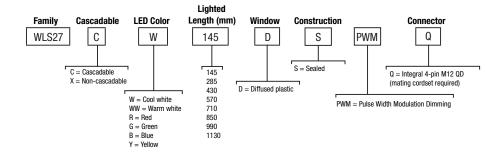
Datasheet

For complete technical information about this product, including installation instructions, application requirements and guidelines, EU Declaration of Conformity, technical specifications, and accessories, see *www.bannerengineering.com* and search for 186597.



For PWM dimming, use with the LC65 Dimmer Module. For more information, refer to the LC65 LED Dimmer Module datasheet, p/n 177086.

Models



Specifications

Operating Voltage

12 to 30 V dc

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

Pulse Width Modulation (PWM)

Frequency: Up to 1000 Hz Voltage: 8 to 30 V dc Current: 4 mA max. per foot

Supply Protection Circuitry

Protected against reverse polarity and transient voltages

Construction

FDA-grade copolyester

Mounting

Bracket LMBWLS27EC included (2 for lights up to 570 mm or 3 for lights 710 mm and longer)

Connections

Integral 4-pin M12 male quick disconnect (QD) (4-pin connecting cordset required)

Storage Temperature

-40 °C to +70 °C (-40 °F to +158 °F)

Operating Temperature

 $-40~^{\circ}\text{C}$ to +70 $^{\circ}\text{C}$ (–40 $^{\circ}\text{F}$ to +158 $^{\circ}\text{F}$) Light output begins to decrease above 50 $^{\circ}\text{C}$ (122 $^{\circ}\text{F}$) and will be approximately 65% of max intensity at 60 $^{\circ}\text{C}$ (140 $^{\circ}\text{F}$) and 30% of max intensity at 70 $^{\circ}\text{C}$ (158 $^{\circ}\text{F}$)

Application Note

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

Maximum length of light at 12 V dc: 1.4 m (4.6 ft)
Maximum length of light at 24 V dc: 3.0 m (9.8 ft)
Maximum length of light at 30 V dc: 3.1 m (10.2 ft)

Light Length		Max. Current		
	12 V dc	24 V dc	30 V dc	A
145 mm	0.33 A	0.15 A	0.12 A	0.4
285 mm	0.66 A	0.30 A	0.24 A	0.8
430 mm	1.01 A	0.46 A	0.36 A	1.2
570 mm	1.36 A	0.61 A	0.48 A	1.6
710 mm	1.75 A	0.77 A	0.60 A	2.0
850 mm	2.13 A	0.92 A	0.73 A	2.4
990 mm	2.59 A	1.08 A	0.85 A	2.8
1130 mm	3.04 A	1.24 A	0.97 A	3.2



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

Environmental Rating

Rated IEC IP66, IP67, and IP69K, per DIN 40050

Vibration and Mechanical Shock

Vibration 10-55 Hz 1.0 mm p-p amplitude per IEC 60068-2-6 Shock 15G 11 ms duration, half sine wave per IEC 60068-2-27

Certifications









Dimensions

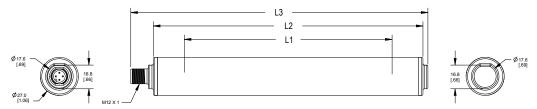


Figure 1. Quick Disconnect Models

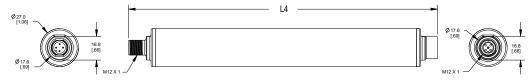


Figure 2. Cascade Models

Models	L1	12	L3	L4
WLS27145	145 mm (5.7 in)	189 mm (7.4 in)	208.5 mm (8.2 in)	217 mm (8.5 in)
WLS27285	286 mm (11.3 in)	330 (13 in)	349.5 mm (13.8 in)	358 mm (14.1 in)
WLS27430	427 mm (16.8 in)	471 mm (18.5 in)	490.5 mm (13.3 in)	499 mm (19.6 in)
WLS27570	569 mm (22.4 in)	612 mm (24.1 in)	631.5 mm (24.9 in)	640 mm (25.2 in)
WLS27710	708 mm (27.9 in)	752 mm (29.6 in)	771.5 mm (30.4 in)	780 mm (30.7 in)
WLS27850	849 mm (33.4 in)	893 mm (35.2 in)	912.5 mm (35.9 in)	921 mm (36.2 in)
WLS27990	991 mm (39 in)	1035 mm (40.8 in)	1054.5 mm (41.5 in)	1063 mm (41.8 in)
WLS271130	1120 mm (44.1 in)	1164 mm (45.8 in)	1183.5 mm (46.4 in)	1192 mm (46.9 in)

Wiring Diagram

Male	Female	Pin	Wire Color	Connection
2 1 1 4	_2	1	brown	12 to 30 V dc
	1-	3	blue	dc common
	4-03	4	black	Pulse width modulation (PWM) input. For maximum intensity, leave the black wire floating or connected to common.
		2	white	Not used

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