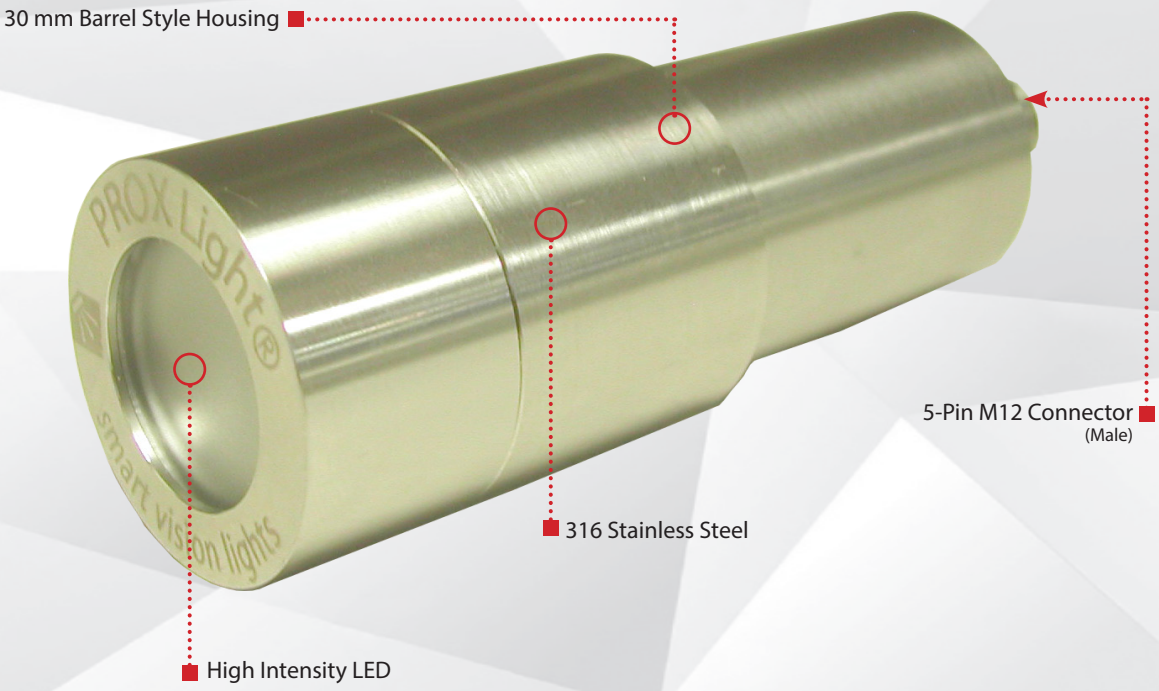
smart vision lights

SXW30 *Prox Light* SPOTLIGHT WASHDOWN

PRODUCT DATA SHEET



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

PRODUCT HIGHLIGHTS

- ✓ 5-pin M12 quick connect
- ✓ Built-in driver
- ✓ PNP and NPN trigger signal input input
- ✓ Washdownwith 316 stainless steel barrel styl housing
- ✓ Standard optics provides tight focused light

PRODUCT DESCRIPTION

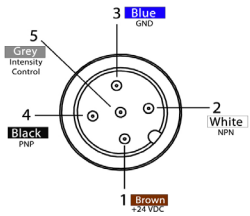
The SXW30 Series of Spot Lights features a 100% waterproof stainless steel barrel style housing, specially designed for food industry and washdown environments where water and corrosive materials are present. The SWX30 produces a homogeneous light pattern at any recommended working distance for a very define and even projected spot. NPN or PNP strobe triggers can be used to control the pulse of the light. Intensity of the light can be controlled via 1–10 V DC remote analog signal.

