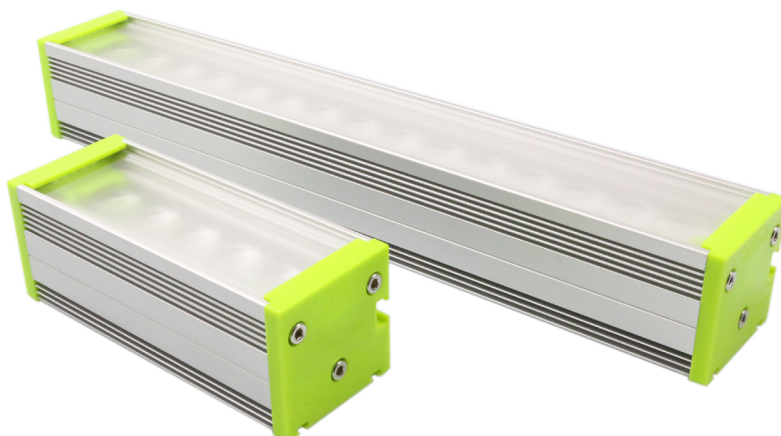


## LGHT-B

High-power adjustable LED bar light



**KIT Version:** Delivered with three diffusers included as a package

**Very intense** and **uniform** illuminated area

**Full range of colors**

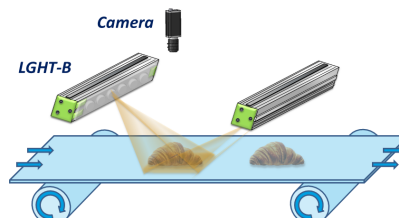
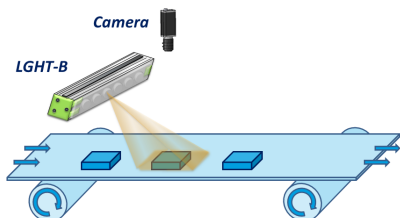
**Long lifetime** and minimal maintenance

**Standard** connections and fasteners

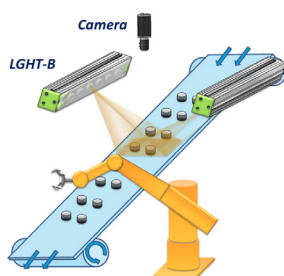
**Flexibility:** 4 adjustable illumination angles & 3 different window options

### TYPICAL APPLICATION

#### QUALITY CONTROL







#### PICK AND PLACE



## TECHNICAL SPECIFICATIONS

<b>Illumination Mode</b>	High-power Strobe or Continuous mode
<b>Wavelengths</b>	465nm, 625nm, 850nm (+/- 5%) White (5500K ±500K)
<b>Power Supply</b>	24V DC +/- 10%
<b>Power Consumption</b>	Depends on the size (Cf. page 5)
<b>Connector</b>	M12 - 4pins
<b>Driver version</b>	Autostrobe (not dimmable) / Analog Intensity Control (AIC) version available in option
<b>Response Time</b>	Rising: 15µs / Falling: 10µs
<b>Duty cycle</b>	Max. 30% in strobe mode / No restriction in continuous mode (Duty cycle = 100%)
<b>Input signal</b>	PNP trigger input: Light ON: from 4 to 24V / Max. signal consumption: 2mA (for 145 LEDs)
<b>Weight</b>	60g + 300g per 100mm
<b>Dimensions</b>	51mm x 49mm x Length (Cf. page 4)
<b>Material</b>	Device body: Aluminium allow & ABS / Window: PMMA
<b>Fastener</b>	One T-slot on the back for 8mm T-nut (M6 recommended), and one slot on the side for M6 hex nut
<b>IP rating</b>	IP5X (IP67 and IP69K versions available)
<b>Working temperature</b>	0°C to 50°C
<b>Storage temperature</b>	-20°C to 60°C
<b>Regulations</b>	CE - RoHS - REACH - WEEE - IEC 62471
<b>Country of Origin</b>	France

## PART NUMBER KEY

LGHT-B	LLL	CC	-XX	YY	ZZ
Type	Optical length	Color	Detail	Rev	Custom
B = Bar light	100 = 100mm 300 = 300mm	 RD (Red 625nm)  BL (Blue 465nm)  WH (White 5500K)  IR (Infrared 850nm)	00 = NA	0	0

**Example:** LGHT-B300RD-0000 = 300mm Red Bar light

**Note:** The product is delivered **as a package** including: **Transparent, Semi-diffusive** and **Opaline windows, lens plate**, and the light. The light is delivered assembled in the default configuration with the lens plate positioned in Position 2 (45°) and the Semi-diffusive window.

## ACCESSORIES

OPTICAL ACCESSORIES (Replace XXX by the optical length: 100 / 300)	
Polarizer	LGHT-AXXXBP-0000
CABLES (Replace XX by the cable length in meter: 05 / 10)	
M12 Female to Flying leads	LGHT-A000CB-XX00

## OPTICAL FLEXIBILITY

### MANY POSSIBLE CONFIGURATIONS IN JUST ONE LIGHT

#### Window

The LGHT-B KIT Series is shipped with three different diffusers. Depending on the uniformity necessary for the application, the user can easily change the diffuser to one that fulfills the application requirements.

