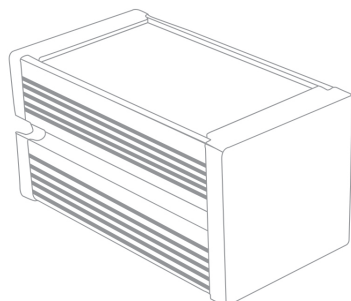


UV BAR LIGHT - PURE UV™ TECHNOLOGY

ELBC SERIES: ELBC-100PUV365



The ELBC Series is a **high-power** flood type bar light with innovative design features to answer the needs of many machine vision applications.

This UV Bar light is dedicated to **UV Fluorescence applications**. It integrates the advanced **Pure UV™** technology - an optical system that drastically improves the fluorescence effect while concurrently **removing glare** and **improving contrast**.

The **integrated controller** with our **Auto-strobe** feature allows for 300% increased intensity while being strobed as compared to continuous mode.

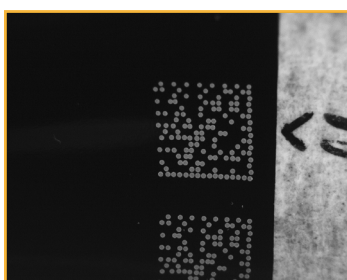
MAIN FEATURES

- Very **intense** and **uniform** illuminated area
- Direct connection** for strobe use with *COGNEX In-Sight 7000 Series*
- Long lifetime and minimal maintenance
- Standard connections and fasteners
- Pure UV™ technology** integrated for perfect contrast

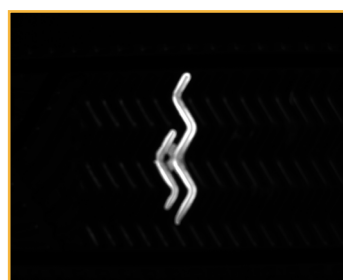


| | |
|----------------------|------------------------------------------------------------------------------------------------|
| Connector | M12 - 4 contacts |
| Power supply | 24V DC |
| Illumination mode | Continuous or Overdrive strobe mode |
| Electronical mode | Auto-strobe |
| Available wavelength | UV 365nm |
| Available size | 100mm (other sizes upon request) |
| Width x Height | 51mm x 49mm |
| Mounting | One T-slot on the back for 8mm T-nut (M6 recommended), and one slot on the side for M6 hex nut |
| Material | Device body: Aluminum alloy; Window: PMMA |
| Working temperature | 0° to 50° C |
| IP code | IP50 |

APPLICATIONS

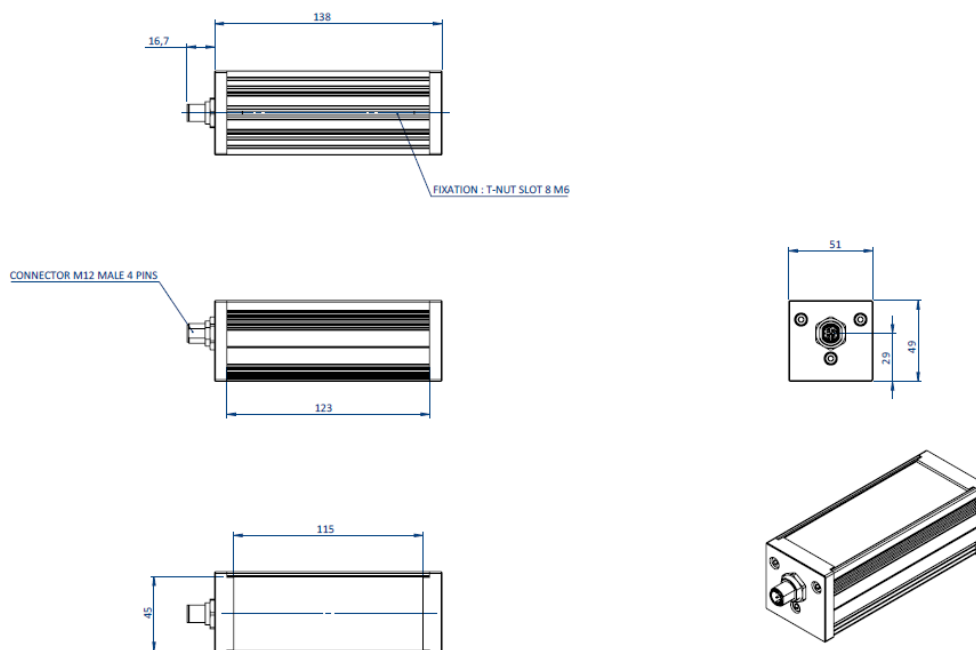


Traceability



Quality control

DIMENSIONS (MM)

