

VI55I-xxxxxxHx

Illumination



Described product

VI55I-xxxxxHx

Manufacturer

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Original document

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1 Safety information

1.1 Basic safety notes

Please observe the safety notes and the warnings listed here and in other sections of this product documentation to reduce the possibility of risks to health and avoid dangerous situations.

Danger due to visible radiation is product-specific. See the technical data for more information.

LED notes



CAUTION

Optical radiation: LED risk group 1, visible radiation, 400 nm to 780 nm

The LEDs may pose a danger to the eyes in the event of incorrect use.

- Do not look into the light source intentionally.
- Do not open the housing. Opening the housing will not switch off the light source. Opening the housing may increase the level of risk.
- Comply with the current national regulations on photobiological security of lamps and lamp systems.

If the product is operated in conjunction with external illumination units, the risks described here may be exceeded. This must be taken into consideration by users on a case-by-case basis.

No maintenance is required to ensure compliance with the LED risk group.

It is not possible to entirely rule out temporary disorienting optical effects, particularly in conditions of dim lighting. Disorienting optical effects may come in the form of dazzle, flash blindness, afterimages, photosensitive epilepsy, or impairment of color vision, for example.

Mounting and electrical installation



WARNING

Electrical voltage!

Electrical voltage can cause severe injury or death.

- Work on electrical systems must only be performed by qualified electricians.
- The power supply must be disconnected when attaching and detaching electrical connections.
- The product must only be connected to a voltage supply as set out in the requirements in the operating instructions.
- National and regional regulations must be complied with.
- Safety requirements relating to work on electrical systems must be complied with.

1.2 Intended use

The VI55I illumination unit is used as an integrated light source for image-based code readers. In this document, the image-based code readers are referred to as the product or device. The VI55I is referred to as the illumination unit. The illumination unit depends on the product variant.

Intended use includes compliance with all information in this document as well as in the supplementary operating instructions of the product.

Incorrect use, improper modification, or tampering with the product will invalidate any warranty offered by SICK AG. Furthermore, SICK AG shall not accept any responsibility or liability for any resulting damage and consequential damage.

1.3 Related applicable documents

Related applicable documents from SICK

Document	Title	Part number	Source
Operating Instructions	Inspector83x	8029044	www.sick.com/8029044

2 Product description

2.1 Integrated illumination unit

Overview

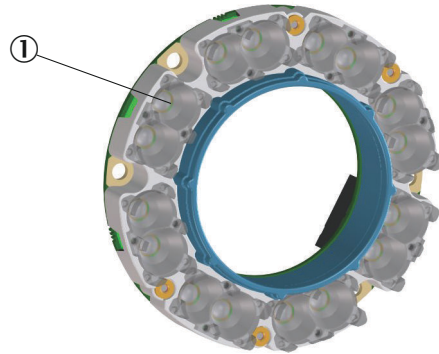


Figure 1: VI55I Illumination unit

- ① 16 illumination LEDs, color: visible white light

2.2 Type code

Type code structure

VI55a - b c d e f

Position	Description	Characteristic
a	Illumination geometry	I: Integrated illumination unit
b	Illumination color	WH: white
c	Minimum working distance [mm], homogeneity greater than 50% from peak	20: ≥ 200 mm
d	Aperture angle	31: Medium 47: Wide
e	Intensity and adjustability	H: High intensity, not adjustable
f	Manufacturer	0: SICK

3 Technical data

Integrated illumination unit	16 LEDs: <ul style="list-style-type: none"> • Visible white light, medium, aperture angle: 31° • Visible white light, wide, aperture angle: 47°
LED risk group of the illumination unit (visible white light variant)	Risk group 1 (low risk) according to IEC 62471-1: 2006-07 / EN 62471-1: 2008-09 Radiance: <ul style="list-style-type: none"> • $L_B^{1)}$: $< 10 \times 10^3 \text{ W}/(\text{m}^2\text{sr})$ within 100 seconds; at a distance $\geq 200 \text{ mm}$ • $L_R^{2)}$: $< 2.5 \times 10^6 \text{ W}/(\text{m}^2\text{sr})$ within 10 seconds; at a distance $\geq 200 \text{ mm}$

1) L_B = Hazard from blue light.

2) L_R = Hazard to the retina of the eye due to heating.