# smart vision lights PRODUCT DATA SHEET

## RD130 Series **RING LIGHT**

GHT Diffuse Light



### product introduction

The all metal construction of the Ring Light Series of lights provides a small particle resistant and all around durable light. Its plug and play 5 Pin M12 connector allows for ease of use while allowing for full control. The RD130 has an optimal working distance between 150mm and 450mm and will operate with either an NPN or a PNP signal and runs on an industry standard 24 VDC. The 0-10 VDC intensity control assists in gaining full control of the light output. A standard 42 mm inner hole diameter allows for use with nearly all camera systems with available step-up and step-down conversion kits adapters.



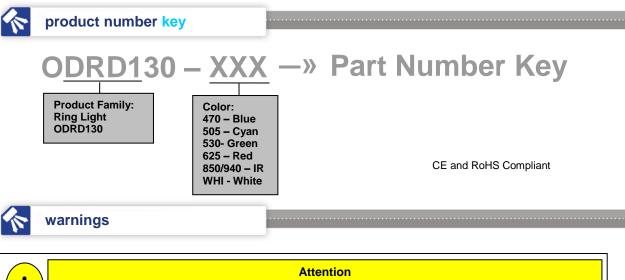
#### product features



- Backlight Diffuser
- T-Slot For Mounting
- Conversion Adapters For Different Cameras
- PNP and NPN Strobe Input
- Dimmable Via Built In Potentiometer
- 4-5 Times Brighter Than Standard High Current LEDs

# 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 = Light 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 0 -100% of brightness by a 0 -10 VDC signal		
Connection	5 pin M12 connector		
Ambient Temp.	-20° - 50° C (-4° - 122° F)		
IP Rating	IP50		
Weight	~325g		
Certification	CE and RoHS certified		
IEC 62471 Rating	See page 5		



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.

wiring configuration

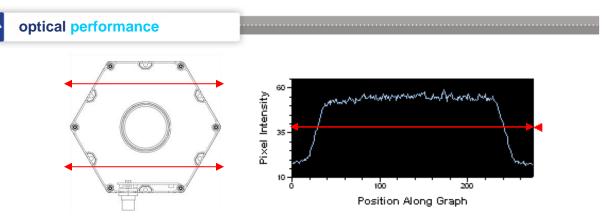
If Analog 0-10 VDC is not used to control light intensity;

+VDC (24VDC) must be connected to Analog Input - Jumper pin 5 to pin 1

3	
5	
1	

	Pin	Function	Signal	Wire Color
	1	Power In	+24VDC	BROWN
2	2	NPN	Sinking Signal	WHITE
U	3	GND	Ground	BLUE
	4	PNP	Sourcing Signal	BLACK
	5	Intensity Control	0-10VDC	GREY <sup>+</sup>

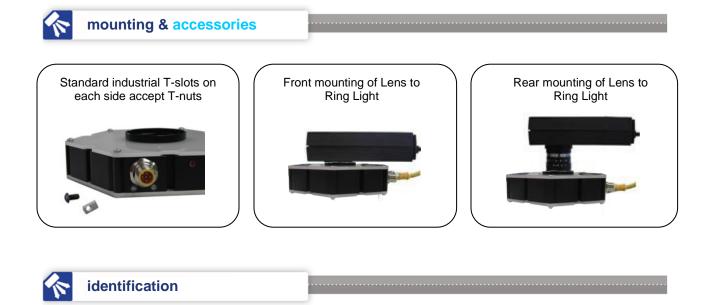
\* Some cables use green with yellow stripe for 0-10V adjustment

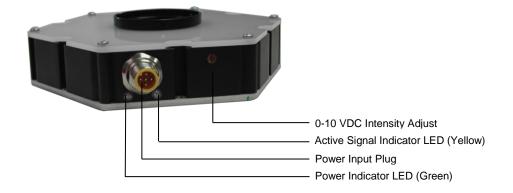


The ODRD130 offers a very diffuse light pattern at a defined working distance between 150mm – 450mm. The Pixel Graph representation shows a steep drop off in intensity outside of the active area with a very diffuse light pattern inside.

Average Intensity Rating	60,000 lux*

\*Lux measurement taken at surface of ODRD130.







# Standard Adapter Kit – Part # SU46-25.5-27

Adapter Kit includes 2 step up rings (25.5 and 27), 6 set screws and hex tool. 6 set screws – 3 for mounting step up ring to light and 3 additional for lens. Some locking thumbscrews may prevent the lens from fitting through the center of the R80, extra low-profile replacement set screws are included, allowing the protruding thumbscrews to be removed.



# Step Up Adapter Kits

Step Up Adapter Kits includes step up rings, 6 set screws and hex tool. Lenses can be mounted to front or back of ring light. Filters can also be installed.



M46 step-up	Lens thread size	Part #
46-	25.5	SU46- 25.5/27
46-	27	SU46-
46-	30.5	25.5/27 SU46-30.5
46-	34	SU46-34
46-	37	SU46-37
46-	37.5	SU46-37.5
46-	39	SU46-39
46-	40.5	SU46-40.5
46-	43	SU46-43

## Step Down Adapter Rings

Step Down rings mount large lenses to light. Step Down rings mount lenses to back of ring light. Filters can also be installed.



M46 step-down	Lens thread size	Part #
46-	49	SD46-49
46-	52	SD46-52
46-	55	SD46-55
46-	58	SD46-58
46-	62	SD46-62
46-	67	SD46-67
46-	72	SD46-72



#### 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.