



Livi CS opening sensor manual

DESCRIPTION

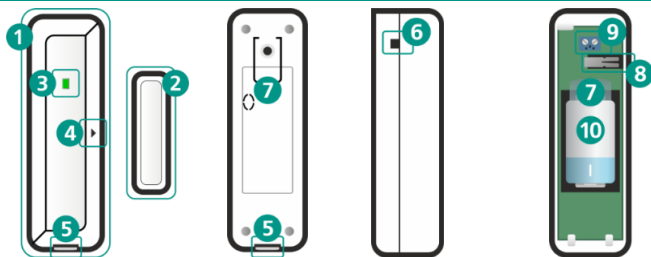
The Livi CS opening sensor (hereafter referred to as the sensor) is designed to control the opening and closing of structural elements such as doors, windows, shutters, hatches and gates.

The sensor switches to the alarm mode when the structural element is open:

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

The sensor consists of a magnetically operated switch (1) and a control element - a magnet (2). An external wired reed switch can be connected (OR circuit).

SENSOR APPEARANCE



1. Magnetically operated switch
2. Magnet
3. LED indicator
4. Mark for placing the magnet
5. Enclosure latch
6. Plug
7. Protective film
8. Tamper button
9. Terminals for connecting an external wired reed switch
10. Battery

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: press one of the latches (5) 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 (10).
- Install a new CR123A battery (observing polarity) if necessary and close the sensor enclosure.

CHOOSING A LOCATION FOR THE SENSOR

Mount the magnetically operated switch (1) to the fixed part of a structural element (e.g. a door frame), and then mount the magnet (2) to the moving part of the structural element (e.g. a door leaf or a window sash). The sensor can be mounted vertically or horizontally.

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.

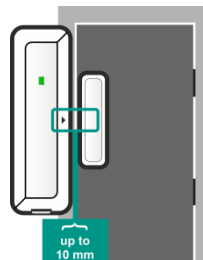
There are two ways to evaluate the signal strength:

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 enclosure of the magnetically operated switch (1): press one of the latches (5) 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.
3. Close the enclosure.
4. Similarly open the enclosure of the magnet and fasten the base of the magnet (2) to the moving part of the structural element. Place the center of the magnet near to the mark (4) on the magnetically operated switch.
5. Close the magnet enclosure.



CONNECTING AN EXTERNAL WIRED REED SWITCH

An external wired reed switch can be connected to the sensor (OR circuit).

Open the enclosure of the magnetically operated switch (if it has been closed) and connect the reed switch wires to the sensor terminals (9) as shown on the connection diagram.



Break one of the plugs (6) in the sensor enclosure to make a hole for the reed switch wire.

ATTENTION

The internal opening sensor becomes inactive once an external wired reed switch is connected. The magnet (2) must be removed and kept away from the magnetically operated switch (1)

CHECKING THE SENSOR OPERATION

Check the operation of the sensor after its installation. Make sure that the LED indication matches the information in the "LED indication" table below when you open and close the structural element (door or window).

Enable full guard of the site through the Livicom app. Make sure that you see an alarm alert in the app when you open the guarded structural element.

If you see an incorrect indication or do not receive the alert, then check:

- whether the center of the magnet is placed near to the mark (4) on the magnetically operated switch;
- whether the magnet comes near the magnetically operated switch (up to 10 mm) when you open and close the structural element (door or window).

Contact technical support (mail to: support@livicom.ru) if the magnet is placed correctly and you still observe an incorrect indication or do not receive the alerts.

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 (8). 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.

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

SPECIFICATIONS

Operating frequency	868 MHz
Radio communication range*	1000 m
Radio channel power	25 mW
Period of sending test events to the hub	2 minutes
External reed switch wire length	up to 15 m
Sensing distance	up to 10 mm
Current consumption in sleep mode	3 µA
Current consumption in active mode	up to 30 mA
Power source (3 V)	lithium battery CR123A
Battery life**	up to 10 years
Operating temperature range	from -20 to +55 °C
Relative humidity	no more than 80% at 25 °C
Magnetically operated switch dimensions	90 x 28 x 28 mm
Magnet dimensions	45 x 13 x 16 mm

* Radio communication range is the maximum distance between the hub and the sensor in line of sight and without interference.

** Battery life depends on the intensity of radio communication between the sensor and the hub. The maximum battery life can be achieved if the sensor is operated at the temperature of 25 °C, relative humidity no more than 80% and without vibration load.

SUPPLY SET

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

LED INDICATION

Open	The indicator blinks red once
Closed	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).