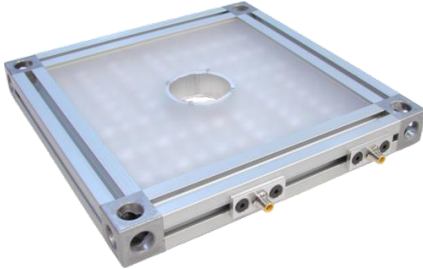




product features



- 128, 1mm² Die High Current LEDs
- OverDrive 4-5x Intensity of RL300
- Up to 5000 Strokes Per Second
- Maximum Strobe Time 125mS
- SafeStrobe Technology
- 45mm Industrial Frame
- PNP and NPN Strobe Input
- Analog Intensity 0-10VDC Signal



product specifications

Electrical Input	24 VDC +/- 5%
Current	Max. 14A draw per connector during strobe; 28A Total – Max. Total Average 2.8A
Wattage	Max. 336W draw per connector during strobe; 672W Total – Max. Total Average 672W
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)
Signal Wiring	Tie NPN/PNP signal of each plug together
Duty Cycle	Max. 10%
Strobe/Pulse Time	Max. 5000 SPS (Strokes Per Second) Max. Single Pulse = 125ms
Analog Intensity	The output is adjustable from 10 -100% of brightness by a 0 -10 VDC signal
Connection	5 pin M12 connector
Lifespan	100,000 hrs
IP Rating	IP50
Certification	CE and RoHS certified
IEC 62471 Rating	See page 4



product number key

ODRL300 – XXX – X* —» Part Number Key

Product Family:
OverDrive Ring Light
ODRL300

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

Lenses:
N - Narrow

* Lights come standard with Wide lenses

CE and RoHS Compliant



warnings



Attention

Please note that the power requirements are up to 14A at 24VDC per connector for a total of 28A. Failure to supply light with up to 28A 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 †

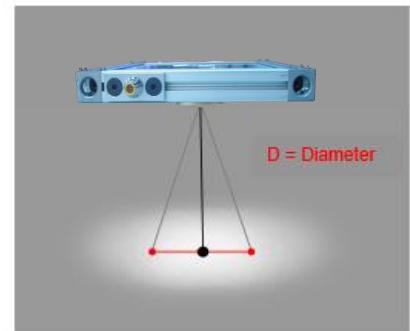
- † Some cables use green with yellow stripe for 0-10V adjustment.
- † The NPN or PNP signal from each plug must be tied together.



optical performance

ODRL300-XXX

Working Distance mm (inches)	Pattern (80%-100% measured intensity)	
	mm (Inches)	
.5m (20")	23cm (9") D	
1m (40")	37cm (14.5") D	
Typical output performance		Illumination (Lux)
Distance = .5 meter		125000
<i>Illumination measurement taken on White Lights – 6000K</i>		



mounting & accessories

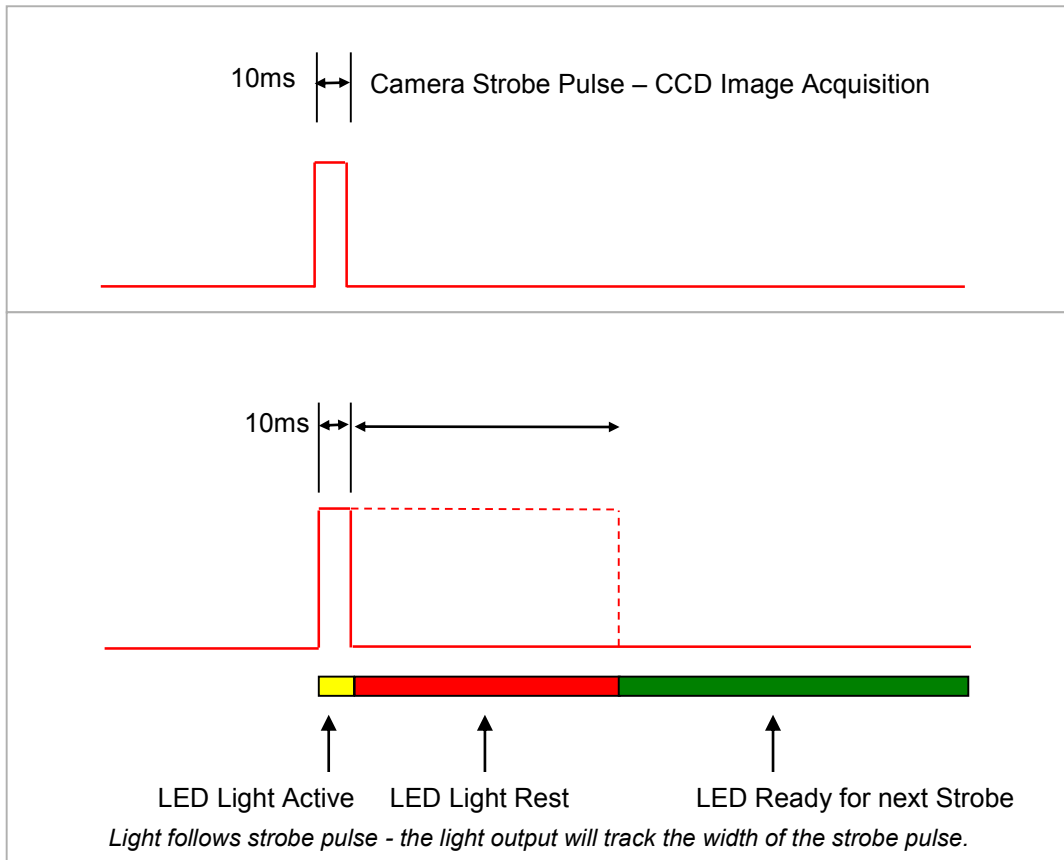


- Standard T-nut with 5/16-18x1/2" bolt



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.

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

Rest Time is 100ms for 10ms Strobe Time



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