TR : Transparent



SD : Semi-diffusive

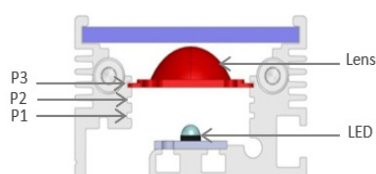
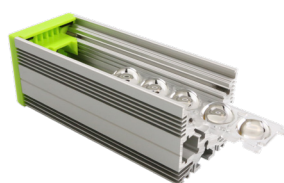


OP : Opaline

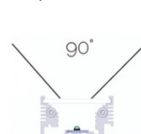


#### Lens position

The LGHT-B offers flexible lens positioning to control the beam angle. The user can adjust it by himself : the angle can be widened by moving the lens closer to the LEDs or narrowed by moving the lens further away from the LEDs.



P0 (Without lens)



P1



P2



P3



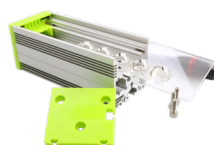
### HOW TO CHANGE THE CONFIGURATION OF THE LGHT-B



1 Unscrew the M4 screws



2 Slide out the window



3 Slide out all lenses

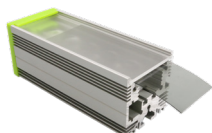


4 Replace the window and lenses in desired configuration

### WAVELENGTH COMPARISON

Wavelength Impact				
Wavelength	○ White (5500K)	● Red (625nm)	● Infrared (850nm)	● Blue (465nm)
Optical power ratio Working distance = 100mm	1	1.3	1.6	2.8

### OPTION: POLARIZER ACCESSORY



Using polarizers on the Efflux light and the camera, it is possible to eliminate glare from your workpiece making it easier to acquire a suitable image for the application.

The user can insert directly the polarizer plate inside the LGHT-B, under the window.



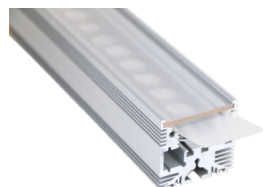
Without polarizer



With polarizer

**Note:** Polarization is optimal with a transparent window, the use of diffuser may depolarize the light.

### OPTION: LINESCAN ACCESSORY



With the lens in the **upper position** (P3) and the **transparent window**, the linescan accessory transforms the LGHT-B light into a uniform line light ideal for either brightfield or darkfield illumination.

The user can insert directly the linescan accessory inside the LGHT-B, under the transparent window.



Without linescan



With linescan

**Note:** A cylindrical lens version is also available to focus the light even more into a very bright line. Please refer to the specific datasheet.

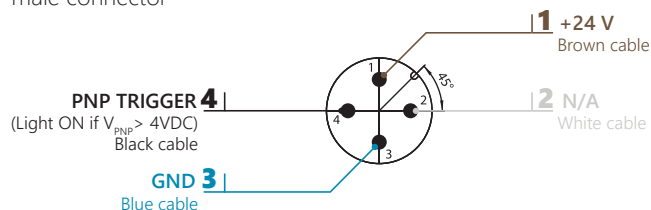
## ELECTRONICAL SPECIFICATIONS

## WIRING LAYOUT - STANDARD VERSION

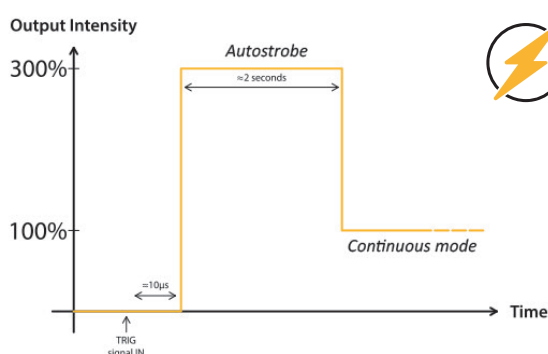
The LGHT-B requires 24V DC input power. Note the trigger pin **needs to be connected** either to the 24V DC signal for Continuous mode or to a PNP Trigger signal for Overdrive strobe mode.

M12 - 4 pins

male connector



## AUTOSTROBE FEATURE



The integrated driver with Autostrobe feature allows for 300% increased intensity while being strobed when compared to continuous mode.

Respect a duty cycle lower than 30% in strobe mode.

Response time	
Rising time	15μs
Falling time	10μs

## POWER CONSUMPTION AND CONNECTOR TYPE

Depending on power consumption, the LGHT-B has a standard M12 connector. The exact power consumption of the product is always indicated on the product's stickers.

