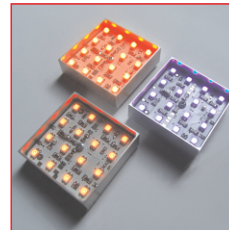


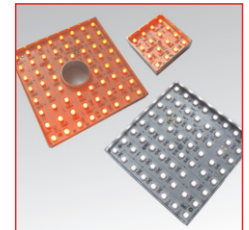
MATRIX-40

Incident light

- >> modular in-line mounting without visual interruption
- >> extremely versatile
- >> compact housing
- >> well-priced design
- >> easy and versatile mounting
- >> for continuous, switched and pulsed operation
(depending on type)



MATRIX-40 modules



MATRIX-40, MATRIX-80 and MATRIX-80-CO

Technical specifications



Housing	Aluminium milled, natural anodised
Total weight	approx. 30g
Operating / ambient temperature	max. 50°C recommended
IP protection class	depending on the version
Connector	JST connector (6-pin)*
Supply voltage**	24VDC type or 12VDC type: 24VDC resp. 12VDC SC type: For use in conjunction with a controller
Number of LEDs	16
LED lifetime	The LED lifetime of our lights is very high, but depends on many different factors such as ambient temperature, current load, and so on. Further information is available in the Technical information LED lifetime .

* Cable not included in the scope of supply

** more information see section Operating modes

Characteristics

Colour *	LED characteristics		typical characteristics per light		
	Wavelength (approx.)	Viewing angle	Current demand (24V type) ** / constant current max. (SC type) [mA]	Pulse current max. (SC type) *** [mA]	Intensity **** [W/m ²]
red	617nm	30°	50	200	
red	617nm	60°	50	200	
red	635nm	120°	30	200	2
white	6500K	120°	50	200	5
IR	850nm	30°		800	
IR	850nm	50°		800	
IR	850nm	120°		800	

* other colours and types from UV to infrared on request

** stated current values of the 24V types should be considered approximate values

*** depending on the strobe conditions, recommended maximum values for a flash time of 1ms

**** approximately data measured in DC mode; Measuring distance 100mm



Safety note!

LED light systems can produce very intense radiation, which may possibly damage the eyes on improper use. Do not look directly into the light beam with unprotected eyes! Use eye protection!

Operating modes

24VDC type / 12VDC type

The lights are designed depending on the version for continuous operation at 24VDC or 12VDC.

The following operating modes are possible:

- DC operation at an appropriate power supply with 24VDC or 12VDC
- Switched operation with a matching power supply e.g. via PLC, opto-relay or controller (GS or SC series)
- Brightness-controlled operation via controller (GS or SC series) in conjunction with suitable power supply
- Pulsed mode via controller (GS or SC series) in conjunction with suitable power supply. The LED current can be increased in pulse mode up to a factor of 2 to 3.

SC type

For pulsed, switched or brightness-controlled operation, the lights are also available as optimized SC versions. They can be used in combination with our controllers of the GS and SC series and provide optimized and maximum current flow, especially in pulsed operation. We will assist you in selecting the right components.

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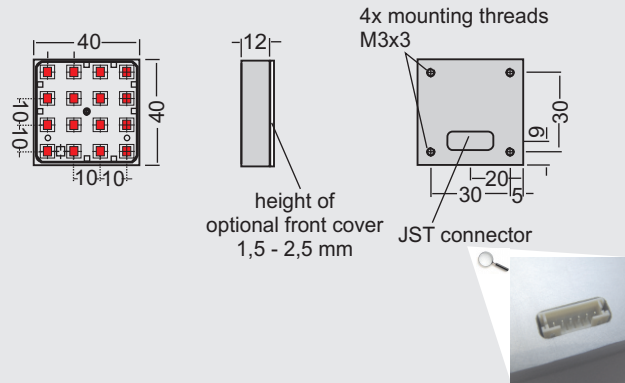
Uzstrasse 2
86465 Welden
Germany

