

STICKER

Compact battery-powered LoRaWAN sensor in three variants: Clime, Input and Motion



DOCUMENTATION

docs.hardwario.com/sticker/first-steps

Configuration, firmware updates
and integration, step by step.

Intended use

STICKER is a compact, battery-powered wireless sensor. It sends its measurements over LoRaWAN or, in LoRa P2P mode, directly to a HARDWARIO FIBER gateway.

- **STICKER Clime** measures temperature and humidity and takes external 1-Wire temperature probes.
- **STICKER Input** measures voltage on two inputs up to 30 V, captures logic and pulse signals and reads up to four 1-Wire temperature probes.
- **STICKER Motion** detects and counts motion with a passive infrared sensor (range 5 m, angle 100°).

ACCESSORIES AND SOFTWARE

The sensor is configured with the HARDWARIO Manager app on a phone with NFC. Its data are received by your LoRaWAN network server (for example ChirpStack or The Things Stack) or by a HARDWARIO FIBER gateway.

Safety

- ⚠ Read this manual before installing the device and keep it for later reference.
- ⚠ Use the device only for its intended use and within the operating conditions given in this manual.
- ⚠ Do not modify the device beyond what the documentation describes. Do not use a visibly damaged device.
- ⚠ The device is not designed for potentially explosive atmospheres.
- ⚠ Connect only signals up to 30 V DC to the inputs of STICKER Input.

First start

- 1 Open the enclosure and insert two AA cells as the polarity marks show. The LED lights red, yellow and green while the sensor starts.
- 2 The sensor ships with its radio switched off and flashes yellow every 3 seconds. Add it in the HARDWARIO Manager app with its secret key; the app talks to the sensor over NFC, even without batteries.
- 3 Tap the sensor with the phone to read its LoRaWAN keys, and register it in your LoRaWAN network server.
- 4 Write the region, the activation mode and the keys, switch the radio mode to LoRaWAN and tap again. Ten green flashes confirm the change.
- 5 A green flash after joining means the sensor is connected to the network.

Technical data

Power supply	2 × AA cell 1.5 V, lithium or alkaline
Operating temperature	−20 to +60 °C
Storage temperature	−30 to +70 °C
Ingress protection	IP30
Dimensions	91 × 36.5 × 33.3 mm
Enclosure	ABS
Mounting	Double-sided tape or two screws

Radio equipment

The device operates in the following frequency bands:

INTERFACE	FREQUENCY BAND	MAXIMUM POWER
LoRaWAN, LoRa P2P	863–870 MHz	14 dBm
NFC	13.56 MHz	passive tag, no transmitter

Batteries

The sensor runs on two size AA cells:

Two size AA cells, supplied

Lithium-iron disulfide (Li-FeS₂), primary · 1.5 V · 3 000 mAh
Energizer lithium AA

Alternatively two alkaline AA cells (LR6)

Alkaline (Zn-MnO₂), primary · 1.5 V

- ⚠ Use only the battery types listed here and insert them with the correct polarity (+ and –).
- ⚠ Never recharge a primary (non-rechargeable) cell.
- ⚠ Replace all cells of a set at the same time; do not mix old and new cells or cells of different types.
- ⚠ Do not short-circuit, open, crush or heat a battery and do not throw it into fire.
- ⚠ Keep batteries out of the reach of children.
- ⚠ A damaged or leaking battery can overheat or catch fire: take it out of service and do not touch leaking electrolyte.

⚠ Lithium batteries are dangerous goods in transport. When shipping the device, follow the carrier's rules for lithium batteries.

Replacing the battery

Open the enclosure and replace both cells with new cells of one type, observing the polarity marks in the battery holder. The settings and the stored measurements are kept.

Disposal and take-back



The crossed-out wheeled bin on the product, on its batteries or on the packaging means that at the end of their life they must not be disposed of with unsorted municipal waste: they must be collected separately.

The symbols Cd or Pb beneath the bin on a battery would mean cadmium or lead above the legal limit.

THE DEVICE

Hand the device in free of charge at a take-back point for electrical equipment, or return it to HARDWARIO.

BATTERIES

Take the batteries out first, where this is possible without damaging them, and hand them in free of charge at a battery collection point or to a battery retailer. Cover the terminals of lithium batteries with tape; do not open, puncture or burn them, and keep damaged batteries away from flammable materials.

WHY IT MATTERS

By handing them in you enable re-use, recycling and other recovery of their materials. Electrical equipment and batteries contain substances (metals, lithium compounds, flammable or corrosive electrolytes, flame retardants) that harm the environment and human health when littered or put into unsorted waste. Discarded lithium batteries can start fires in waste bins, collection vehicles and sorting plants.

LESS WASTE

You help prevent waste by using the device for its full service life. Operating it within the stated temperature range and with a reporting interval no shorter than needed extends the battery life; replace the battery, not the device.

TAKE-BACK POINTS

[www.hardwario.com/downloads/legal/
take-back-electrical-equipment-en.pdf](http://www.hardwario.com/downloads/legal/take-back-electrical-equipment-en.pdf)

Declaration of conformity

RADIO EQUIPMENT TYPES

STICKER Clime**STICKER Input****STICKER Motion**

EUROPEAN UNION



Hereby, HARDWARIO a.s. declares that the radio equipment types listed above are in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

www.hardwario.com/resources/declarations

The device also complies with Directive 2011/65/EU on the restriction of hazardous substances (RoHS).

GREAT BRITAIN



Hereby, HARDWARIO a.s. declares that the radio equipment types listed above are in compliance with the relevant statutory requirements. The full text of the declaration of conformity is available at the following internet address:

www.hardwario.com/resources/declarations

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The type designation and the serial number are given on the product label.

