

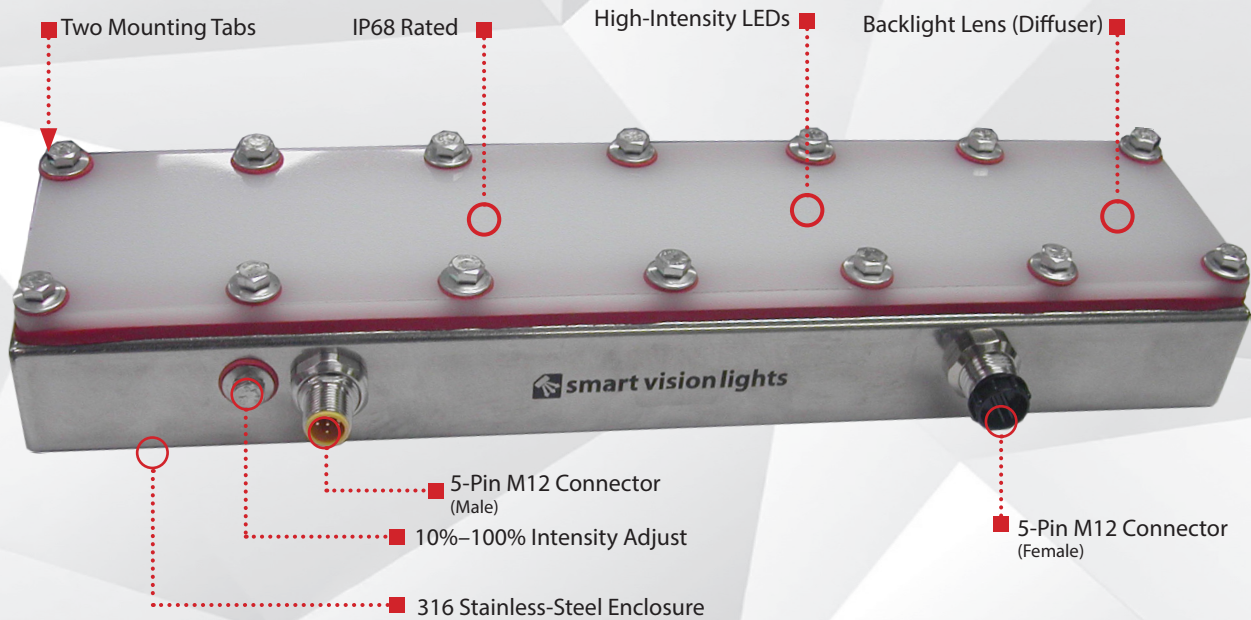


smart
vision lights

LWB300

Connect-a-Light
LINEAR LIGHT
WASHDOWN | BACKLIGHT

PRODUCT DATA SHEET



Warranty 10 YEAR	Compliant IEC 62471	Compliant CE RoHS	Rated IP 68	Connector 5-PIN M12
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PRODUCT HIGHLIGHTS

- ✓ 5-pin M12 quick connect
- ✓ Built-in driver, no external wiring needed
- ✓ PNP and NPN trigger input signal
- ✓ Washdown light with 316 stainless-steel enclosure
- ✓ Daisy-chain up to six LWB300 linear lights using a 5-pin M12 washdown jumber cable



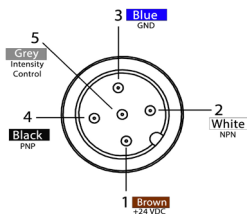
PRODUCT DESCRIPTION

The LWB300 series features a 100% waterproof stainless-steel enclosure specially designed for food industry and washdown environments where water and harsh detergents are present. The LWB300 features an integrated constant-current driver built into the light and runs in continuous operation. NPN or PNP trigger signal input can be used to control the turning on/off input of the light. Intensity of the light can be controlled via a 1–10VDC remote analog signal line or manual potentiometer. Daisy-chain up to six LWB300 together.

