Lighting Solutions

BANNER®

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WLB32 LED Light Bar

Family	Voltage	Cascadable	Lighted Length (mm)	Window	Control	Connector	Plug Type (AC Models)
WLB32	Z	C	285		PB	QM	B
	Z = AC **Blank** = DC	**C** = Cascadable	285 570 850 1130	**Blank** = Standard Diffuse **E** = Eye Shield Diffuse	**PB** = Hi/Low/OFF **Blank** = No Switch **M** = Motion	**Blank** = Cable (DC) **Q** = M12 QD (DC) **QM** = AC	**B** = North & Central America, Japan, Taiwan. **D** = India, Sri Lanka, Nepal, Namibia. **EF** = France, Belgium, Slovakia, Tunisia, Germany, Austria, Netherlands, Spain, S. Korea. **G** = UK, Ireland, Cyprus, Malta, Malaysia, Singapore, Hong Kong, Vietnam. **I** = Australia, New Zealand, Papua New Guinea, Argentina, China. **N** = Brazil, South Africa. **C** = AC connector with flying leads. **Blank** = No power cord

WLB92 Industrial Light Bar

AC Conduit Models

Family	Voltage	Color	Cascadable	Lighted Length (mm)	Control	Connector
WLB92	Z		C	550	A	CT
	Z = AC	**Blank** = Daylight White **WW** = Warm White **R** = Red **G** = Green **Y** = Yellow **B** = Blue	**C** = Cascadable	550 1100	**A** = 0-10 V Analogue Dimming	**CT** = Conduit Entry

AC Quick-Disconnect Models

Family	Voltage	Cascadable	Color	Lighted Length (mm)	Control	Connector	Plug Type (1.8 m Cable)
WLB92	Z	C		550	PB	QM	B
	Z = AC	**C** = Cascadable	**Blank** = Daylight White **WW** = Warm White **R** = Red **G** = Green **Y** = Yellow **B** = Blue	550 1100	**PB** = Switch, Dimming Knob	**QM** = AC	**B** = N. & C. America, Japan, Taiwan. **D** = India, Sri Lanka, Nepal, Namibia **EF** = Mainland EU & S. Korea. **G** = UK, Ireland, Cyprus, Malta, Malaysia, Singapore, Hong Kong, Vietnam. **I** = Australia, New Zealand, Papua New Guinea, Argentina, China. **N** = Brazil, South Africa. **C** = AC connector with flying leads. **Blank** = No power cord

DC Models

Family	Cascadable	Color	Lighted Length (mm)	Control	Connector
WLB92	X		550	PB	Q
	X = Non-Cascadable	**Blank** = Daylight White **WW** = Warm White **R** = Red **G** = Green **Y** = Yellow **B** = Blue	550 1100	**PB** = Switch, Dimming Knob **PWM** = Dimmable via Pulse Width Modulation	**Blank** = 2 m Integral Cable **Q** = Integral 4-pin M12 QD

LC65P1T
LED Dimming Controller

WLS27 LED Strip Lights

Family	Cascadable	LED Colour	Lighted Length (mm)	Window	Construction	Control	Connector
WLS27	C	W	145	D	S	PWM	Q
	C = Cascadable **X** = Non-Cascadable	**W** = Cool White* **WW** = Warm White **R** = Red **G** = Green **B** = Blue **Y** = Yellow	145 710 285 850 430 990 570 1130	**D** = Diffused Plastic	**S** = Sealed	**Blank** = None **PWM*** = Dimmable via Pulse Width Modulation * Only for cool white models	**Q** = Integral M12 QD

