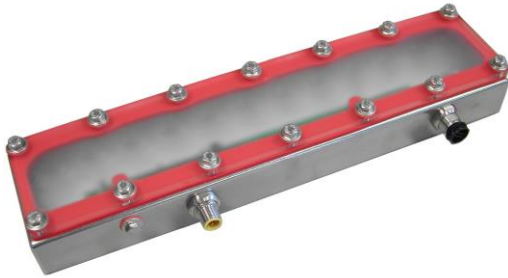



product introduction

The LW300 series features a 100% waterproof stainless steel enclosure specially designed for food industry and wash down environments where water and corrosive materials present. All circuitry is enclosed in an epoxy potted compound further protecting the light from dust, debris, and all other contaminants. The LW300 array utilizes 12 high intensity LEDs being the longest light in the Connect-a-light Series. It also features an integrated constant current driver built into the light. Built-in driver technology was pioneered by Smart Vision Lights during the company's creation. It eliminates the need for any external components in the lighting system. Connect-a-light Series Linear Lights utilize 24VDC and can operate in continuous or strobe mode. NPN or PNP strobe triggers can be used to control the pulse of the light. Intensity of the light can be controlled via 0-10V remote analog signal or manual potentiometer. Available in standard narrow, wide, and line optics with options for all standard and some custom wavelengths.


product features


- IP69K Rated Stainless Steel Housing
- Designed to operate in food applications
- 5 Pin M12 Quick Disconnect
- Option of connecting lights together
- Driver built in – No External wiring to a driver
- PNP and NPN Strobe input
- Continuous operation or Strobe mode
- Dimmable via built in potentiometer
- Analog intensity 0-10VDC signal
- Twelve, 1mm² Die High Current LEDs


product specifications

Electrical Input	24 VDC +/- 5%
Current	Max. 700mA
Wattage	Max. 17W
Strobe Input	PNP ► +3VDC or greater to activate. NPN ► GND (<1VDC) to activate
PNP Line	3.7mA @ 3VDC 6.2mA @ 5VDC 12.6mA @ 10VDC 30.4mA @ 24 VDC
NPN Line	22mA @ Common (0VDC)
Continuous Mode	Light will be in continuous mode by leaving signal on strobe input active
Potentiometer	3/4 turn pot – Intensity control of 10% to 100% Clockwise increases intensity
Analog Intensity	The output is adjustable from 10 -100% of brightness by a 0 -10 VDC signal
Connection	5 pin M12 connector
Daisy Chain	Up to six LW300
Lifespan	100,000 hrs
IP Rating	IP69K
Weight	~1430g
IEC 62471 Rating	See page 4



product number **key**

LW300 – XXX – X* –» Part Number Key

Product Family:
Linear Wash
Down Light
LW300

Color:
470 – Blue
505 – Cyan
530 – Green
625 – Red
850/940 – IR
WHI - White

Lenses:
W - Wide
L - Line

* Lights come standard with Narrow lenses
CE and RoHS Compliant



warnings



Attention

Please note that the power requirements are 700mA at 24VDC. Failure to supply light with 700mA will result in non-repeatable lighting. Contact Smart Vision Lights for more information.



wiring **configuration**

If Analog 0-10 VDC is not used to control light intensity;
+VDC (24VDC) must be connected to Analog Input - Jumper pin 5 to pin 1

	Pin	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	0-10VDC	GREY †

† Some cables use green with yellow stripe for 0-10V adjustment.



mounting & **accessories**

The LW300 features two stainless steel tabs welded directly to the housing for simple yet versatile mounting options. Complete mounting hardware included.



connecting lights/**daisy chain**

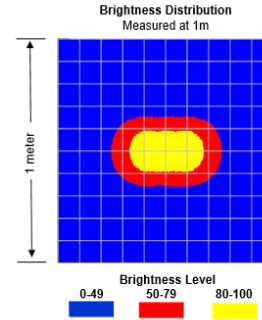


LW300 Series light require the use of a standard 5-pin M12 jumper cable effectively paralleling up to six LW300 lights.



