

LZR[®]-I100 / LZR[®]-I110

Can the laser emission of the LZR[®]-I100 / LZR[®]-I110 cause damage to the human body?

Because the LZR[®]-I100 / LZR[®]-I110 is emitting two kinds of laser radiation, during the installation and the normal working mode, it is necessary to verify the risk related to the use of such a product in a public environment. In fact, even relatively small amounts of laser light can lead to severe eye injuries.

Therefore the sale and use of lasers is typically subject to official regulations.

Lasers, according to the IEC 60825-1, have been classified by wavelength and maximum output power into four classes and a few subclasses. The classifications categorize lasers according to their ability to produce damage on exposed people, from class 1 (no hazard during normal use) to class 4 (severe hazard for eyes and skin).

Visible laser radiation during the installation:

Three visible laser beams can be activated by the BEA remote control to facilitate the angular positioning of the sensor. These are CLASS 3R laser beams where a direct intrabeam viewing has to be avoided, even if the risk of injury is quite low.

Because these beams can only be activated by the BEA remote control, and only trained people install these sensors, we suggest the installer to lock the access to the sensor parameters by entering a code.

As a precaution, the visible laser beams switch off automatically after a maximum time of 15 minutes.

Infrared laser radiation during normal operation:

These are CLASS 1 laser beams, so no particular precaution must be taken: a CLASS 1 laser is safe under all conditions of normal use.

We can therefore conclude that there is absolutely no risk to use the LZR[®]-I100 / LZR[®]-I110 in a public environment. Only during installation by trained people, the sensor has to be handled carefully.

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