PRODUCT DATA SHEET

ODS75 Series | **BRICK LIGHT** | OverDrive

product introduction

The ODS75 Series of brick light features an Overdrive driver with NPN or PNP signal options. Six high current LED's pulse at 4-5 times the brightness of a standard S75 and a 75mm active light area provide not only an intense but diffuse light pattern at any given working distance. These series of lights also offers a manual potentiometer intensity control as well as a 0-10 VDC analog intensity control. Heat is dissipated through the aluminum back plate which allows the ODS75 Series to be run at a higher current and hence greater intensity.

product features

- 4-5 Times Brighter Than Standard High Current LEDs
- Driver Built In – No External Wiring To A Driver
- PNP and NPN Strobe Input
- Overdrive/Strobe Only
- Maximum 5000 Strobes Per Second
- Dimmable Via Built In Potentiometer

product specifications

Electrical Input	24 VDC +/- 5%
Current	Max. 4A draw during strobe – Max Average 400mA
Wattage	Max. 96W during strobe - Max. Avg. 9.6W
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 @ 24 VDC
NPN Line	22mA @ Common (0VDC)
Duty Cycle	Max. 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
Potentiometer	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
Ambient Temp.	-20º - 50º C (-4º - 122º F)
IP Rating	IP50
Weight	~155g
Compliances	CE and RoHS
IEC 62471 Rating	See page 5

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www.smartvisionlights.com

product number key

ODS75 – XXX – X* —» Part Number Key

Product Family:
Brick Light
ODS75

Color:
365, 395 – UV
470 – Blue
505 – Cyan
530 – Green
625 – Red
850, 940 – IR
WHI - White

Lenses:
W - Wide

* Lights come standard with Narrow lenses

CE and RoHS Compliant

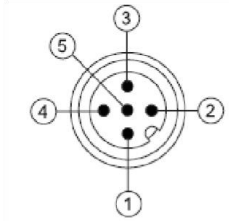
warnings

Attention

Please note that the power requirements are up to 4A at 24VDC. Failure to supply light with up to 4A can 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 ǂ

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

mounting & accessories

5m, 10m, or 15m Power Cable
Available

Pan and Tilt Mount
Available

Extrusions
Available

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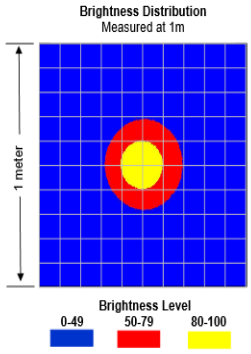
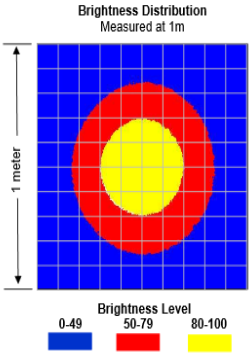
ODS75-XXX

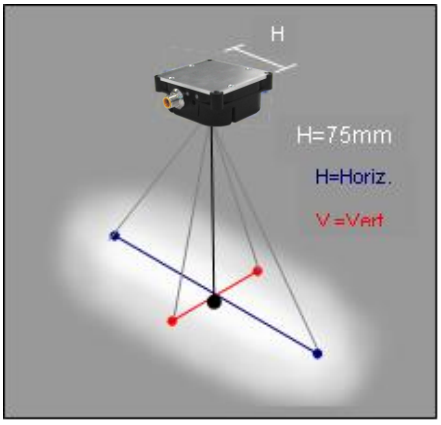
Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	100mm (~4") D
1m (39.4")	200mm(~8") D
1.5m (59")	300mm(~12") D
Typical output performance	Illumination (Lux)
Distance = .5 meter	45000
Illumination measurement taken on White Lights – 6500K	



ODS75-XXX-W

Working Distance mm (inches)	Pattern (80%-100% measured intensity) mm (Inches)
.5m (19.7")	210mm(~6") D
1m (39.4")	425mm(~17") D
1.5m (59")	650mm(~22") D
Typical output performance	Illumination (Lux)
Distance = .5 meter	31500
Illumination measurement taken on White Lights – 6500K	





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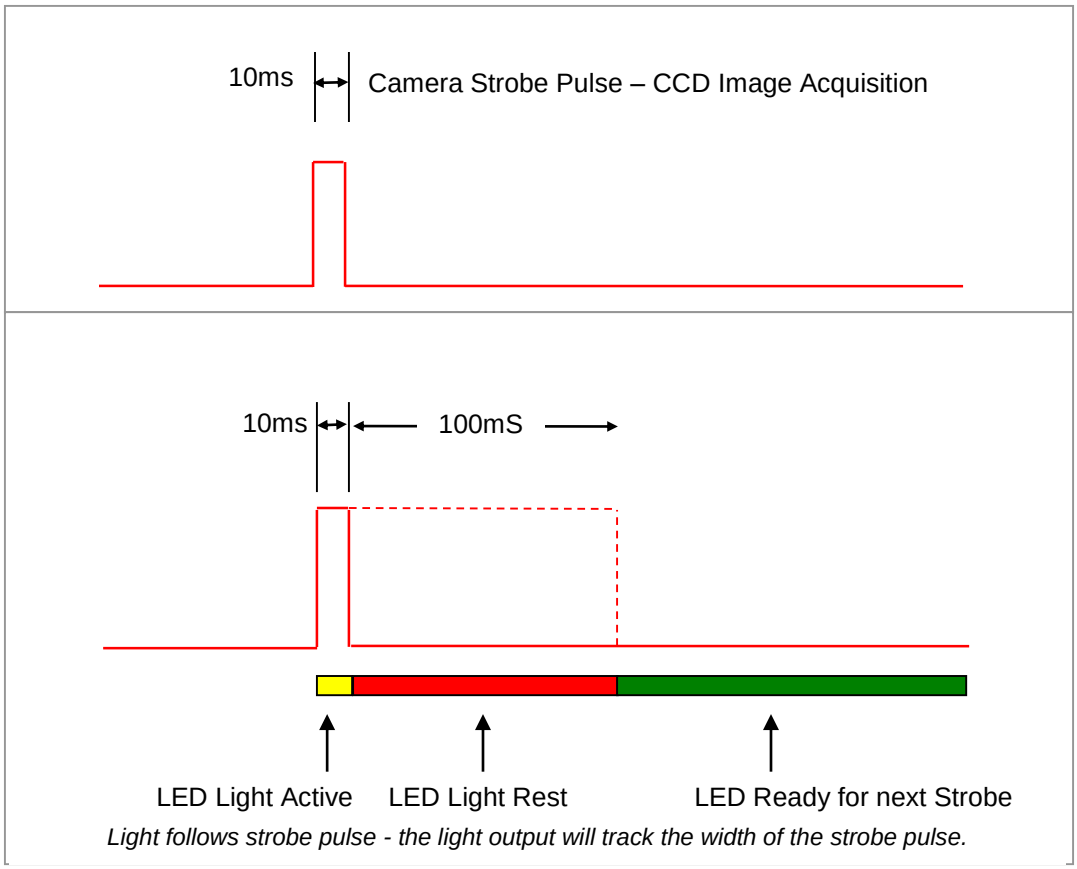
Duty Cycle on Performance of Light

All lights are pulse following



Light follows strobe pulse - the light output will track the width of the strobe pulse.

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

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identification

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