

## DESCRIPTION

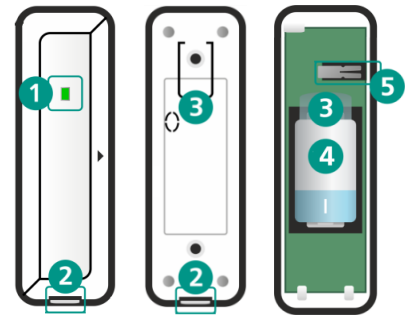
The Livi VS impact sensor (hereafter referred to as the sensor) is designed to detect displacement or impact that occur when glass, metal, brick and reinforced concrete structures are being cut, drilled or broken.

The sensor detects both single (e.g. impact, explosion) and periodic (e.g. drilling) pulses. The sensor also detects movements and angular displacement of the guarded surface.

The sensor switches to the alarm mode when it detects an impact on the surface (if the guard is enabled):

1. the sensor indicator blinks red once,
2. the sensor sends an alarm alert to the [Livi Smart Hub](#) (hereafter referred to as the hub).

## SENSOR APPEARANCE



1. LED indicator
2. Enclosure latch
3. Protective film
4. Battery
5. Tamper button

## BINDING THE SENSOR TO THE HUB

The sensor must be unpacked and allowed to reach room temperature for at least two hours before handling if it was transported or stored at low temperatures.

1. Pull the protective film out of the battery compartment. The sensor indicator will start blinking blue once the sensor is switched to the binding mode.
2. In the [Livicom app](#), open the "Devices" screen. In the upper right corner of the screen tap **+** and select "Add Device". The sensor indicator will blink green 5 times after successful binding.

The sensor switches to the binding mode only for 60 seconds. If you have not bound it to the hub within this period, remove the battery from the sensor (see below) for 30 seconds, and reinstall it (observing polarity). The sensor will switch to binding mode again.

## REMOVING OR REPLACING THE BATTERY

- Open the sensor enclosure to remove or replace the battery: press one of the latches (2) on the short side of the enclosure using a flat-blade screwdriver, and then pull the lid up while pressing the latch.
- Remove the battery (4).
- Install a new CR123A battery (observing polarity) if necessary and close the sensor enclosure.

## CHOOSING A LOCATION FOR THE SENSOR

The sensor is designed to be mounted on a guarded surface.

**DO NOT** install the sensor outdoors, in places with high humidity, or at temperatures exceeding the operating temperature range (see "Specifications" table).

## EVALUATING SIGNAL STRENGTH

Check the quality of the connection between the sensor and the hub at the intended location of the sensor. There are two ways to evaluate the signal strength:

1. In the Livicom app, on the sensor settings screen.
2. With the help of the LED indication on the sensor. Double-click on the tamper button and look at the sensor indicator. Interpret the indication using the table below.

Good signal	The indicator blinks green 3 times
Average signal	The indicator blinks green twice
Poor signal	The indicator blinks green once
No connection	The indicator blinks red 4 times

## SENSOR INSTALLATION

1. Open the sensor enclosure: press one of the latches (2) on the short side of the enclosure using a flat-blade screwdriver and then pull the lid up while pressing the latch.
2. Fasten the base of the sensor enclosure at the selected location using a supplied mounting kit.

We recommend fastening the sensor base with self-tapping screws, as duct tape can absorb vibration and so reduce the sensor sensitivity.

3. Close the sensor enclosure.

## CHECKING THE SENSOR OPERATION

Check the operation of the sensor after its installation. Enable full guard of the site through the Livicom app and wait for 5 minutes. Create vibration on the guarded surface (hit or move the surface).

Make sure that the sensor indication matches the information in the table "LED indication" and you see an alarm alert in the app.

### Attention

**The sensor does not monitor impacts when the guard is disabled, in order to extend battery life (in the Livicom app the sensor status will always be OK if the guard is disabled). The sensor requires from 3 to 5 minutes to switch to the standby mode and start monitoring impacts after the guard is enabled.**

Contact technical support (mail to: [support@livicom.ru](mailto:support@livicom.ru)) if you see an incorrect indication or do not receive the alert.

## DELETING THE SENSOR (UNBINDING FROM THE HUB)

There are two ways to unbind the sensor from the hub:

1. In the Livicom app, on the sensor settings screen.
2. Using the tamper button (5). Remove the battery from the sensor for 30 seconds, then press the tamper button and while holding it, reinstall the battery, observing polarity. Release the tamper button and quickly click on it until the sensor indicator starts blinking blue.

## SENSOR MAINTENANCE

Keep the sensor free of dust and dirt. Replace the battery as soon as possible after you receive a low battery notification in the Livicom app.

### Attention

**Do not wipe the sensor with substances containing alcohol, acetone, gasoline and other active solvents**

## SPECIFICATIONS

Operating frequency	868 MHz
Guaranteed operating range in open areas	up to 1000 m
Radio channel power	25 mW
Minimum angle measured	0,5°
Minimum acceleration measured	100 mg
Minimum impulse measured	30 ms
Current consumption in sleep mode	9 µA
Current consumption in operation mode	up to 30 mA
Power source (3 V)	Lithium battery CR123A
Operating temperature range	from -20 to +55 °C
Relative humidity	no more than 80% at 25 °C
Dimensions	90 x 28 x 28 mm

## SUPPLY SET

Livi VS impact sensor	1
Mounting kit	1
Lithium battery CR123A (3 V)	1
Protective film for the battery	1
Packaging	1

## LED INDICATION

An impact is detected	The indicator blinks red once
The sensor has recovered after an alarm	The indicator blinks green once
Binding mode	The indicator blinks blue for 1 minute
Confirmation of successful binding	The indicator blinks green 5 times

## WARRANTY

The manufacturer LLC "NPP Stels" guarantees that the sensor meets AGNS.421453.001 TU technical requirements, provided that the consumer complies with the conditions of transportation, storage, installation and operation.

The warranty period is 5 years from the manufacturing date. The warranty does not apply to batteries.

The warranty does not cover the following cases:

1. Non-compliance with the intended operating conditions;
2. Mechanical damage to the sensor;
3. Repairs to the sensor by a third party (a person or a company other than the Manufacturer).