

# SMART LIGHT

## SL-120

Superior, **4 switch-oversegment illumination**. Fully programmable via USB interface. For demanding, shiny and/or curved objects and surfaces.

PROGRAMABLE VIA USB INTERFACE

SWITCH-OVER 4 SEGMENT ILLUMINATION

ROBUST CONSTRUCTION



## LIGHT OPERATING MODES

### PERMANENT ILLUMINATION MODE

The 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 bellow.

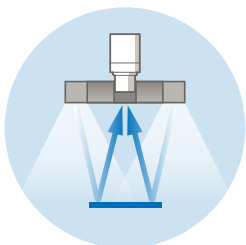
### LIGHT TRIGGERING MODE

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 bellow.

### 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  $\leq 40$  kHz.

## WAYS OF USE



## ORDERING CODE

example of the ordering code

**SL** - **120** **B**

Smart Light      Ø of Active Area      Wavelength

## CONFIGURATION

Model	Wavelength [nm]	Ø of Active Area [mm]
SL-120W	CTR 5000 k	120
SL-120R	660   625	120
SL-120G	525	120
SL-120B	470	120

## ELECTRIC PARAMETERS

Model	SL-120W	SL-120R	SL-120G	SL-120B	
$U_n$ Voltage Span	7-28 V	7-28 V	7-28 V	7-28 V	
$U_{jm}$ Nominal Voltage	24 V DC	24 V DC	24 V DC	24 V DC	
$I_{jm}$ Nominal Current	625 mA	625 mA	625 mA	625 mA	
$I_{max}$ Single Segment Current <sup>1</sup>	625 mA	625 mA	625 mA	625 mA	
<b>P</b> Input	15 W	15 W	15 W	15 W	
$U_{trig}$ Trigger Voltage	≥ 10 - 24 V <sup>2</sup>	$I_{trig}$ Trigger Current	2.3 mA <sup>2</sup>	$U_{EN}$ Analogue Dimming	≥ 2.7 .. ≤ 10 V <sup>2</sup>
$U_{seg}$ Segment Input Voltage	12 - 24 V <sup>3</sup>	$I_{seg}$ Segment Input Current	1.9 mA <sup>3</sup>	$I_{EN}$ PWM Dimming	> 10 V .. ≤ 24 V <sup>4</sup>

<sup>1</sup> Single segment current in a strobe mode (only one segment is switched on)    <sup>2</sup> EN (Enable) trigger signal values, (M8 3-pin connector - pin number 4)

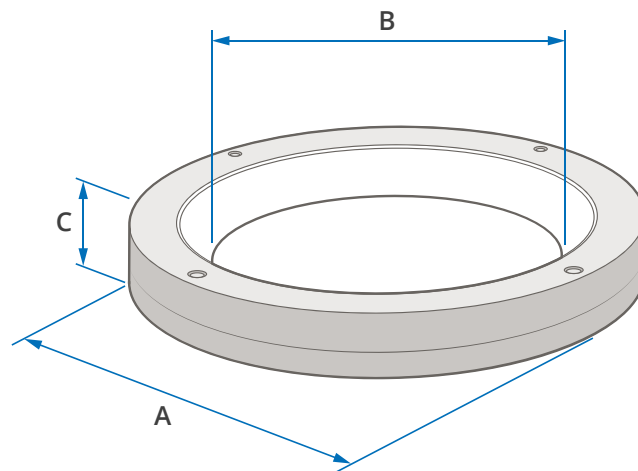
<sup>3</sup> Segment drive values S1 -S4 (M8 4-pin connector)

<sup>4</sup> PWM maximal rate is ≤ 40 kHz

## DIMENSIONS & WEIGHT

<b>A</b> Outer Ø [mm]	172
<b>B</b> Inner Ø [mm]	120
<b>C</b> Height [mm]	28
<b>Weight [g]</b>	433

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

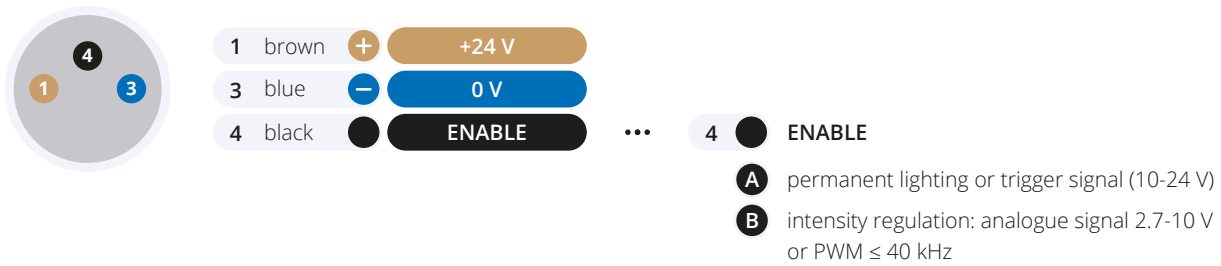


## TECHNICAL DATA

IP Category: <b>IP50</b>	Protection Category: <b>III</b>	Ambient Temperature: <b>-20 - +40 °C</b>	Isolation Resistance: <b>500 V</b>	Housing Material: <b>Aluminium alloy</b>
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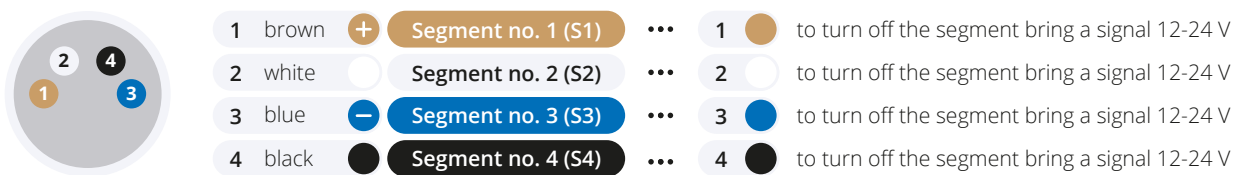
## CONNECTOR M8-3PIN ASSIGNMENT

light connector front view



## CONNECTOR ASSIGNMENT FOR SEGMENT CONTROL

light connector front view



## ACCESSORIES

✓ Straight Cable M8-3PIN (5 m)

## OPTIONAL ACCESSORIES

- + Controller **Smart Light CT-SL4D**
- + Glass Diffuser
- + Set of Cables **CT-CAB SET - P1**
- + Universal Mounting

 **SmartView**

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