IP67, IP68G, IP69K

WLS28-2 LED Strip Lights

Family	Cascadable	LED Colour	Lighted Length (mm)	Window	Construction	Control	Connector
WLS28-2	C	W (1)	145	D	X	PB	Q
	C = Cascadable **X** = Non-Cascadable	**W** = Cool White (2) **WW** = Warm White **R** = Red **G** = Green **B** = Blue **Y** = Yellow	145 710 285 850 430 990 570 1130	**Blank** = Clear Plastic **D** = Diffused Plastic **L25** = 25° Lensed Window	**S** = Sealed (3) **X** = Not Sealed (3) Sealed models not available with ON/OFF Switch	**Blank** = None **M** = Motion Switch **PB** (3) = Hi/Low/OFF **PWM** (2) = Dimmable via Pulse Width Modulation (2) Only for cool white models	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

(1) UV models also available, contact factory for more information

Non-sealed models: **IP50**
Sealed models: **IP67, IP69K**

WLS28-2 Dual-Colour LED Strip Lights

Family	Cascadable	Colours (C) / Density (D)				Lighted Length (mm)	Window	Construction	Control	Connector
		C1	D1	C2	D2					
WLS28-2	X	W		R	2	– 285	D	X	PB	Q
	C = Cascadable **X** = Non-Cascadable	**W** = Daylight White **B** = Blue **R** = Red **Y** = Yellow **G** = Green			**Density –** **Blank** = 100% **2** = 50% **3** = 33%	145 285 430 570 710 850 990 1130	**Blank** = Clear Plastic **D** = Diffused Plastic **L25** = 25° Lensed Window	**S** = Sealed* **X** = Not Sealed * Sealed models not available with ON/OFF Switch	**Blank** = None **PB*** = Colour 1/OFF/Colour 2	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

WLC60 Heavy-Duty LED Lights

Family	Cascadable	LED Colour	Lighted Length (mm)	Window	Mounting Type	Construction	Connector Exit	Connector
WLC60	X	W	340	G		A		Q
	C = Cascadable **X** = Non-Cascadable	❍ **W** = Cool White	340 640	**Blank** = Polycarbonate **G** = Borosilicate Glass	**Blank** = Base Mount	**A** = Nickel-Plated Aluminium	**Blank** = Side Exit	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

IP68, IP68G, IP69K

WLC60 LED Light – Dimmable Models

Family	Cascadable	LED Colour	Lighted Length (mm)	Window	Mounting Type	Construction	Connector Exit	Control	Connector
WLC60	X	W	340	G		A		PWM	Q
	C = Cascadable **X** = Non-Cascadable	❍ **W** = Cool White	340 640	**Blank** = Polycarbonate **G** = Borosilicate Glass	**Blank** = Base Mount	**A** = Nickel-Plated Aluminium	**Blank** = Side Exit	**PWM** = Dimmable via Pulse Width Modulation	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

WLC60 LED Light – Stainless Steel Models

Family	Cascadable	LED Colour	Lighted Length (mm)	Window	Mounting Type	Construction	Connector Exit	Connector
WLC60	X	W	340	G		SS		Q
	X = Non-Cascadable	❍ **W** = Cool White	340	**Blank** = Polycarbonate **G** = Borosilicate Glass	**Blank** = Base Mount	**SS** = 316 Stainless Steel	**Blank** = Side Exit	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

WLC90 Heavy-Duty LED Lights

Family	LED Colour	Window	Lensing	Connector Exit	Control	Connector
WLC90	W	G	L15		PWM	Q
	❍ **W** = Cool White	**Blank** = Polycarbonate **G** = Borosilicate Glass	**L8** = ± 8° **L15** = ± 15° **L30** = ± 30°	**Blank** = Side Exit **R** = Rear Exit	**Blank** = None **PWM** = Dimmable via Pulse Width Modulation	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

IP68, IP68G, IP69K

WLA LED Area Lights

Standard Models

IP67, IP69K

Family	LED Colour	Array Size (mm)	Window	Lensing	Control	Connector
WLA	W	105X180		L11	PWM	Q
	○ **W** = Cool White* ○ **WW** = Warm White **R** = Red **G** = Green **B** = Blue **Y** = Yellow	105X180 190X180 275X180 360X180	**Blank** = Clear Plastic **D** = Diffused Plastic	**Blank** = No Lenses **L11** = ± 11° **L22** = ± 22° **L30** = ± 30°	**Blank** = None **PWM*** = Dimmable via Pulse Width Modulation * Only for cool white models	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

