



product introduction

The DDL-250 Series is a diffuse 10" dome light designed to read code and imperfections on rounded or highly reflective products and product inspection with an even, uniform, and repeatable light intensity. The 60 LED design and the constant current regulation the built in driver provides along with the semi-reflective white dome further backs the DDL-250 light's performance. The DDL-250 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



- 5 Pin M12 Quick Disconnect
- Driver Built In – No External Wiring To A Driver
- NPN or PNP Signal Options
- Analog Intensity 0-10VDC Signal
- 250mm Dome Diameter
- 40mm Camera Viewing Hole
- Continuous Operation and OverDrive Built In



product specifications

Electrical Input	24 VDC +/- 5%
Current	Constant ON - Max. 1.8A OverDrive - Max. 6A during strobe
Wattage	Constant ON - Max. 43W OverDrive - Max. 144W 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.	-20° - 50° C (-4° - 122° F)
IP Rating	IP50
Compliances	CE and RoHS
IEC 62471 Rating	See page 3



product number key

DDL-250 – XXX —» Part Number Key

Product Family:
Dome Light
DDL-250

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

CE and RoHS Compliant



warnings

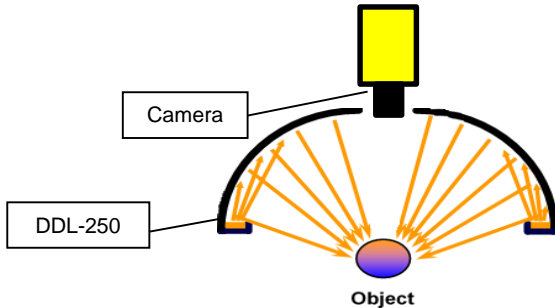


Attention

Please note that the power requirements are 1.8A at 24VDC in continuous ON operation or 6A at 24VDC in OverDrive operation. Failure to supply light with 1.8A in continuous ON or 6A in OverDrive operation can result in non-repeatable lighting. Contact Smart Vision Lights for more information.



light output cutaway



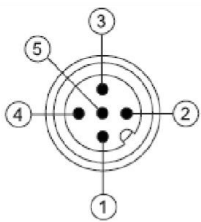
The dome shape gives this product a particular advantage in uniformity when illuminating and reading OCR codes on reflective or round surfaces.

40mm Camera Viewing Hole and 250mm Dome diameter



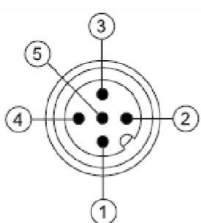
wiring configuration

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.



mounting



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

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



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