PRODUCT SPECIFICATIONS

Electrical Input	24 V DC +/- 5%
Input Current	Max. 200 mA
Input Power	Max. 5 W
PNP Trigger	2.8 mA @ 4 V DC | 8.8 mA @ 12 V DC | 17.6 mA @ 24 V DC
NPN Trigger	14.4 mA @ Ground (0VDC)
Trigger Input	PNP > +4 VDC (24 VDC max.) to activate or NPN ≥ GND <1VDC to activate (not both)
Continuous Mode	NPN can be tied to ground **OR** PNP can be tied to 24 V DC (not both)
Red Indicator LED	LED Strobe Indicator ON = Light Active
Green Indicator LED	ON = Power
Analog Intensity	The output is adjustable from 10–100% of brightness by a 1–10 V DC signal. (Jumpering pin 5 to pin 1 will provide maximum intensity)
Connection	5-pin M12 connector
Operating Temperature	-10° - 40° C (14°-104° F) | RH max 80% non-condensing humidity
Storage Temperature	-20° - 70° C (-4°-158° F) | RH max 80% non-condensing humidity
IP Rating	IP68
Weight	~266g
Compliances	CE, RoHS, IEC 62471
Warranty	10 years*

**See SmartVisionLights.com/warranty for details*

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	1–10 V DC	GREY *

Some cables use green/yellow for 1-10V adjustment

For proper light function, apply either a PNP or NPN signal, not both.

Failure to supply light with correct input current will result in inconsistent lighting behavior.
(see Product Specifications for requirements)

RESOURCE CORNER

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

Smart Vision Lights
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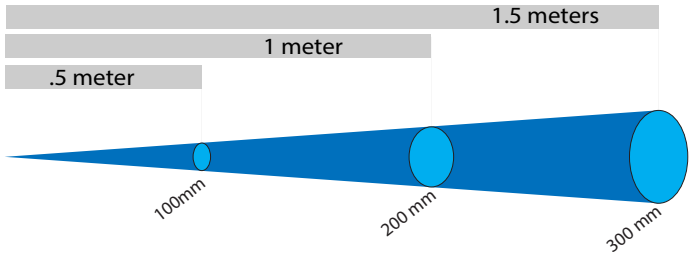
Norton Shores, MI 49441
P: +1 231.722.1122 | F: +1 231.722.9922
smartvisionlights.com
techsupport@smartvisionlights.com
Opened: Monday - Friday | 8am - 5pm EST

LIGHT PATTERNS

Smart Vision Lights recommends the SXW30 be used at a working distance between 500 mm and 4000 mm.

Beam Diameter (White Light) – 6500 K

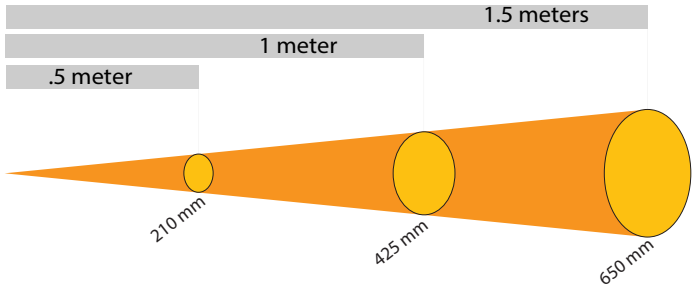


LIGHTING PATTERN FOR THE SXW30 (NARROW)

Working Distance mm (inches)	Pattern (80% - 100% measured intensity) mm (inches)
.5m (19.7")	100mm (~4") D
1m (39.4")	200mm (~8") D
1.5m (59")	300mm (~12") D

Typical Output Preformance	Illuminance (Lux)
Distance = .5 meter	
Illuminance measurement taken on White Lights - 6500K	

