

DOME LIGHT

DL1-120

Ideal for indirect homogeneous illumination of curved surfaces or objects.

COMPACT DESIGN

INTEGRATED STROBE FUNCTION

HOMOGENOUS LIGHT FIELD

INTEGRATED INTERN LIGHT INTENSITY REGULATION



LIGHT OPERATING MODES

PERMANENT ILLUMINATION MODE

This light is designed for both the permanent and light-triggering mode. For permanent illumination bring the voltage of 12-24 V to the pin number 4 (black wire). The light is ON during the time when the 24 V EN signal is activated. Use a PCL, camera or another binary signal source. For the light intensity control, please see the text below.

LIGHT TRIGGERING MODE

Light triggering mode saves energy and extends the lifetime of the light. Trigger operation mode is recommended when a parallel operation of 2 or more lights might affect the quality of the acquired image. To start using a triggering mode, bring the pin number 4 (black wire) to a 12-24 V signal. The light is ON when a voltage signal is present at pin number 4 then. Use a PCL, camera, or another binary signal source for triggering. For the light intensity control, please see the text below.

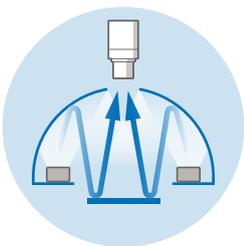
STROBE MODE

Strobe function significantly multiplies the maximum intensity of the light. The strobing function saves energy, extends the light lifetime and in many cases improves the stability of the entire inspections system. Pin number 2 (white wire) of the M8 connector is used to activate the strobe function. The maximum strobe pulse time is 470 ms, while the light idle time must be at least 3 times longer. Please do not use a trigger mode during strobing function, do not bring a voltage to the pin number 4.

LIGHT SOURCE INTENSITY REGULATION

The light intensity might be regulated by an internal trimmer, PWM signal or an external controller. The maximum PWM frequency is ≤ 40 kHz.

WAYS OF USE



ORDERING CODE

example of the ordering code

DL1 - 120

B

Dome Light Ø of Active Area Wavelength

CONFIGURATION

Model	Wavelength [nm]	Ø of Active Area [mm]
DL1-120W	5700 K	120
DL1-120IR	850	120
DL1-120R	625	120
DL1-120G	528	120
DL1-120B	470	120

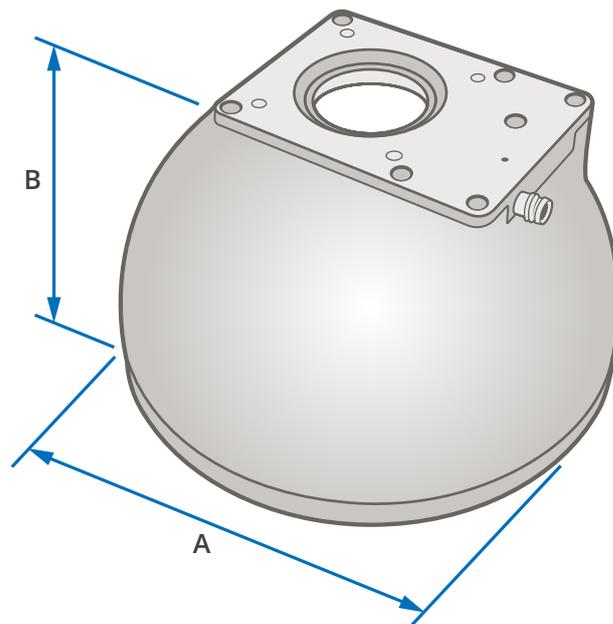
ELECTRIC PARAMETERS

Model	DL1-120W	DL1-120IR	DL1-120R	DL1-120G	DL1-120B
U _n Voltage Span	19 - 28 V				
U _{jm} Nominal Voltage	24 V DC				
I _{jm} Nominal Current	600 mA	-	-	-	-
P Input	14.4 W	-	-	-	-

DIMENSIONS & WEIGHT

A Outer Ø [mm]	170
B Height [mm]	103
Weight [g]	471

i For more details please see **our 2D drawings.**



TECHNICAL DATA

IP Category: **IP50**

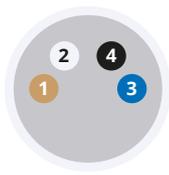
Protection Category: **III**

Ambient Temperature: **-20 - +40 °C**

Isolation Resistance: **500 V**

CONNECTOR M8-4PIN ASSIGNMENT

light connector front view



1	Brown	+	+24 V
2	White		EN
3	Blue	-	0 V
4	Black		EN

...

2 ENABLE - strobe mode (+24 V)

...

4 ENABLE

A permanent lighting or trigger signal (12-24 V)

B light intensity regulation: internal trimmer

ACCESSORIES

✓ Angular Cable M8-4PIN (5 m)

OPTIONAL ACCESSORIES

+ Straight Cable M8-4PIN (5 m)

+ Controller **Smart Light CT-SL4D**

+ Controller **CM-01**

 SmartView

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