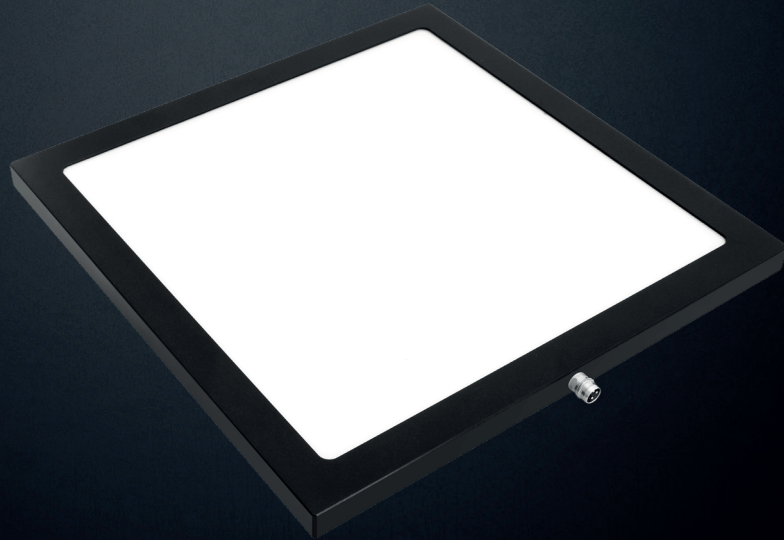


BACK LIGHT

BL-130-4SA

Back Light diffused illumination to emphasize the shape and contours of the controlled object.



HOMOGENOUS LIGHT FIELD

COMPACT DESIGN

UNIVERSAL MOUNTING

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 10-24 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 10-24 V signal. The light is ON when a voltage of 24 V 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.

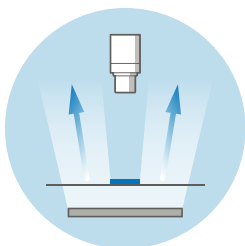
STROBE MODE

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 10 ms, while the light idle time must be at least 10 times longer, which in this case makes 100 ms. Bringing a permanent logical 1 signal (10-24 V voltage) to a light strobe input, the light standardly operates in a 10 ms ON and 100 ms OFF cycle. The strobe operation pulse might be chosen in the time span of 1-10 ms. Please do not use a trigger mode during strobing function, do not bring a voltage to the pin number 3.

LIGHT SOURCE INTENZITY REGULATION

The light intensity might be regulated by an analogue voltage, PWM signal or an external controller. In case of using an analogue signal, the light intensity might be regulated in a linear way at a pin number 4 by the voltage span of 2.7-10 V. Bringing a voltage of 10-24 V to the pin number 4, the light works at its maximum intensity. The maximum PWM frequency is ≤ 40 kHz.

WAYS OF USE



ORDERING CODE

example of the ordering code

BL

-

130

W

4SA

Back Light

Active Area

Wavelength

4 - Pin
S - Strobe Function
A - Analogue Function

CONFIGURATION

Model	Wavelength [nm]	Active Area [mm]
BL-130W-4SA	White	130 x 130
BL-130HIR-4SA	940	130 x 130
BL-130IR-4SA	850	130 x 130
BL-130R-4SA	633	130 x 130

ELECTRIC PARAMETERS

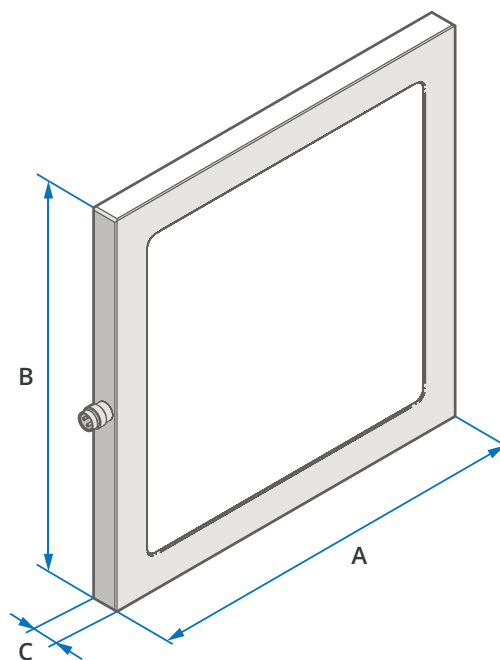
Model	BL-130W	BL-130HIR	BL-130IR	BL-130R
U_n Voltage Span	18-28 V	20-28 V	21-28 V	21-28 V
U_{jn} Nominal Voltage	24 V	24 V	24 V	24 V
I_{jn} Nominal Current	400 mA	400 mA	360 mA	400 mA
P Input	9.6 W	9.6 W	8.8 W	9.6 W

U_{trig} Trigger Voltage	$\geq 10 - 24$ V	I_{trig} Trigger Current	1.4 mA
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DIMENSIONS & WEIGHT

A	Length [mm]	160
B	Width [mm]	160
C	Height [mm]	11
	Weight [g]	343

i For more details please see our 2D drawings.

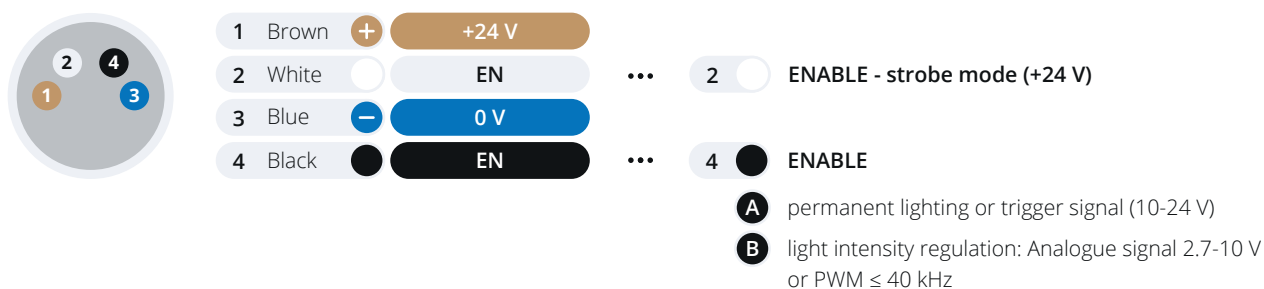


TECHNICAL DATA

IP Category: IP63	Protection Category: III	Ambient Temperature: -20 - +40 °C	Isolation Resistance: 500 V	Housing Material: Aluminium alloy
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CONNECTOR M8-4PIN ASSIGNMENT

light connector front view



ACCESSORIES

✓ Straight Cable M8-4PIN (5 m)

OPTIONAL ACCESSORIES

+ Angular Cable M8-4PIN (5 m)

+ Controller **Smart Light CT-SL4D**

+ Controller **CM-01**

 **SmartView**

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VISION
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COMPANY OFFICE

Smart View s.r.o.
Nivy 313
765 02 Otrokovice
Česká republika

+420 601 575 797
+420 602 457 497

info@smartview.cz
www.smartview.cz

OUR SALES PARTNERS SLOVAKIA

MTS, spol. s r.o.
Krivá 53
027 55 Krivá
Slovensko

+421 43 5819 111

mts@mts.sk
www.mts.sk