Tel.: +49 (0)8293 | 909 112
Fax: +49 (0)8293 | 909 111

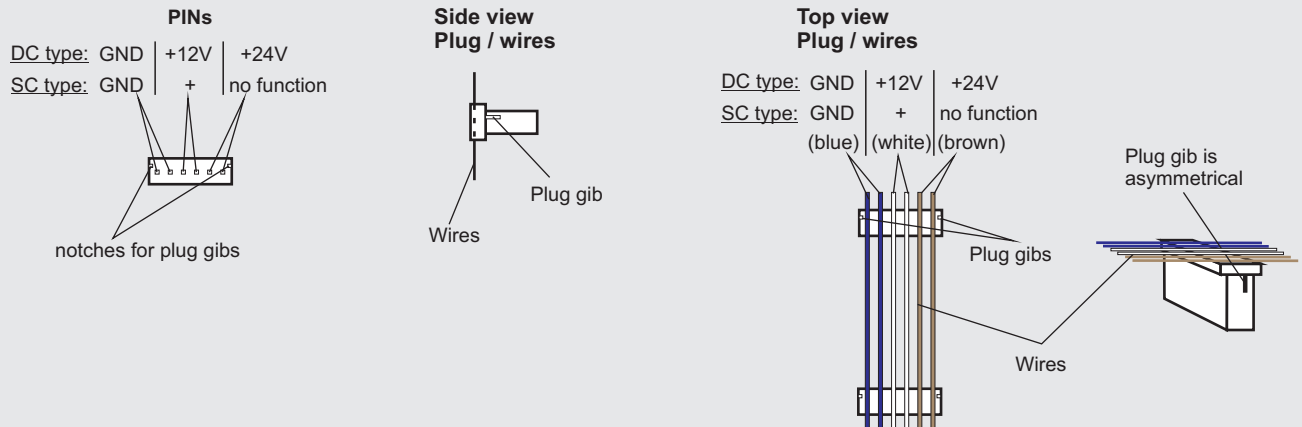
E-mail: info@buechner-lichtsysteme.de
Web: www.buechner-lichtsysteme.de

www.imaging-light-technology.com

Dimensions

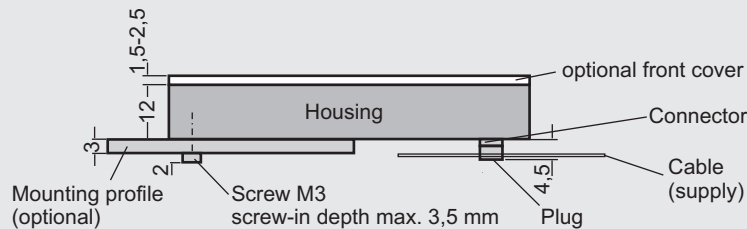


PIN assignment connector

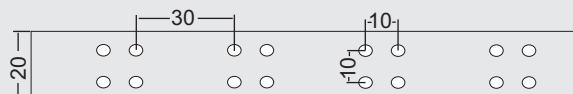


Mounting notes / Dimensions

Heights



Dimensions mounting profile



technical changes reserved

Büchner Lichtsysteme GmbH

Uzstrasse 2
86465 Welden
Germany

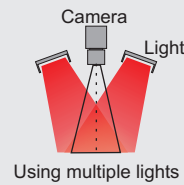
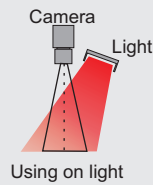
Tel.: +49 (0)8293 | 909 112
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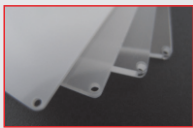
IMAGING LIGHT TECHNOLOGY
BÜCHNER

Application notes (Incident light)



Light which hits the surface from a specific angle physically produces a slightly inhomogeneous light spot, depending on the inclination. By using a symmetrical arrangement of several lights this occurring intensity drop can be compensated and increases additionally the intensity in the field of view.

Accessories



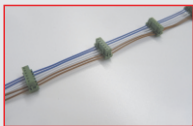
Front covers / diffusers

Through the use of different diffuse front covers, the optical characteristics of the illumination can be changed. More information can be found in the **Technical information Front materials**.



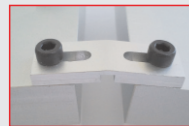
Mounting profiles

For simple and quick installation of MATRIX modules in the grid in various lengths available.



Connection and bus cable

Available for fast and easy wiring of one or more MATRIX modules in various lengths and designs.



Mounting brackets

By using the bendable mounting brackets several MATRIX modules can be connected together, for example, to realize a tunnel-like combination.