Beam Diameter (White Light) – 6500 K

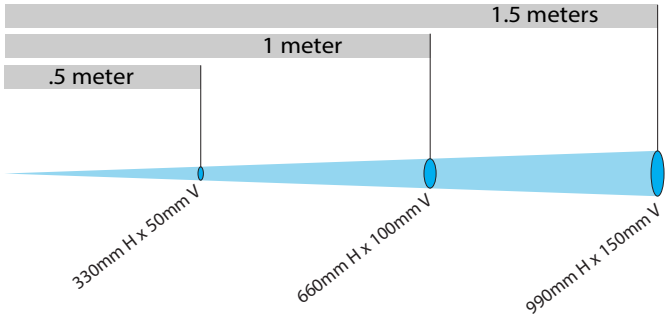


LIGHTING PATTERN FOR THE SXW30 (WIDE)

Working Distance mm (inches)	Pattern (80% - 100% measured intensity) mm (inches)
.5m (19.7")	210mm (~6")
1m (39.4")	425mm (~17")
1.5m (59")	650mm (~22")

Typical Output Preformance	Illuminance(Lux)
Distance = .5 meter	
Illuminance measurement taken on White Lights - 6500K	

Beam Diameter (White Light) – 6500 K



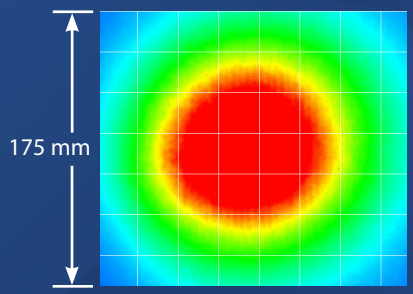
LIGHTING PATTERN FOR THE SXW30 (LINE)

Working Distance mm (inches)	Pattern (80% - 100% measured intensity) mm (inches)
.5m (19.7")	330mm (~13") H x 50mm (~2") V
1m (39.4")	660mm (~26") H x 100mm (~4") V
1.5m (59")	990mm (~39") H x 150mm (~6") V

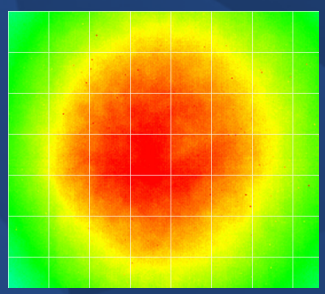
Typical Output Preformance	Illuminance (Lux)
Distance = .5 meter	
Illuminance measurement taken on White Lights - 6500K	

The SXW30 Linear Light produces a uniform light pattern.

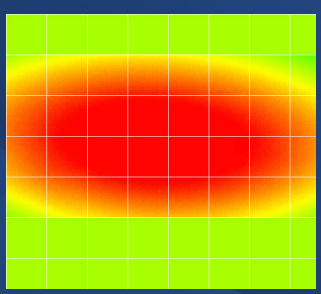
Working Distance = 500 mm Grid set to 25 mm x 25 mm



Narrow



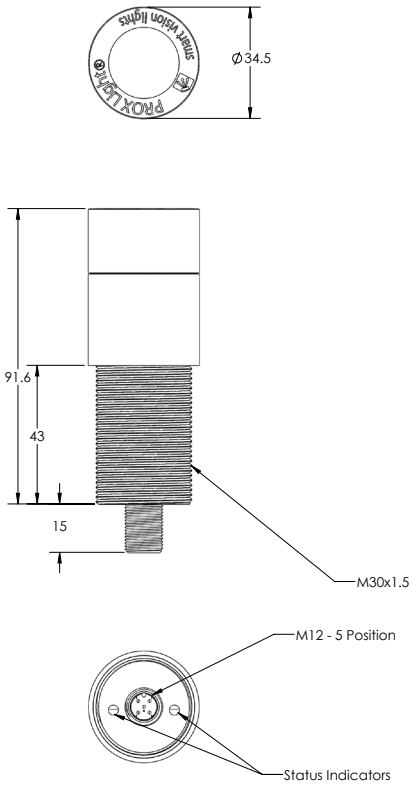
Wide



Line

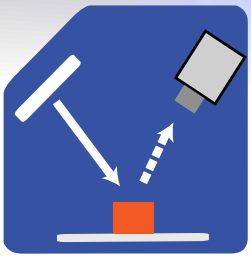
PRODUCT DRAWING

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

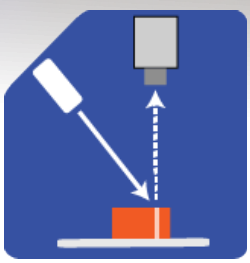


ILLUMINATION

SXW30 series of Linear Lights works best for:



Bright Field



Projector

EYE SAFETY

According to IEC 62471:2006. Full documentation upon request with purchase of product.