PRODUCT SPECIFICATIONS

Electrical Input	24VDC +/-5%
Input Current	Max. 700 mA
Input Power	Max. 17 W
On/Off Input	PNP: +4VDC to activate NPN: GND (<1VDC) to activate
PNP Line	2.8 mA @ 4VDC 8.8 mA @ 12VDC 17.6 mA @ 24VDC
NPN Line	14.4 mA @ Common (0VDC)
Continuous Mode	NPN can be tied to ground OR PNP can be tied to 24VDC (not both)
Potentiometer	270° turn pot — Intensity control of 10%–100%. Turn clockwise to increase intensity.
Analog Intensity	Brightness output is adjustable from 10%–100% via a 1–10VDC signal. (Jumpering pin 5 to pin 1 will provide maximum intensity.)
Connection	5-pin M12 connector
Ambient Temperature	-18°–40°C (0°–104°F)
IP Rating	IP68
Weight	~1430 g
Compliances	CE, RoHS, IEC 62471
Warranty	10 years. For complete warranty information, visit smartvisionlights.com/warranty .

WIRING CONFIGURATION



Pin layout for light (Male Connector)

Pins	Function	Signal	Wire Color
1	Power In	+24VDC	BROWN
2	NPN	Sinking Signal	WHITE
3	GND	Ground	BLUE
4	PNP	Sourcing Signal	BLACK
5	Intensity Control	1–10VDC	GREY*

* Some cables use green/yellow for pin 5

For maximum intensity, tie pin 5 to pin 1 at +24VDC.

For continuous mode: Tie PNP (pin 4) can be tied to +24VDC (pin 1) or tie NPN (pin 2) can be tied to Ground (pin 3)

OPTIONAL

For maximum intensity, connect pin 5 to pin 1 at 24VDC.



RESOURCE CORNER

Additional resources, including CAD files, videos, and application examples, are available on our website.



PART NUMBER

LWB300 –

COLOR:



Part Number Example:

LWB300-625 LWB300, 625 Red Wavelength



This light is available in our SWIR LEDs.



Additional wavelengths available upon request.

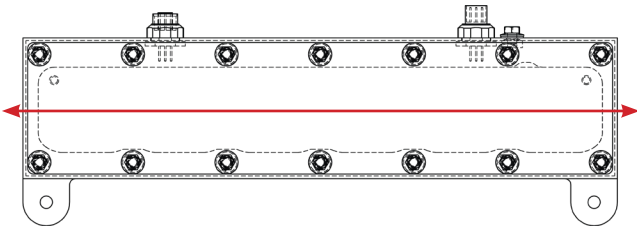


OPTICAL PERFORMANCE

The LWB300 offers a very diffuse light pattern.

OPTICAL PERFORMANCE FOR THE LWB300

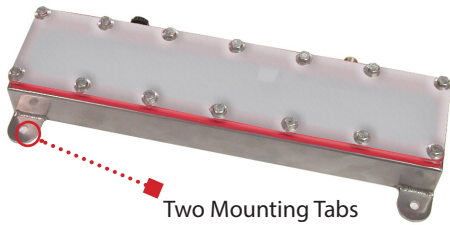
Rating	Illumination (Lux)
Average Intensity Rating	42,000
<i>Illuminance measurement taken at surface of LWB300</i>	





MOUNTING

The LWB300 Series features two stainless-steel tabs welded directly to the housing for simple yet versatile mounting options.

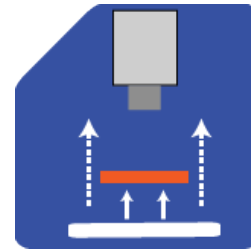


Two Mounting Tabs



ILLUMINATION

LWB300 Series of Linear Lights works best for:

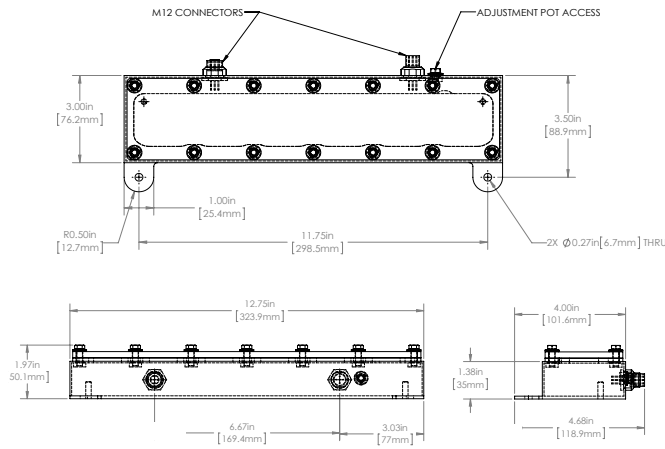


Backlight



PRODUCT DRAWING

CAD files available on our website.
Dimensions are in mm.



EYE SAFETY

According to IEC 62471: 2006. Full documentation available upon request.



Notice


Exempt Group: No photobiological hazard to eyes or skin even for continuous, unrestricted use. Applicable for wavelengths 625, 850, 940, 1050, 1200, 1300, 1450, and 1550.

Caution

Risk Group 1: Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to eyes. Safe for most applications except prolonged exposure. Applicable for wavelengths 470, 505, 530, and WHI.



ACCESSORIES

Power Cables (Wash-down)	
	
Length	Part Number
10 m	W5PM12-10
15 m	W5PM12-15

Jumper Cables (Daisy-Chain) (Washdown)	
	
Length	Part Number
300 mm	W5PM12-J300
2000 mm	W5PM12-J2000
2 m	W5PM12-J2000

Washdown cables have a 316 Stainless-steel connector(s).



GLOSSARY

This glossary covers all Smart Vision Lights product families; some content in this section may not apply to this specific light.

TERMINOLOGY

OverDrive™ Lights include an integrated high-pulse driver for complete LED light control.

Continuous Operation Lights stay on continuously.

Multi-Drive™ Combines continuous operation and OverDrive™ strobe (high-pulse operation) mode into one easy-to-use light.

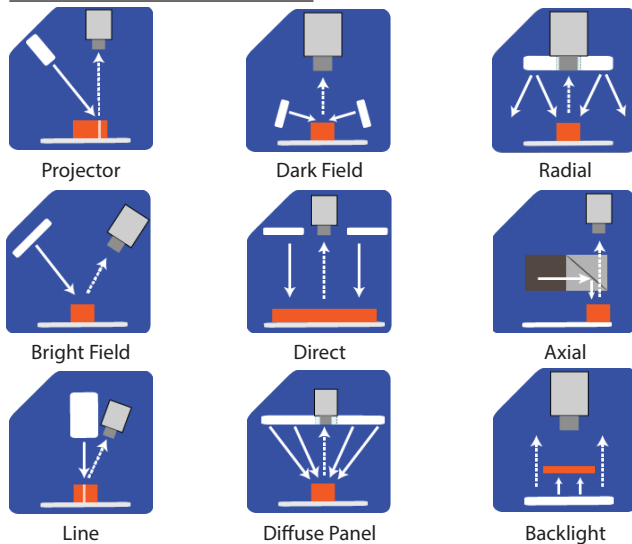
Built-In Driver The built-in driver allows full function without the need for an external controller.

Camera to Light Connect the light directly to the camera, without the need for additional controllers or equipment.

Polarizers Filters that reduce reflections on specular surfaces.

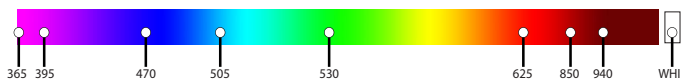
Diffuser Used to widen the angle of light emission, reduce reflections, and increase uniformity.

TYPES OF ILLUMINATION



COMMON COLOR/WAVELENGTHS LEGEND

Wavelength options range from 365 nm to 1550 nm.*
Additional wavelengths available for many light families.



*See Part Number section for **this light's** available standard wavelengths.



Shortwave infrared LEDs are available in 1050 nm, 1200 nm, 1300 nm, 1450 nm, and 1550 nm.*

*Check Part Number section to see if **this light** is available in SWIR wavelengths.