Encapsulated Models

Family	LED Colour	Array Size (mm)	Window	Control	Connector
WLA	W	105X180	E	PWM	Q
	○ **W** = Cool White	105X180 190X180 275X180 360X180	**E** = Encapsulated in Polyurethane	**Blank** = None **PWM** = Dimmable via Pulse Width Modulation	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

WL50S LED Spot Lights

Black Anodized Aluminium Models

IP67, IP69K

Family	LED Colour	Lens Angle	Control	Connector
WL50S	W	L11	PWM	Q
	○ **W** = White* ● **G** = Green ● **R** = Red	**L5** = ±5° (small) **L11** = ±11° (large) **L20** = ±20° (largest)	**Blank** = None **PWM** = Dimmable via Pulse Width Modulation * Only for white models	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

Stainless Steel Models

Family	LED Colour	Housing	Window Material	Lens Angle	Control	Connector
WL50S	W	SS	G	L11	PWM	Q
	○ **W** = White* ● **G** = Green ● **R** = Red	**SS** = Stainless Steel	**Blank** = Acrylic **G** = Glass	**L5** = ±5° (small) **L11** = ±11° (large) **L20** = ±20° (largest)	**Blank** = None **PWM** = Dimmable via Pulse Width Modulation * Only for white models	**Q** = Integral M12 QD

WL50-2 LED Work Lights

Family	Power Switch	Control	Connector
WL50-2	**PB**	**PWM**	**Q**
WL50-2 = 30 mm Mount **WL50F-2** = Flat Mount	**Blank** = Standard **PB** = ON/OFF Switch	**Blank** = None **PWM** = Dimmable via Pulse Width Modulation	**Blank** = 2 m Integral Cable **Q** = Integral M12 QD

Standard models: **IP69K**
Push-button models: **IP67**

Flex Arm

Models	Base Connection	Light Connection	Brackets
FLX18-1212	 1/2-14 NPSM	1/2-14 NPSM (Male) Use with: **WL50** **WL50PB** **WL50-2** **WL50-2PB**	 **SMB22A** **SMBFLXMAG** **SMBFLXMAGR** – Protective cover for magnet sold separately **LMBE12RA**
FLX18-F12	 3-Hole Flange		Direct Mount
FLX18-12M30	 1/2-14 NPSM	 M30 x 1.5 (Female) Use with: **WL50** **WL50PB** **WL50-2** **WL50-2PB** **WL50S**	 **SMB22A** **SMBFLXMAG** **SMBFLXMAGR** – Protective cover for magnet sold separately **LMBE12RA**
FLX18-DM30	 2 x 1/4-20W 1.375 spacing		 **SMBFLXCLAMPD** **SMBFLXMAGD** **SMBFLXMAGDR** – Protective cover for magnet sold separately
FLX18-FM30	 3-Hole Flange		Direct Mount

Vision Lights

Linear Array Lights

Linear Array Lights effectively illuminate large areas over long distances while cutting through dust, mist and grime

LED Area Lights

Area Lights provide even illumination with high-intensity lights for the highest levels of contrast to help vision sensors detect the presence or absence of a feature

LED On-Axis Lights

Banner's innovative On-Axis Lights use a beam splitter to focus light along a camera's optical axis, providing even, diffused illumination

LED Back Lights

Banner Backlights provide more optical contrast by creating an image that shows a silhouette of a part, allowing for inspection of size and shape

LED Ring Lights

Ring Lights brightly illuminate the area directly in front of a camera and are especially useful for small parts and high-speed inspections

Low-Angle Ring Lights

Low-Angle Ring Lights enhance the contrast of surface features, making them ideal for a number of quality, identification and verification applications

