

Safety instructions for the use of this LED product

All of our UV and IR emitting sources are classified in accordance with IEC/EN60825-1 as **Class 3B** products when the nominal power supply data are applied. The optimal power of these sources can be reduced by adjusting a built-in trimmer or supplying less electrical power than what is stated in the product datasheet; pulsing operation can also be adopted by the user. Under these conditions the device could be operating within lower classes values and the user may decide to reclassify the machine or device which integrates this component

1. Before using this COMPONENT please READ CAREFULLY all of the following safety instructions:

- Do not look into the beam directly or through any optical system that may be used: direct or indirect incidence of ultraviolet and infrared light into the eye is extremely dangerous even for weak powers or short exposure times
- Prevent any direct, reflected or diffused UV or IR radiation to reach the eye
- Wear appropriate protective glasses when using this product and exercise caution in its handling
- Do not expose your skin to direct, reflected or diffused UV LED radiation for more than few seconds
- Do not point the device beam towards people (especially the eye)
- On the device or equipment integrating the illuminator, provide warning indications stating the use of Class 3B ultraviolet or infrared radiation inside
- Enclose the beam path as much as possible to avoid direct exposure or reflections
- Avoid beams coming out of a device by using beam dumps, screens or curtains
- Possibly install the LED device at a fixed level (below eye level).
- Ensure individuals who operate with these sources be properly trained on LED radiation danger and eye safety procedures
- Post a sign outside your lab to indicate the use of potentially dangerous UV or INFRARED radiation
- Restrict the access to LED radiation-trained personnel
- Install a key switch or interlock circuit feature, if available.

2. Radiation Safety Eyewear

Protective glasses, goggles or spectacles with an OD (optical density) of at least 3 (transmission < 0,1%) shall be used in order to operate safely. The OD value shall be valid for all the emission spectrum of the LED as indicated by the labeling here below.

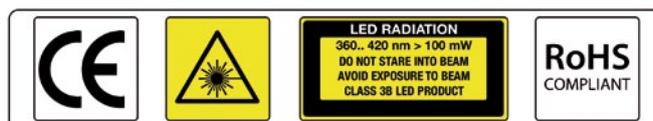
3. Safety features to be implemented by SYSTEM manufacturers:

This product must be considered an OEM product, not a standalone unit (a complete system) and therefore should only be used as part of a system. It is the responsibility of the system manufacturer using an OEM product to make sure that its SYSTEM includes all the required safety features to comply with IEC regulations:

- Shutter: a protective cover in front of the optical aperture can be used as a beam blocker if the device is emitting
- On/off switch: an I/O switch can be wired to the LED device to switch off the device in order to protect personnel from accidental beam exposure during assembly procedures
- Key switch: a removable key-actuated master control preventing source emission when removed
- Interlock circuit: a remote interlock connector that prevents radiation emission when removed
- Radiation emission indicator: a LED turning on when the source is powered.

4. Product labeling

- a. UV Sources



- b. IR Sources

