

ZOOM SPOT LIGHT

SP-50-ZOOM

Spot light with adjustable illumination flux angle. Universal illumination for the majority of your applications.



INTEGRATED STROBE FUNCTION

ADJUSTABLE ILLUMINATION FLUX ANGLE

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 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.

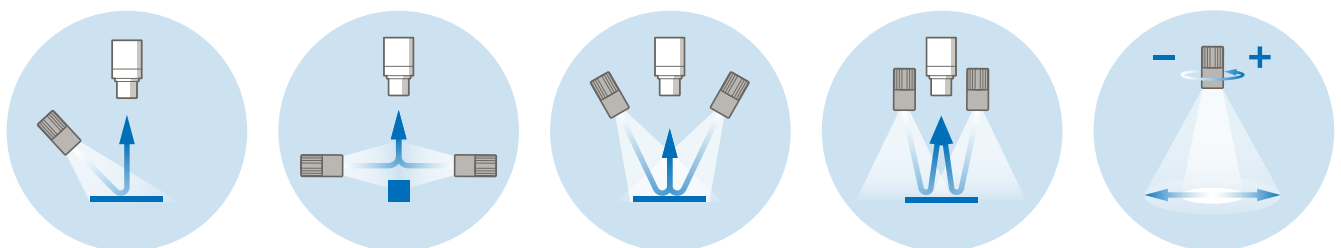
STROBE MODE

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 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

SP - 50 **B** - ZOOM
 Spot Light Ø of Active Area Wavelength LED Beam Angle

CONFIGURATION

Model	Wavelength [nm]	Ø of Active Area [mm]	LED Beam Angle [°]
SP-50W	CTR 5000 k	50	14 - 46
SP-50IR	940 850	50	14 - 46
SP-50R	625	50	14 - 46
SP-50G	525	50	14 - 46
SP-50B	470	50	14 - 46

ELECTRIC PARAMETERS

Model	SP-50W	SP-50IR	SP-50R	SP-50G	SP-50B
U_n Voltage Span	22-28 V	22-28 V	22-28 V	22-28 V	22-28 V
U_{jm} Nominal Voltage	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC
I_{jm} Nominal Current	400 mA	370 mA	450 mA	450 mA	450 mA
P Input	9.6 W	10.8 W	10.8 W	10.8 W	10.8 W
U_{trig} Trigger Voltage	≥ 10 - 24 V ²	I_{trig} Trigger Current	2.3 mA ²	I_{EN} PWM Dimming	> 10 V .. ≤ 24 V ¹
U_{str} Strobe Voltage	3 - 24 V ³	I_{str} Strobe Current	1.9 mA ³		

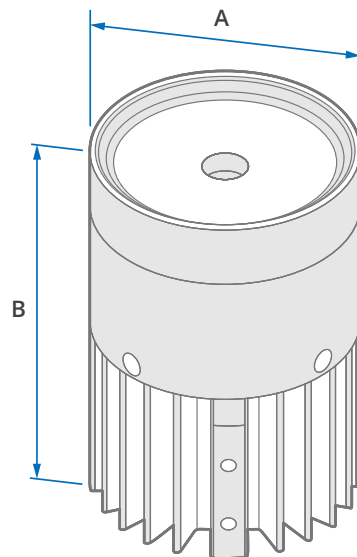
¹ PWM maximal rate is ≤ 40 kHz ² EN (Enable) trigger signal values, M8 connector – pin number 4 ³ Driving voltage and current M8 connector - pin number 2

DIMENSIONS & WEIGHT

A Outer Ø [mm]	60
B Height [mm]	90 139*
Weight [g]	479

* Height with mounting bracket

i For more details please see our 2D drawings.

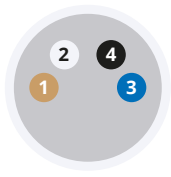


TECHNICAL DATA

IP Category: IP50	Protection Category: III	Ambient Temperature: -20 - +40 °C	Isolation Resistance: 500 V	Housing Material: Aluminium alloy
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CONNECTOR M8-4PIN ASSIGNMENT

light connector front view



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

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2 ENABLE - strobe mode (+24 V)

...

4 ENABLE

- A permanent lighting or trigger signal (10-24 V)
- B intensity regulation: PWM \leq 40 kHz
- C light intensity regulation: internal trimmer

ACCESSORIES

✓ Angular Cable M8-4PIN (5 m)

OPTIONAL ACCESSORIES

+ Straight Cable M8-4PIN (5 m)

+ Light Polarization

+ Mounting Pad

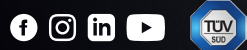
+ Mounting Bracket

+ Controller **Smart Light CT-SL4D**

+ Controller **CM-01**

 SmartView

**YOUR
VISION
PARTNER**



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