



product introduction

The ODSX30 Series of Prox Lights features three high current LEDs enclosed in a 30mm Barrel Style Housing. This LED pulses at 5-6 times the brightness of a standard SX30 light. The ODSX30 features an Overdrive driver with NPN or PNP signal options. Built in SafeStrobe Technology allows for continued use without damage to the LED. The ODSX30 Series has multiple mounting options allowing for ease of install and comes with two locking bolts.



product features



- 30mm Barrel Style Housing
- 5-6x time brighter than standard SX30
- Driver built in – No External wiring to a driver
- PNP and NPN Strobe input
- OverDrive/Strobe only
- Three high intensity LEDs
- Analog intensity 0-10VDC signal
- Standard optics provide tight focused light



product specifications

Electrical Input	24VDC +/- 5%
Current	Max. 500mA draw during strobe – Max. Average 50mA
Wattage	Max. 12W draw during strobe – Max. Average 1.2W
Strobe Input	PNP ▶ +4VDC or greater to activate. NPN ▶ GND (<1VDC) to activate
PNP Line	3.7mA @ 3VDC 6.2mA @ 5VDC 12.6mA @ 10VDC 30.4mA @ 24VDC
NPN Line	22mA @ Common (0VDC)
Duty Cycle	Maximum 10%
Strobe/Pulse Time	Max. 5000 SPS (Strobes Per Second) Max. Single Pulse = 125ms
Red Indicator LED	On = LED Rest (LED inactive) OFF = LED/Light Ready
Green Indicator LED	ON = Power
Analog Intensity	The output is adjustable from 10%-100% of brightness by a 0-10VDC signal
Connection	5 pin M12 connector
Ambient Temperature	-20° - 50° C (-4° - 122° F)
IP Rating	IP65
Compliances	CE and RoHS
Weight	~99g
IEC 62471 Rating	See page 5



product number key

ODSX30 – XXX – X* —» Part Number Key

Product Family:
Prox Light
ODSX30

Color:
365, 395 – UV
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

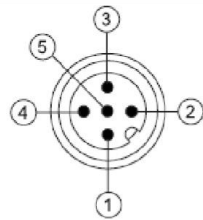
Please note that the power requirements are 500mA at 24VDC. Failure to supply light with 500mA will result in non-repeatable lighting. Contact Smart Vision Lights for more information.



wiring configuration

If Analog 0-10VDC 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



Power Cables
5m, 10m, 15m



PB30-M1
Swivel Mount



PB30-M2
Slotted Block Mount



PB30-M3
Slotted Right Angle



PB30-M6
Bolt-on Block Mount

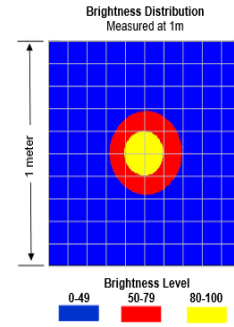


Diffuser Kits
Available



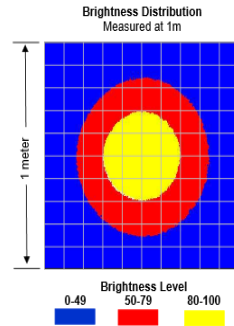
ODSX30-XXX

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	80mm(~3") D
1m (39.4")	185mm(~7") D
Typical output performance	
Distance = .5 meter	Illumination (Lux) 21000
<i>Illumination measurement taken on White Lights – 6500K</i>	



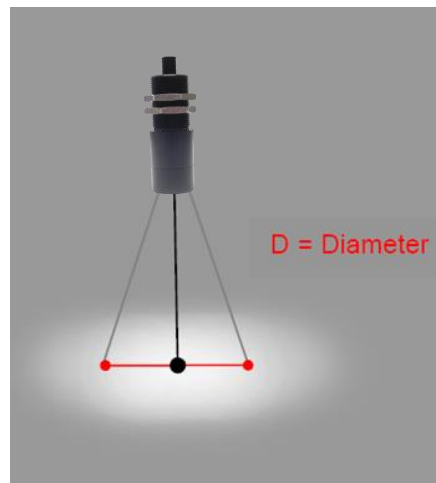
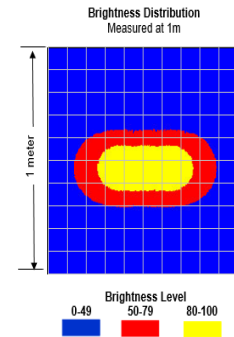
ODSX30-XXX-W

