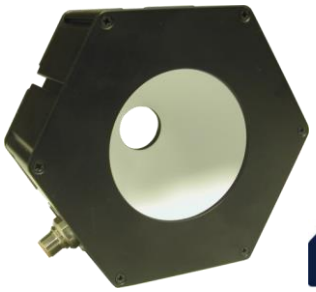
PRODUCT DATA SHEET

DDL-100 Series | **DOME LIGHT** | Single Axis Dome Light

product introduction

The DDL-100 Series is a diffuse dome light with a 75mm viewing area designed to read code and imperfections on rounded or highly reflective products and product inspection with an even, uniform, and repeatable light intensity. The 20 LED design and the constant current regulation the built in driver provides along with the semi-reflective white dome further backs the DDL-100 light's performance. The DDL-100 was designed with simplicity and functionality in mind. Built in constant ON operation and OverDrive Strobe technology allows for use in either operation depending on wiring method. NPN and PNP strobe operation with a built in 0-10VDC analog intensity control allows for further versatility. The industry standard 5-pin M12 connector makes for easy installation.

product features



- 75mm Diameter
- 25mm Camera Viewing Hole
- 5 Pin M12 Quick Disconnect
- Driver Built In – No External Wiring To A Driver
- NPN or PNP Signal Options
- Analog Intensity 0-10VDC Signal
- Continuous Operation and OverDrive Built In

product specifications

Electrical Input	24 VDC +/- 5%
Current	Constant ON - Max. 700mA | OverDrive - Max. 2A during strobe
Wattage	Constant ON - Max. 17W | OverDrive - Max. 48W during strobe
Continuous Mode	Light will be in continuous mode by leaving signal on NPN/PNP input active
Connection	5 pin M12 connector
Lifespan	100,000 hrs
Ambient Temp.	-20º - 50º C (-4º - 122º F)
IP Rating	IP50
Compliances	CE and RoHS
IEC 62471 Rating	See page 3

product number key

DDL-100 – XXX —» Part Number Key

Product Family:
Dome Light
DDL-100

Color':
470 – Blue
530 - Green
625 – Red
WHI - White

CE and RoHS Compliant

'Additional wavelengths available. Contact Smart Vision Lights for more information.

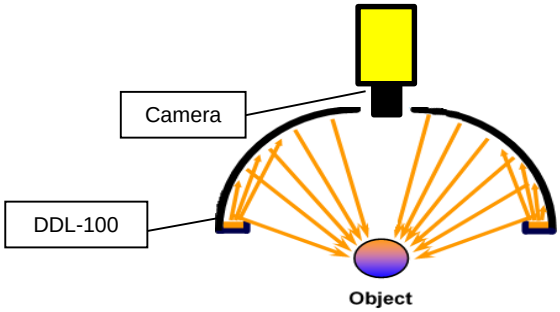
Smart Vision Lights • 2359 Holton Rd. • Muskegon, MI 49445 • Phone 231.722.1199
www.smartvisionlights.com

warnings

Attention

Please note that the power requirements are 700mA at 24VDC in continuous ON operation or 2A at 24VDC in OverDrive operation. Failure to supply light with 700mA in continuous ON or 2A in OverDrive operation can result in non-repeatable lighting. Contact Smart Vision Lights for more information.

light output cutaway

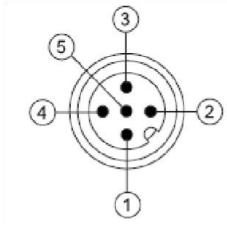


The dome shape gives this product a particular advantage in uniformity when illuminating and reading OCR codes on reflective or round surfaces.

25mm Camera Viewing Hole and 75mm Dome diameter

wiring configuration

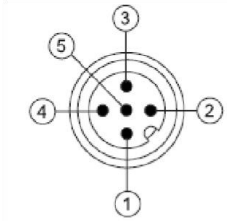
Wiring configuration for CONSTANT ON operation



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	1-10VDC	GREY

* Some cables use green with yellow stripe for 1-10V adjustment.

Wiring configuration for OverDrive operation



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	OverDrive Signal	Ground	GREY

*Analog intensity control is disabled in OverDrive Mode. Light operates at maximum pulse intensity.

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mounting

Standard industrial T-slots on each side accepts T-nuts

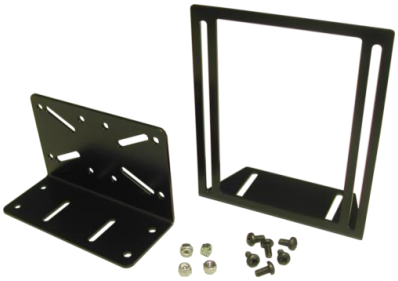
Includes (2) T-nuts and (2) screws

camera brackets

The DDL Series offers a specially designed camera mounting bracket and an optional right angle bracket. Multiple adjustment points means maximum mounting versatility between camera manufacturers. Mounting hardware included.

Right Angle Bracket
P/N: BKT0004

Tower Bracket
P/N: BKT0003



safety 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: 470, 530, and 625

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: WHI