# Professional lighting systems for industrial imaging

# HI-LIGHT-180

### **Backlight**

- >> very high homogeneity
- >> well-priced design
- >> easy mounting
- >> for continuous, switched and pulsed operation (depending on type)





HI-LIGHT-180 red

HI-LIGHT-180

### **Technical specifications**

Housing	ousing Aluminium, natural anodised	
Diffuser	Acrylic material 060 3mm	
Total weight	approx. 650g	
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	
lumber of LEDs 256		
LED lifetime  The LED lifetime of our lights is very high, but depends on many different factors such as a temperature, current load, and so on. Further information is available in the <b>Technical info lifetime</b> .		

<sup>\*</sup> Cable not included in the scope of supply

### **Characteristics**

	LED characteristics		typical characteristics per light		
Colour *	Wavelength (approx.)	Viewing angle	Current demand (24V type) ** / constant current max. (SC type) [mA]	Pulse current max. (SC type) *** [A]	Intensity **** [W/m²]
red	635nm	120°	505	3,2	70
white	6500K	120°	545	3,2	50
IR	850nm	120°	755	12,8	80

<sup>\*</sup> other colours and types from UV to infrared on request



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.

Version: 2.0

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.

### Büchner Lichtsysteme GmbH

Uzstrasse 2 **Tel.:** +49 (0)8293 | 909 112 E-mail: info@buechner-lichtsysteme.de 86465 Welden Web: **Fax:** +49 (0)8293 | 909 111 www.buechner-lichtsysteme.de Germany www.imaging-light-technology.com



<sup>\*\*</sup> more information see section Operating modes

<sup>\*\*</sup> stated current values of the 24V types should be considered approximate values

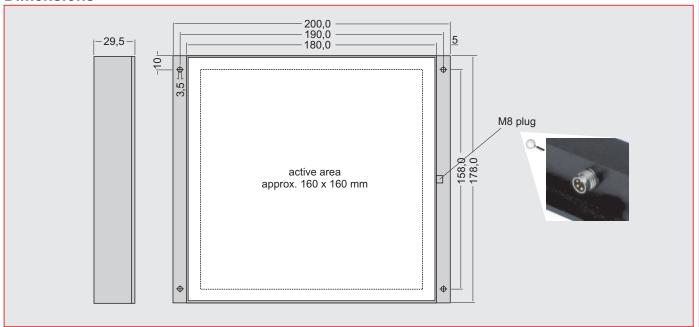
<sup>\*\*\*\*</sup> depending on the strobe conditions, recommended maximum values for a flash time of 1ms
\*\*\*\*\* approximately data measured in DC mode directly on diffuser

# Professional lighting systems for industrial imaging

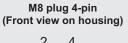


# **Backlight**

### **Dimensions**



### PIN assignment connector





24VDC type			
PIN	Colour	Function	
1	brown	+ 24V	
3	hlue	_	

12 VDC type				
PIN	Colour	Function		
2	white	+ 12V		
3	blue	-		

12VDC tune

SC type				
PIN	Colour	Function		
4	black	+		
3	blue	-		

**Application notes (Backlight)** 