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.

Caution

Risk Group 2: UV emitted from this product. Eye or skin irritation may result from exposure. Use appropriate shielding. Does not pose optical hazard if aversion responses limit exposure. Applicable for wavelengths: 365 and 395.

PART NUMBER

SXW30 – □□□ – □

COLOR:

WHI | 365 395 | 470 | 505 | 530 | 625 | 850 940

LENS:

Leave blank for standard (narrow)

W = Wide

L = Line

Part Number Examples:

SXW30-625 SXW30, 625 nm Red Wavelength, Standard (Narrow) Lenses

SXW30-WHI-L SXW30, White, Line Lenses

Additional wavelengths options available upon request

STANDARD LENS OPTICS

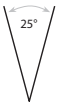
NARROW

Narrow lens are standard.

Standard lenses create a narrow beam of illumination. They can be used when long working distances are needed. Narrow are 10° angle lenses.

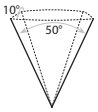
WIDE

Wide lenses create a large area of illumination. Wide lenses can be used when short working distances are needed. Wide lenses create a flood light effect. Wide are 25° angle cone lenses.



LINE

Line lenses create a thin narrow beam of illumination. Line lenses create a line of light when used on the L300 linear light. Line are 10° and 50° angle cone lenses.



** Additional lens options available upon request.*

ACCESSORIES

Power Cables

Lengths	Part Number
5 m	5PM12-5
10 m	5PM12-10
15 m	5PM12-15

Power Cables (Wash-down)

Lengths	Part Number
15 m	W5PM12-15

Washdown cables have a 316 Stainless Steel connector(s).

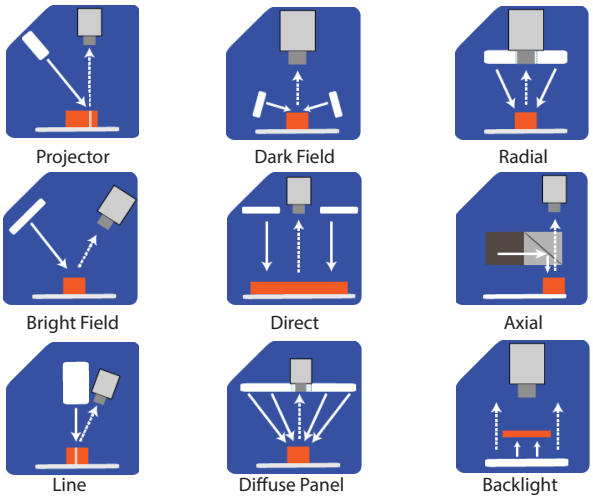
GLOSSARY

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

TERMINOLOGY

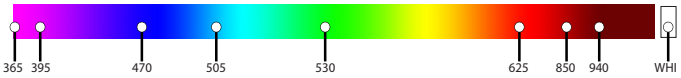
OverDrive™ Lights include an integrated high-pulse driver for complete LED light control.
Continuous Operation Lights stay on continuously.
Multi-Drive™ Combines continuous operation and OverDrive™ strobe (high-pulse operation) mode into one easy-to-use light.
Built-In Driver The built-in driver allows full function without the need of an external controller.
Camera to Light Connecting 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 ILLUMINATIONS



COLOR/WAVELENGTHS LEGEND

Wavelengths 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.*

SWIR SHORT WAVE **INFRARED**

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.*