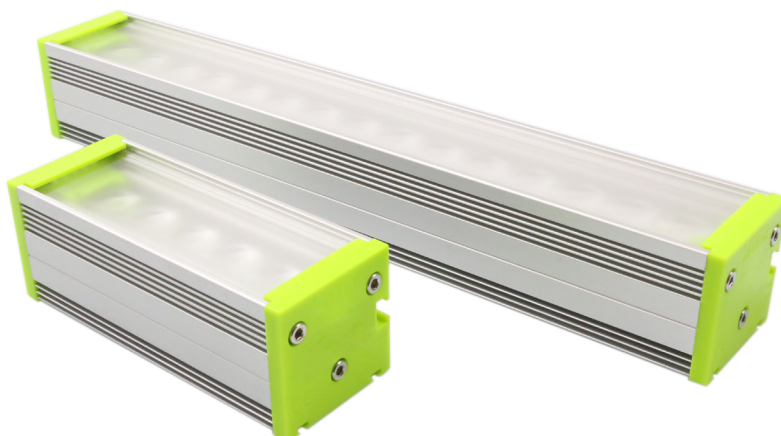


LGHT-B

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

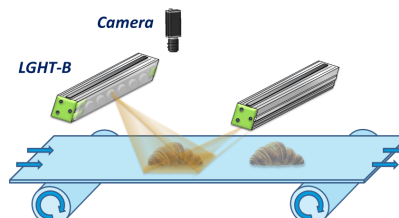
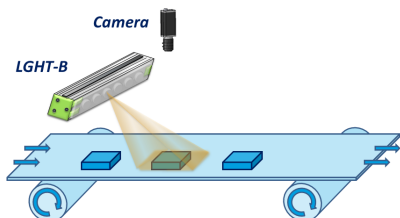
Long lifetime and minimal maintenance

Standard connections and fasteners

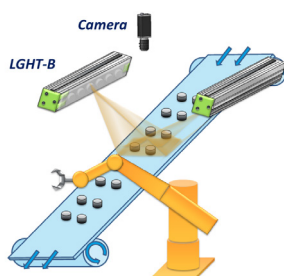
Flexibility: 4 adjustable illumination angles & 3 different window options

TYPICAL APPLICATION

QUALITY CONTROL



PICK AND PLACE



TECHNICAL SPECIFICATIONS

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

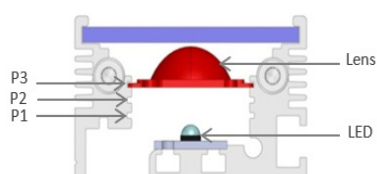
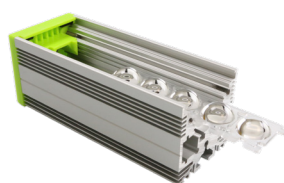


OP : Opaline

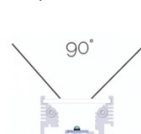


Lens position

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.



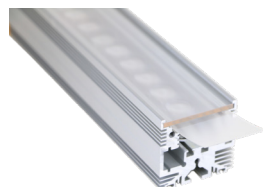
Without polarizer



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.

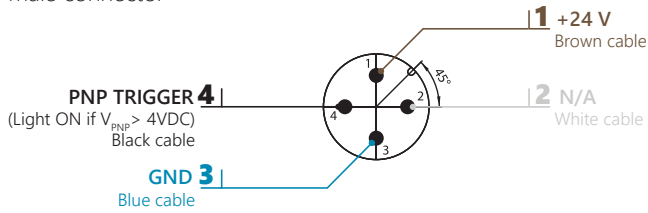
ELECTRONICAL SPECIFICATIONS

WIRING LAYOUT - STANDARD VERSION

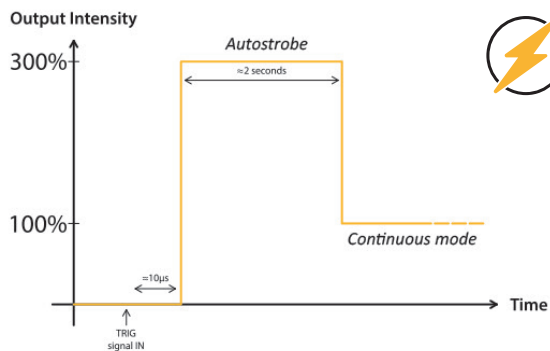
The LGHT-B requires 24V DC input power. Note the trigger pin **needs to be connected** either to the 24V DC signal for Continuous mode or to a PNP Trigger signal for Overdrive strobe mode.

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 indicates on the product's stickers.

