Two Mounting Nuts

Four Degree Lens

5-Pin M12 Connector
(Male)

Easily Adjustable Mounting Nuts

High Intensity LED

Warranty	Compliant	Compliant	Rated	Connector
10 YEAR	**IEC** 62471	**CE** RoHS	**IP 50**	**5 PIN M12**

PRODUCT HIGHLIGHTS

✔ Narrow, 4 degree lens allows for a long, tightly focused beam of light

✔ Built-in driver, no external wiring needed

✔ PNP and NPN strobe input

✔ 5-pin M12 quick connect

✔ Multiple mounting options

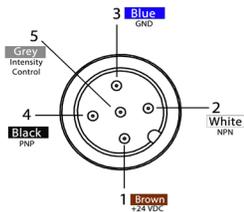## PRODUCT SPECIFICATIONS

Electrical Input	24 V DC +/- 5%
Input Current	Max. 250 mA
Wattage	Max. 6 W
Strobe Input	PNP > +4 V DC or greater to activate | NPN > GND (<1 V DC) to activate
PNP Line	4 mA @ 4 V DC | 10 mA @ 12 V DC | 20 mA @ 24 V DC
NPN Line	15 mA @ Ground (0VDC)
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
Ambient Temperature	-18º–40º C (0º–104º F)
IP Rating	IP50
Weight	~320g
Compliances	CE, RoHS, IEC 62471

WIRING CONFIGURATION

Pin layout for light (Male Connector)

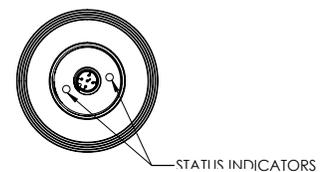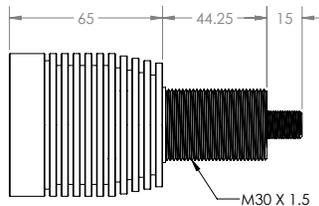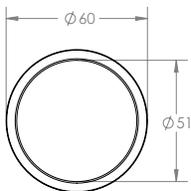| Pins	Function	Signal	Wire Color
1	Power In	+24 V DC	BROWN
2	NPN	Sinking Signal	WHITE
3	GND	Ground	BLUE
4	PNP	Sourcing Signal	BLACK
5	Intensity Control	1 - 10 V DC	GREY*

Some cables use green/yellow for pin 5

OPTIONAL

For maximum intensity, analog intensity may be connected to +V DC (24 V DC) - Jumper pin 5 to pin 1

PRODUCT DRAWING

Ø 60

Ø 51

65   44.25   15

M30 X 1.5

STATUS INDICATORS

ILLUMINATION

SX30 (N4) series of Linear Lights works best for:
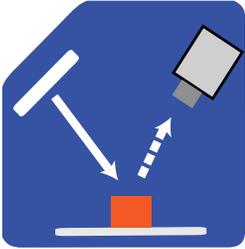
Bright Field

Projector

LIGHT PATTERNS

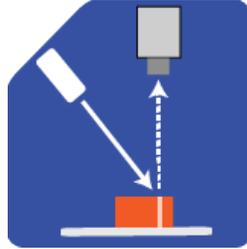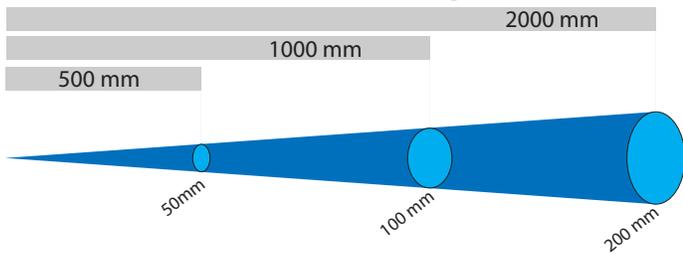Smart Vision Lights recommends the SX30 (N4) be used at a working distance between .5M to 4M.

Illumination measurement taken on White Light – 6500 K

2000 mm

1000 mm

500 mm

50mm

100 mm

200 mm

LIGHTING PATTERN FOR THE SX30 (N4) **with Standard (narrow) Lenses**

Working Distance mm (inches)	Pattern (80% - 100% measured intensity) mm (inches)
500 mm (19.7")	50 mm (~2")
1000 mm (39.4")	100 mm (~3.9")
2000 mm (78.8")	200 mm (~7.8")

Typical Output Preformance	Illumination (Lux)
Distance = 500 mm	
Illumination measurement taken on White Lights – 6500K	

The SX30 (N4) produces a uniform light pattern.
(Grid set to 25 mm x 25 mm)

175 mm
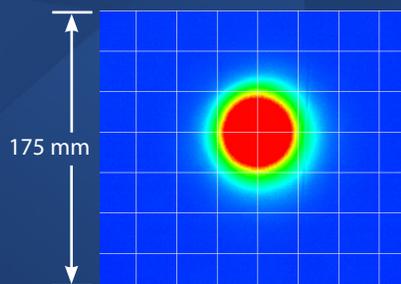
Working Distance: 50 mm
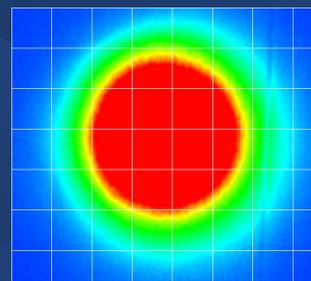
Working Distance: 100 mm

PART NUMBER

SX30 — ☐☐☐ — N4

COLOR:

WHI 470 505
530 625 850 940

Additional wavelengths options available upon request.
UV wavelenghts not available.