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	205mm(~8") D
1m (39.4")	415mm(~16") D
Typical output performance	
Distance = .5 meter	Illumination (Lux) 6500
<i>Illumination measurement taken on White Lights – 6500K</i>	



ODSX30-XXX-L

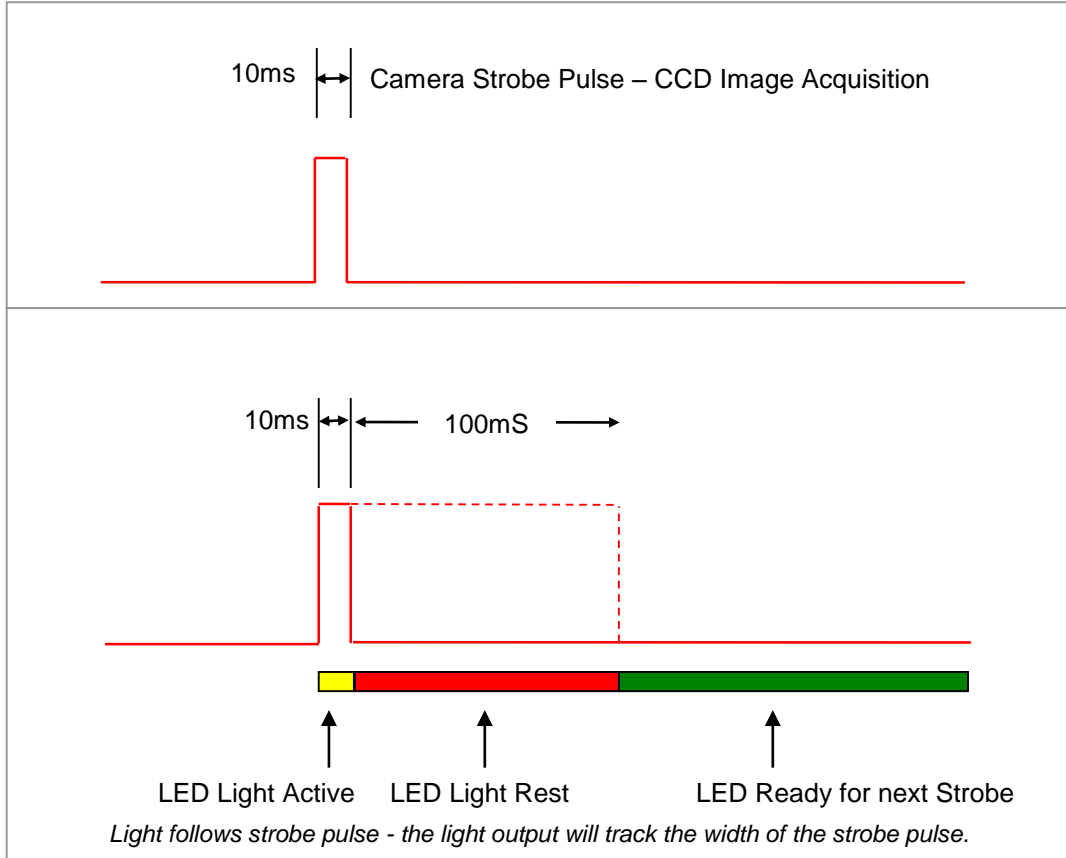
Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	255mm(~10") H x 115mm(~4.5") V
1m (39.4")	460mm(~18") H x 250mm(~10") V
Typical output performance	
Distance = .5 meter	Illumination (Lux) 9500
<i>Illumination measurement taken on White Lights – 6500K</i>	





Duty Cycle on Performance of Light

All lights are pulse following



Duty Cycle (D) is defined as the ratio between Strobe Time and Rest Time

Maximum Duty Cycle for OD Light is 10% = .1

Calculating Rest Time - R_T

$$R_T = \frac{S_T}{D}$$

S_T is the Strobe Time
 R_T is the Rest Time
 D is Duty Cycle

Example: Camera exposure of 10mS where Strobe Time is 10mS.

$$R_T = \frac{10ms}{.1} = 100mS$$

Rest Time is 100ms for 10ms Strobe Time



risk group

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

Notice

Exempt Group: No photo biological 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: 395, 470, 505, 530, and WHI.

Notice

Risk Group 1: UV emitted from this product. Minimize exposure to eyes and skin. Use appropriate shielding. Safe for most applications except prolonged exposures.
Applicable for wavelengths: 395

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