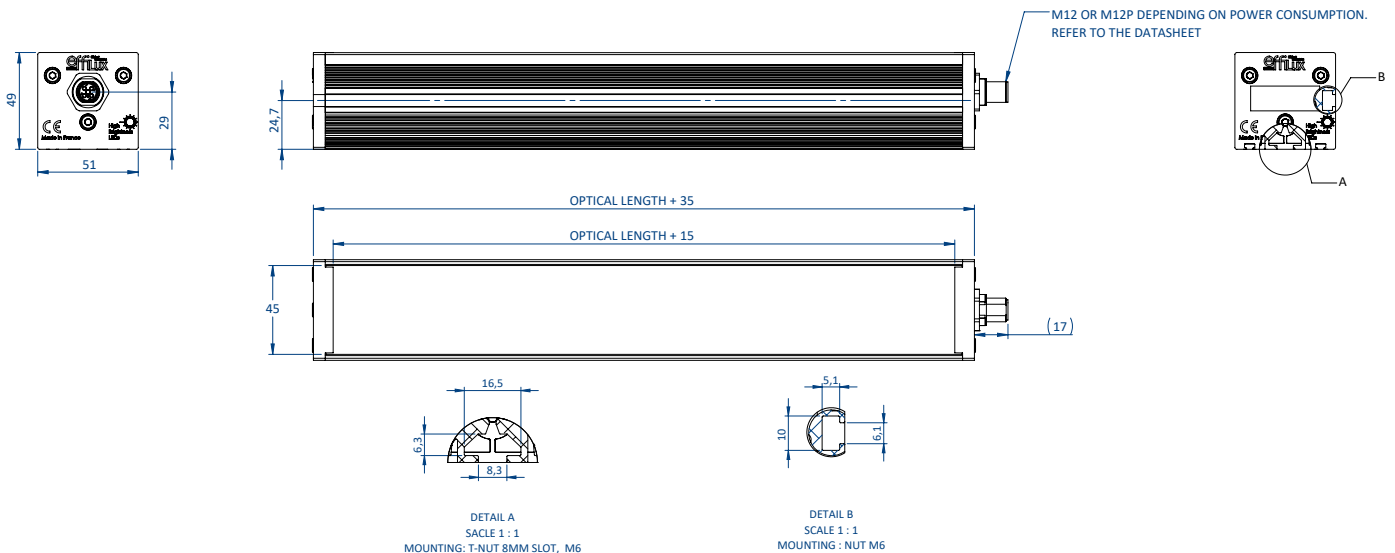
POWER CONSUMPTION (White version)			
Optical length		100	300
Max Power consumption	P _{peak}	20W	60W
	P _{cw}	8W	20W

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

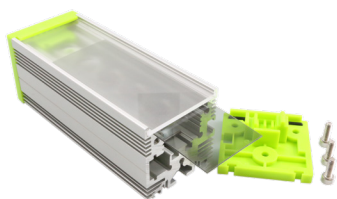
The standard product (Autostrobe) is not dimmable, EFFILUX offers an alternative electronic configuration suitable for continuous use and linear applications. This ELS driver version allows you to adjust the light intensity of the product according to the input signal: AIC Version (Analog Intensity Control).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

MECHANICAL SPECIFICATIONS



ACCESSORIES

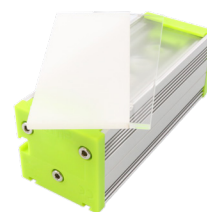
Please refer to the specific documentations for additional information on the accessories of the LGHT-B.



Polarizer



Linescan



Diffusers



Camera filters



Protection glasses



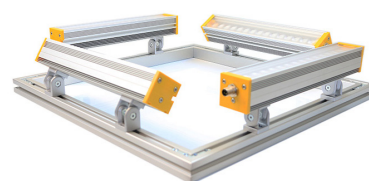
Mounting solutions



Power supplies



Cables



EFFI-SQUARE

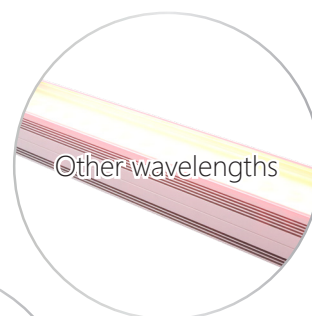
CUSTOM



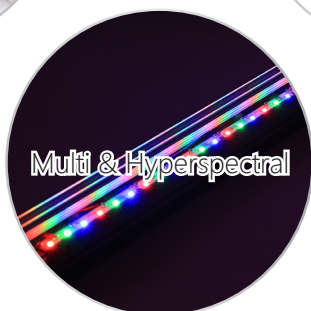
Chainable Version



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.