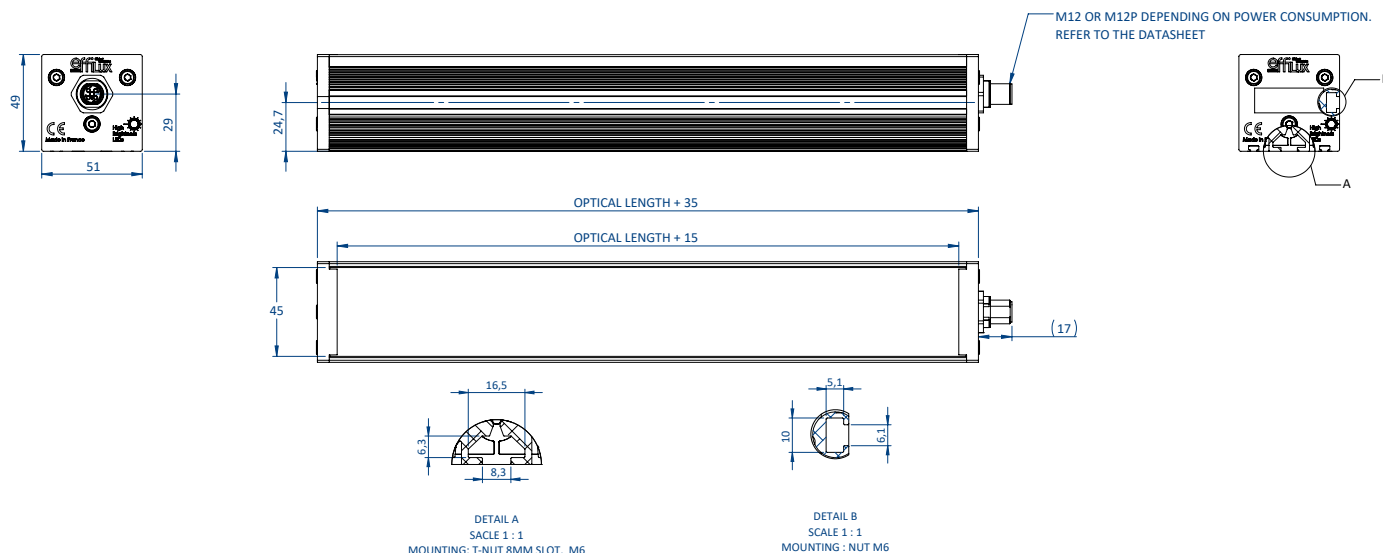
POWER CONSUMPTION (White version)			
Optical length		100	300
Max Power consumption	P <sub>peak</sub>	20W	60W
	P <sub>avg</sub>	8W	20W

$P_{peak}$  is corresponding to the peak consumption during the autostrobe and  $P_{cw}$  is corresponding to the power consumption during the continuous mode, after the autostrobe.

## OPTION ELS DRIVER: ANALOG INTENSITY CONTROL

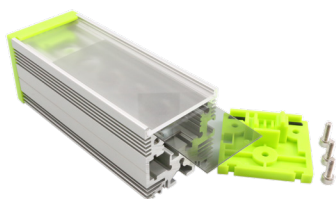
The standard product (Autostrobe) is not dimmable, EFFILUX offers an alternative electronical configuration suitable for continuous use and linear applications. This ELS driver version allows you to adjust the light intensity of the product according to the input signal: AIC Version (Analog Intensity Control). *Contact Efflux.*

## MECHANICAL SPECIFICATIONS



## ACCESSORIES

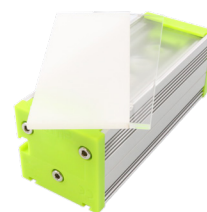
Please refer to the specific documentations for additional information on the accessories of the LGHT-B.



Polarizer



Linescan



Diffusers



Camera filters



Protection glasses



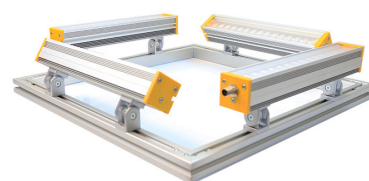
Mounting solutions



Power supplies



Cables



EFFI-SQUARE

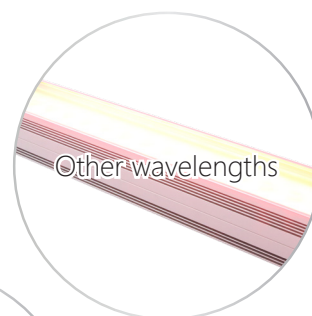
## CUSTOM



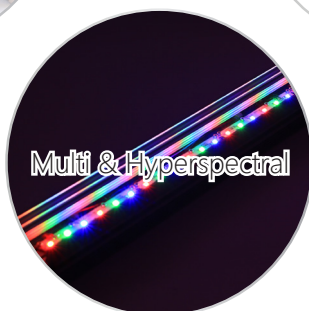
Chainable Version



Custom  
Cap



Other wavelengths



Multi & Hyperspectral



IP67 & IP69K  
Version

## CONTACT INFORMATION

Please refer to the specific documentation (datasheet, user guide, drawing, handling precautions) for complementary information.  
Contents of this document are based on information available as of May-2020 and may be changed without prior notice.