

HI-LIGHT-X / -XL

Backlight

- >> large-sized backlight
- >> high intensity
- >> good homogeneity
- >> well-priced design
- >> for continuous, switched and pulsed operation
(depending on type)



HI-LIGHT-X white



HI-LIGHT-XL red

Technical specifications



Housing	Aluminium, black or natural anodised
Diffuser	Acrylic material 060 3mm
Total weight	X: approx. 220g; XL: approx. 470g
Operating / ambient temperature	max. 50°C recommended
IP protection class	depending on the version
Connector	M8 plug (4-pin)*
Supply voltage**	24VDC type or 12VDC type: 24VDC resp. 12VDC SC type: For use in conjunction with a controller
Number of LEDs	X: 96; XL: 192
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) *** [A]		Intensity *** [W/m ²]
			X	XL	X	XL	
red	635nm	120°	175	330	1,2	2,4	85
white	6500K	120°	240	445	1,2	2,4	75
IR	850nm	120°	190	340	4,8	9,6	75

* 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 directly on diffuser



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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Backlight

Dimensions

HI-LIGHT-X

Operating indicator (IR versions) 3,2

recommended useable active area approx. 80 x 80mm

M8 plug

M8 plug

Dimensions: 120, 110, 100, 90, 92, 100, 20

HI-LIGHT-XL

Operating indicator (IR versions) 3,2

recommended useable active area approx. 80 x 180mm

M8 plug

M8 plug

Dimensions: 200, 210, 220, 90, 92, 100, 20

PIN assignment connector

M8 plug 4-pin
(Front view on housing)

24VDC type

PIN	Colour	Function
1	brown	+ 24V
3	blue	-

12VDC type

PIN	Colour	Function
2	white	+ 12V
3	blue	-

SC type

PIN	Colour	Function
4	black	+
3	blue	-

Application notes (Backlight)