LED Spot Lights

Banner's Spot Lights are compact to fit into tight spaces, and when properly placed can effectively create shadows or highlights to boost optical contrast

Supply Voltage & IP Rating

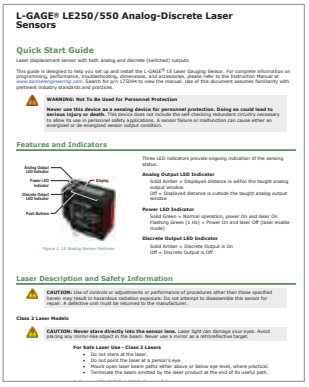
Family	Supply Voltage DC Models	Supply Voltage AC Models	IP Rating
WLB32	12-30 VDC	90-264 VAC	IP50 Dry location only
WLB92	24 VDC	100-277 VAC	IP50
WLS27	12-30 VDC	/	IP68, IP68G, IP69K
WLS28-2	12-30 VDC	/	Non-sealed Models: IP50 – Sealed Models: IP67, IP69K
WLC60	12-30 VDC	/	IP68, IP68G, IP69K
WLC90	12-30 VDC	/	IP68, IP68G, IP69K
WLA	12-30 VDC	/	IP67, IP69K
WL50S	12-30 VDC	/	IP67, IP69K
WL50-2	12-30 VDC	/	Standard models: IP69K – Push-button models: IP67

Additional Resources

Complete Catalogue

Video Channel

Web Site


L-GAGE® LE250/550 Analog-Discrete Laser Sensors

Quick Start Guide

Laser displacement sensor with both analog and discrete (switched) outputs

This guide is designed to help you set up and install the L-GAGE® LE Laser Gauging Sensor. For complete information on programming, performance, troubleshooting, dimensions, and accessories, please refer to the Instruction Manual at www.bannerengineering.com. Search for p/n 175046 to view the manual. Use of this document assumes familiarity with pertinent industry standards and practices.

WARNING: Not To Be Used for Personnel Protection

Never use this device as a sensing device for personnel protection. Doing so could lead to serious injury or death. This device does not include the self-checking redundant circuitry necessary to allow its use in personnel safety applications. A sensor failure or malfunction can cause either an energized or de-energized sensor output condition.

Features and Indicators

Figure 1. LE Analog Sensor Features

Three LED indicators provide ongoing indication of the sensing status.

Analog Output LED Indicator
Solid Amber = Displayed distance is within the taught analog output window
Off = Displayed distance is outside the taught analog output window

Power LED Indicator
Solid Green = Normal operation, power On and laser On
Flashing Green (1 Hz) = Power On and laser Off (laser enable mode)

Discrete Output LED Indicator
Solid Amber = Discrete Output is On
Off = Discrete Output is Off

Laser Description and Safety Information

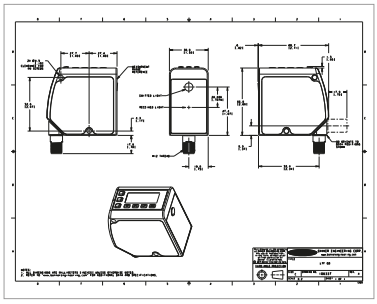
CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Do not attempt to disassemble this sensor for repair. A defective unit must be returned to the manufacturer.

Class 2 Laser Models

CAUTION: Never stare directly into the sensor lens. Laser light can damage your eyes. Avoid placing any mirror-like object in the beam. Never use a mirror as a retroreflective target.

For Safe Laser Use - Class 2 Lasers
- Do not stare at the laser.
- Do not point the laser at a person's eye.
- Mount open laser beam paths either above or below eye level, where practical.
- Terminate the beam emitted by the laser product at the end of its useful path.

Data Sheets



CAD, STP, DXF or PDF drawings

More Sensors, More Solutions

Machine Safety

Sensors

Vision

Lighting & Indication

Wireless I/O

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