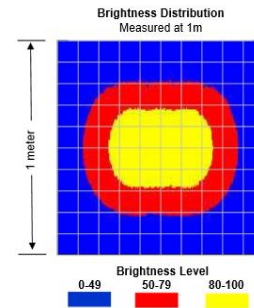
LW300-XXX

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	210mm(~8") H x 100mm(~4") V
1m (39.4")	250mm(~10") H x 200mm(~8") V
1.5m (59")	310mm(~12") H x 300mm(~12") V
Typical output performance	
Distance = .5 meter	Illumination (Lux) 14000
<i>Illumination measurement taken on White Lights – 6500K</i>	



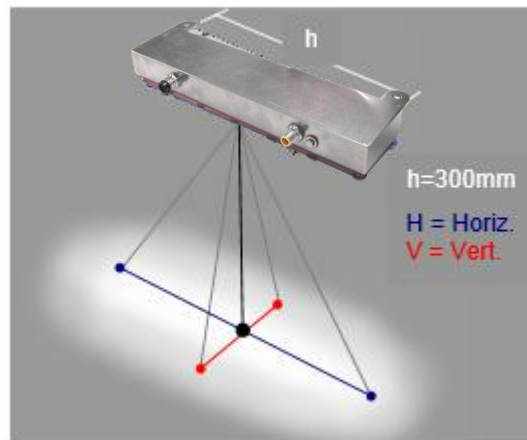
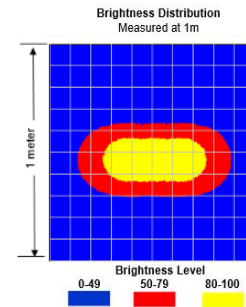
LW300-XXX-W

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	220mm(~9") H x 160mm(~6") V
1m (39.4")	460mm(~18") H x 420mm(~16.5") V
1.5m (59")	570mm(~22") H x 550mm(~22") V
Typical output performance	
Distance = .5 meter	Illumination (Lux) 6300
<i>Illumination measurement taken on White Lights – 6500K</i>	



LW300-XXX-L

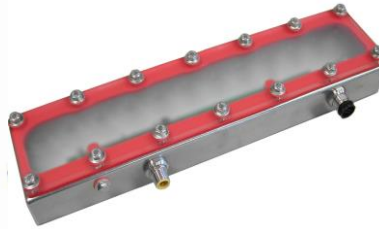
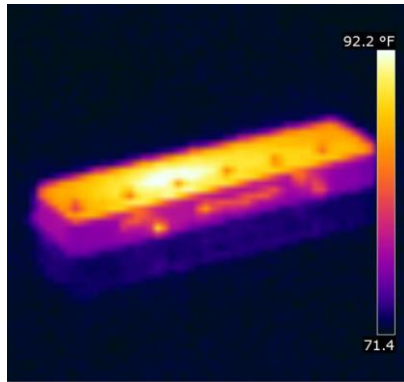
Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	260mm(~10") H x 100mm(~4") V
1m (39.4")	440mm(~17") H x 190mm(~7") V
1.5m (59")	660mm(~26") H x 300mm(12") V
Typical output performance	
Distance = .5 meter	Illumination (Lux) 10000
<i>Illumination measurement taken on White Lights – 6500K</i>	





thermal analysis

In constant operation the housing on LW300 series lights will run at 50 C° in an ambient temperature of 25 C°.



LW300 series aluminum backplates designed to transfer heat away from high power LED's.

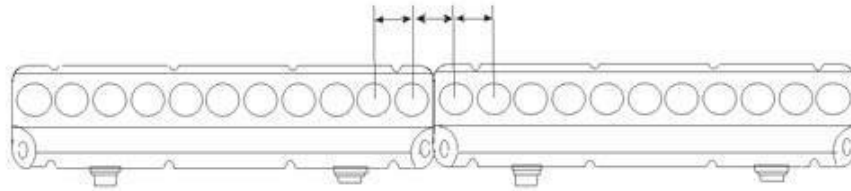
Additional heat sinking recommended in ambient air temperatures above 25°C.

Thermal image taken after 2 hours of continuous ON operation at 25°C.



LED spacing & illumination

Constant spacing between LED's as lights are connected together



risk group

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

Notice

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

Caution

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