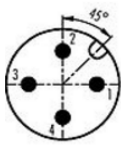


ELECTRONICAL SPECIFICATIONS

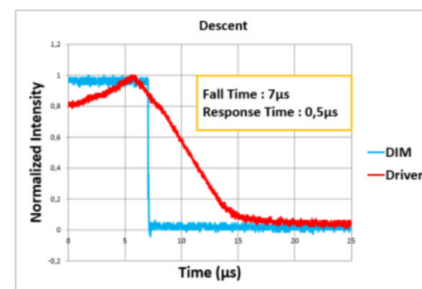
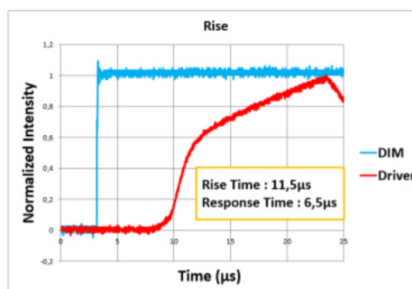
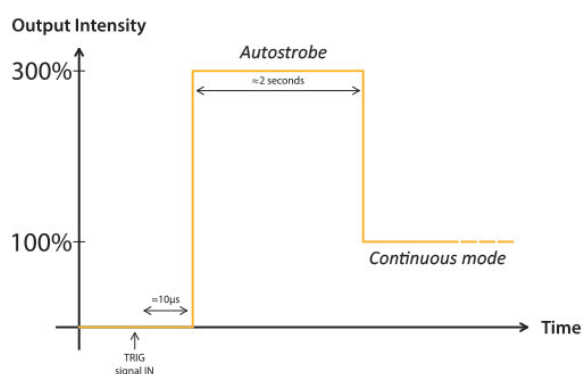


Connector pinout

The ELBC Series 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.

| Connector pinout | Number | Color Contact | Designation |
|---------------------------------------------------------------------------------------------------------------|--------|---------------|-----------------------------------------------------------------------------------------------------|
|  <p>M12 male connector</p> | 1 | Brown | +24V DC |
| | 2 | White | N/A |
| | 3 | Blue | GND |
| | 4 | Black | PNP TRIGGER [trigger for rising edge] for Auto-strobe Light ON if $V_{PNP} > 3V$ DC (max 24V DC) |

Autostrobe feature

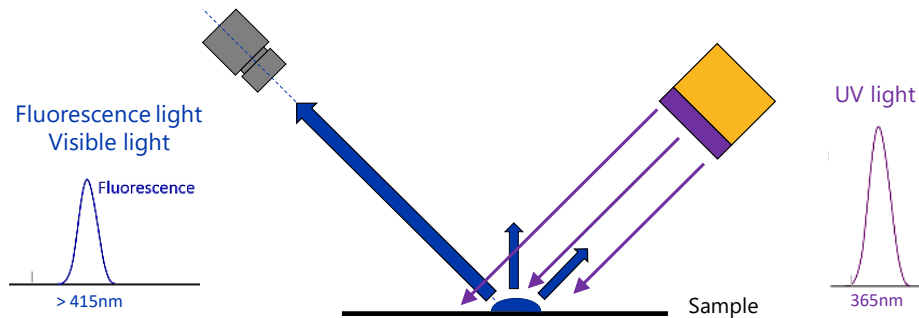


Note: Use a duty cycle lower than 30% in strobe mode.

TECHNOLOGY DESCRIPTION

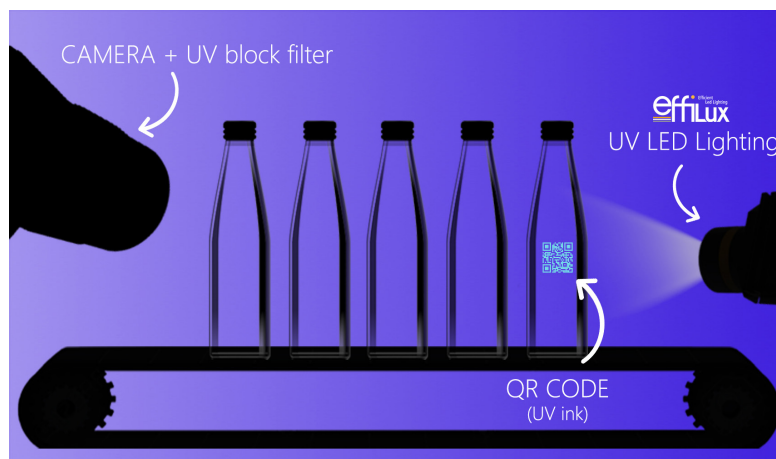
Fluorescence phenomenon

Fluorescence is the property of some materials to emit light when they receive a radiation. The radiation is absorbed at a specific wavelength (UV 365nm for example) and then re-emitted at a longer wavelength (Blue for instance). This phenomenon reveals **glue, ink, coatings** or any materials with **UV optical brighteners**.



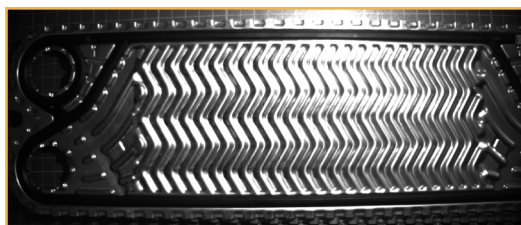
Pure UV™ technology

Pure UV™ fluorescence creates **greater contrast**, highlights specific materials where other lights may not, and **removes all glare**. For better results, the Pure UV™ Bar light should be used **along with a UV Cut filter** on the camera.

