

MATRIX LIGHT

MX-50

Direct, universal illumination
of most surfaces.



HOMOGENOUS LIGHT FIELD

UNIVERSAL MOUNTING

ROUGH, METAL HOUSING

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 below.

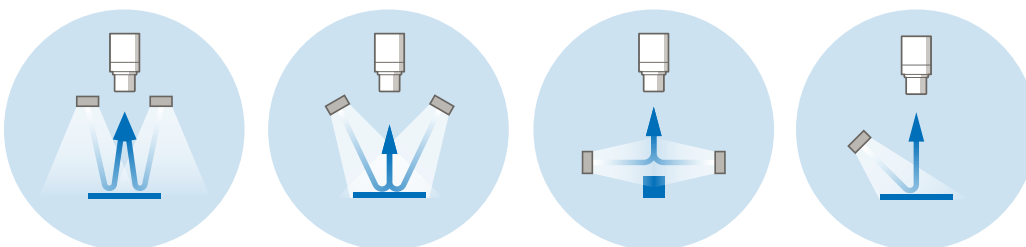
LIGHT TRIGGERING MODE

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.

LIGHT SOURCE INTENZITY REGULATION

The light intensity might be regulated by a PWM signal at a pin number 4 (black wire), or by an external controller. The maximum PWM frequency is ≤ 10 kHz.

WAYS OF USE



ORDERING CODE

example of the ordering code

MX - 50

B

Matrix Light

Active Area

Wavelength

CONFIGURATION

Model	Wavelength [nm]	Active Area [mm]	LED Beam Angle [°]
MX-50W	White	50 x 50	120
MX-50IR	850	50 x 50	50
MX-50R	633	50 x 50	60
MX-50G	525	50 x 50	120
MX-50B	470	50 x 50	120

ELECTRIC PARAMETERS

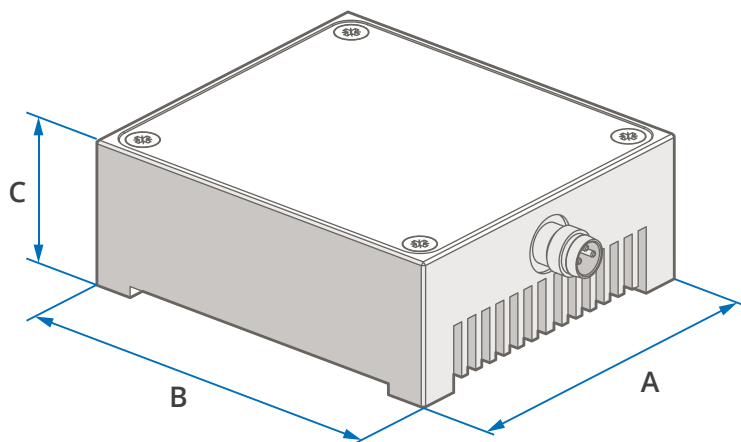
Model	MX-50W	MX-50IR	MX-50R	MX-50G	MX-50B	
U_n Voltage Span	22-28 V	19-28 V	22-28 V	22-28 V	21-28 V	
U_{jm} Nominal Voltage	24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	
I_{jm} Nominal Current	230 mA	190 mA	190 mA	220 mA	220 mA	
P Input	5.5 W	4.5 W	4.5 W	5.3 W	5.3 W	
U_{trig} Trigger Voltage	$\geq 12 - 28 V$ ²		I_{trig} Trigger Current	3.5 mA ²	I_{EN} PWM Dimming	$> 10 V .. \leq 24 V$ ¹

¹ PWM maximal rate is ≤ 10 kHz ² EN (Enable) trigger signal values, M8 connector – pin number 4

DIMENSIONS & WEIGHT

A Length [mm]	63
B Width [mm]	70
C Height [mm]	26
Weight [g]	192

i For more details please see our 2D drawings.



TECHNICAL DATA

IP Category: **IP50**

Protection Category: **III**

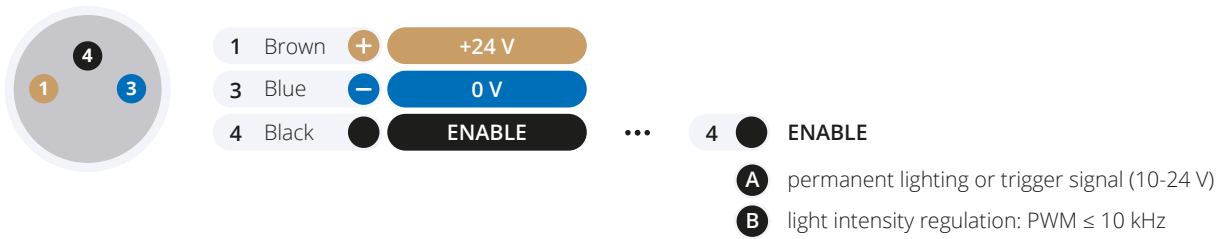
Ambient Temperature: **-20 - +40 °C**

Isolation Resistance: **500 V**

Housing Material: **Aluminium alloy**

CONNECTOR M8-3PIN ASSIGNMENT

light connector front view



ACCESSORIES

✓ Straight Cable M8-3PIN (5 m)

✓ Diffusion glass of 67-68%, 48-50% and 36-38% transparency

OPTIONAL ACCESSORIES

+ Angular Cable M8-3PIN (5 m)

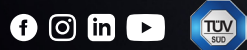
+ Polarizing Foil

+ Controller **Smart Light CT-SL4D**

+ Controller **CM-01**

 SmartView

**YOUR
VISION
PARTNER**



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