Part Number Examples:
SX30-625-N4 SX30, 625 Red Wavelength,
4 Degree Narrow Lens

SWIr
SHORT WAVE **INFRARED**

This light is available in our SWIR LEDs
(1050 nm, 1200 nm, 1300 nm, 1450 nm, 1550 nm)

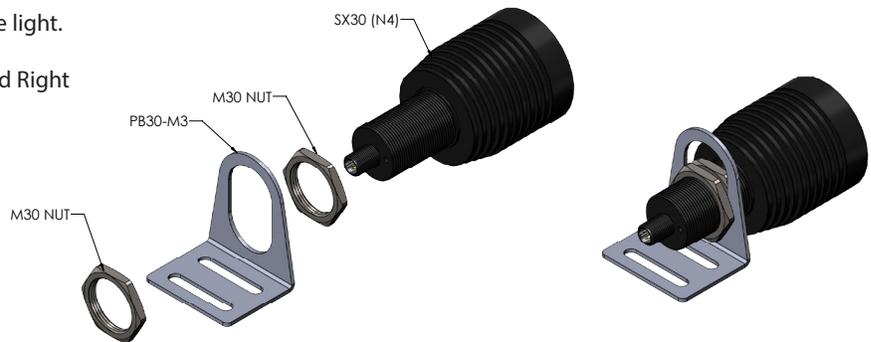# MOUNTING

Two M30 nuts for mounting are included with the light.

Example of the SX30 (N4) shown using the Slotted Right
Angle (**Part Number: PB30-M3**).

See accessories for additional mounting options.

SX30 (N4)
M30 NUT
PB30-M3
M30 NUT

EYE SAFETY

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

SMART VISION LIGHTS
IEC 62471
COMPLIANT

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.

ACCESSORIES

Power Cables	
Lengths	**Part Number**
5 m	5PM12-5
10 m	5PM12-10
15 m	5PM12-15

Mount	
Description	**Part Number**
Swivel Mount	PB30-M1

Mount	
Description	**Part Number**
Slotted Block Mount	PB30-M2

Mount	
Description	**Part Number**
Slotted Right Angle	PB30-M3

Mount	
Description	**Part Number**
Blot-on Block Mount	PB30-M6

Power Adapters *	
Description	**Part Number**
AC, 24 Volt, 1.7 Amp	T1 Power Supply

* **European Versions Available** (Add -EURO to end of T1 or T2. Example T1-EURO Power Supply)

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. OverDrive™ light part numbers start with OD.

Continuous Operation Lights stays 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.

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

TYPES OF ILLUMINATIONS

Projector

Dark Field

Radial

Bright Field

Direct

Axial

Line

Diffuse Panel

Backlight
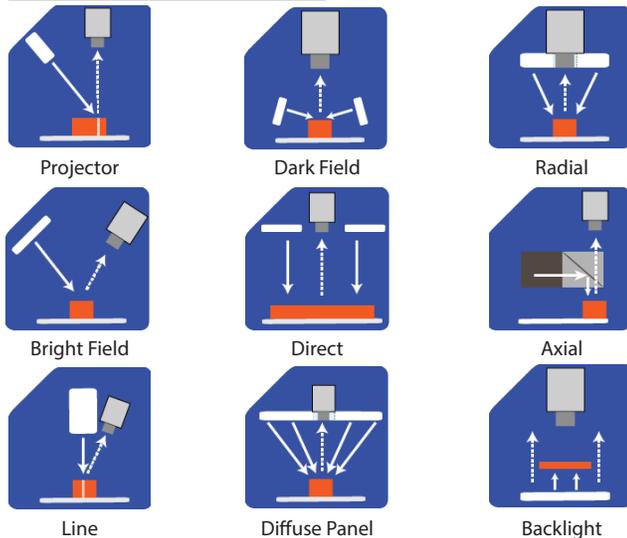
COLOR/WAVELENGTHS LEGEND

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

365 395 470 505 530 625 850 940 WHI
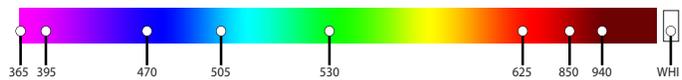
See Part Number section for **this light's available standard wavelengths.*

SWIR SHORT WAVE **INFRARED**

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