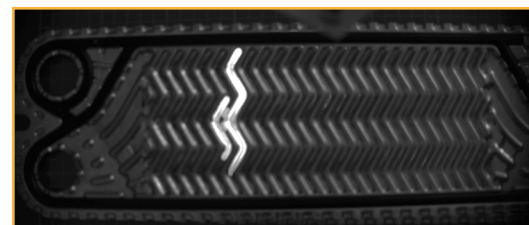


Combined with the Pure UV™ technology the resulting image has perfect contrast.

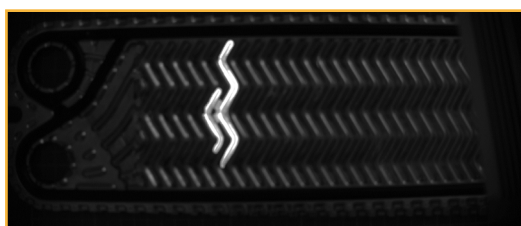
Example of resulting images



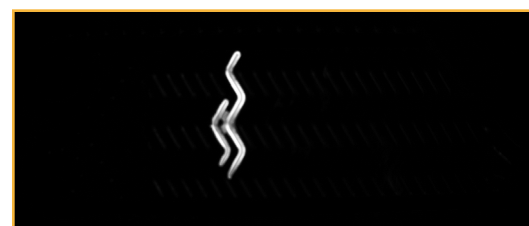
White Bar light



UV 365nm Bar light



UV 365nm Bar light
+
UV Cut filter



UV 365nm Bar light with **Pure UV™ Technology**
+
UV Cut filter

PRODUCT LINE UP

ELB Series - Pure UV version - 100MM LONG

| Series | Part Number | Color | Wavelength | Max Power Consumption | | Connector | Weight | Optical Length (L _{op}) |
|--------|---------------|-------|------------|-----------------------|------------|-----------|--------|-----------------------------------|
| | | | | Strobe | Continuous | | | |
| ELB | ELB-100PUV365 | UV | 365 nm | 25W | 9W | M12 | 500g | 100mm |

ACCESSORIES - CABLES

| Part Number | Connectors | Length |
|-------------|---------------------------|--------|
| ECB-2-FL | M12 Female to Flying lead | 2m |
| ECB-5-FL | M12 Female to Flying lead | 5m |
| ECB-10-FL | M12 Female to Flying lead | 10m |
| ECB-2 | M12 Female to M12 Male | 2m |
| ECB-5 | M12 Female to M12 Male | 5m |
| ECB-10 | M12 Female to M12 Male | 10m |

ACCESSORIES - UV SAFETY GLASSES

| Part Number | Description |
|---------------|-------------------|
| EL-GLASSES-UV | UV Safety Glasses |

ACCESSORIES - CAMERA LENS FILTERS

| Type of filter | Description |
|----------------|---------------------------------|
| LP415 | Long pass filter - 415nm |
| BP470 | Band pass filter - 470nm |
| BN470 | Narrow band pass filter - 470nm |

Please contact your local representative to get more information and recommendations about filters.

CUSTOM - ON REQUEST

OPTIONS AVAILABLE ON REQUEST



EXAMPLE OF CUSTOM



UV RISK



This device generates UV radiation centered at 365 nm.

It is subject to the EN 62471:2008 standard which classifies optical sources into a risk group according to the potential biological photo hazard.

Because of the high UV emissions, the UV products belong to Group 3 (danger even for a momentary exposure) so special measures, detailed thereafter, must be respected.



Wearing protective equipment is mandatory to protect eyes and skin. The protective glasses must be compatible with standard EN 170 and must protect the eyes against the light rays that arrive directly or from the sides.

Recommended Minimum Protection: UVEX SCT-Orange Tint that reduces the fatigue of the eye by absorbing blue and green light and allowing the user to correctly observe the components during the drying or inspection process by absorbing 99.99% of the UV emission and visible light up to 532nm. CCS can provide protective glasses. Please contact your local representative.

EU DIRECTIVE



In accordance with EU machinery directive, EMC directive, and low voltage directive, machines and electronic devices not marked with the CE logo are subject to distribution restrictions within the EU. All EL Series products will maintain the EU mandate compatibility of our customers' machinery and electronic devices.

ROHS DIRECTIVE

All products from the EL Series comply with the RoHS Directive.

CONTACT INFORMATION

MANUFACTURER

EFFILUX
1 Rue de terre Neuve
Mini Parc du Verger - Bâtiment E
91940, Les Ulis, FRANCE

WEBSITE

www.el-series.com

SALES & TECHNICAL SUPPORT

CCS AMERICA, Inc.
6 Lincoln Knoll Lane Suite # 102
Burlington, MA 01803 U.S.A.

TEL: +1-781-272-6900
E-MAIL: sales@ccsamerica.com
SITE: www.ccsamerica.com

CCS EUROPE N.V.
Bergensesteenweg 421B 1600
Sint-Pieters-Leeuw, BELGIUM

TEL: +32-2-333-0080
E-MAIL: sales@ccseurope.com
SITE: www.ccs-grp.com