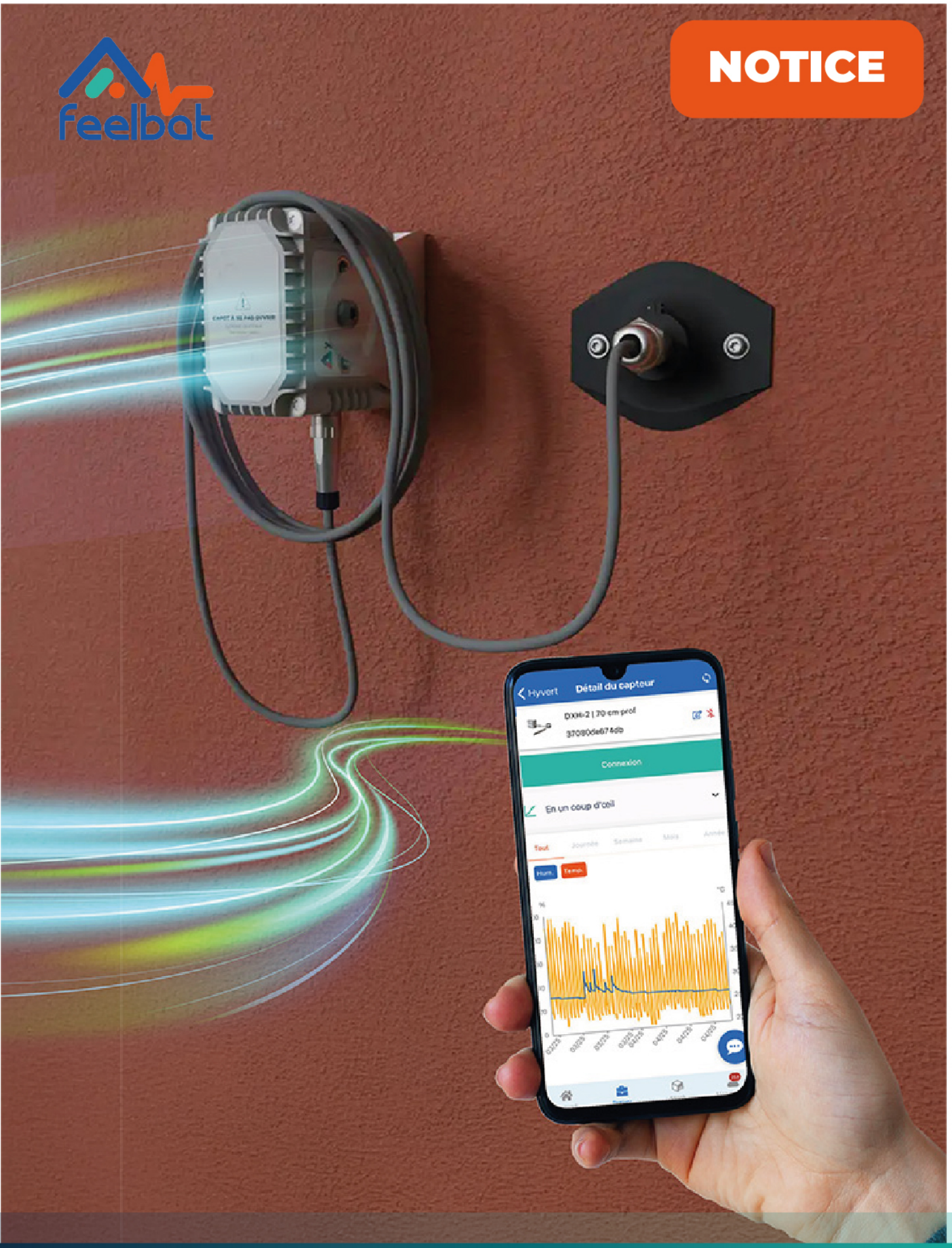
feelbat

NOTICE



DELTA X-Hm

Monitoring of moisture variation in materials

X-Hm

The DELTA X-Hm sensor is equipped with a measurement probe that allows continuous monitoring of moisture variations in materials. Values are expressed as a percentage (0–100%).

Compact & Resistant

Precise
Range from 0 to 100%

Plug & Play
Easy to use and install

Autonomous
Battery 3,6 V - 17 Ah

Connected
LPWAN radio, 4G or Bluetooth

Features

Battery 3,6 V - 17 Ah - **Battery life** 1 to 7 years*	IP66 **protective enclosure**	**Operating temperature** -25 °C to +70 °C
Resolution 1 %	**Connectivity Bluetooth & LPWAN radio**	**Measurement range** 0 to 100 %
Accuracy ±3% h.r. 20 - 80% at +20 °C, otherwise ± 5 % h.r.	**Measurement interval** from 10 min to 24 h	External temperature measurement
Internal memory 250,000 measurements	**Probe cable length** 1,5 m	**Stainless steel probe** 0 = 16 mm, Ln= 142 mm

**Depending on measurement frequency, sensor exposure, and data transmission mode (Bluetooth, LPWAN, etc.).*

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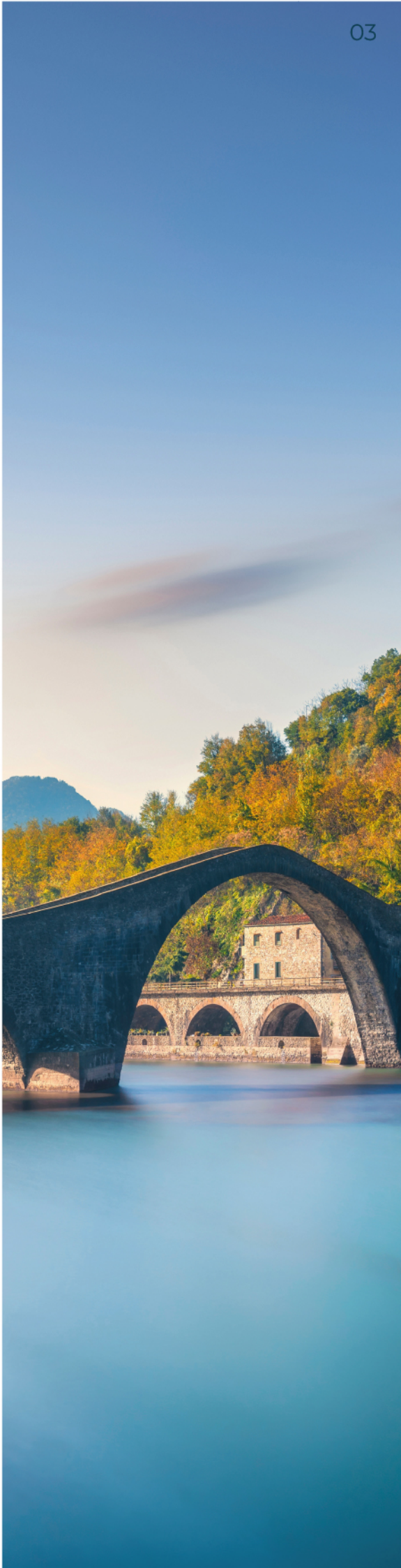
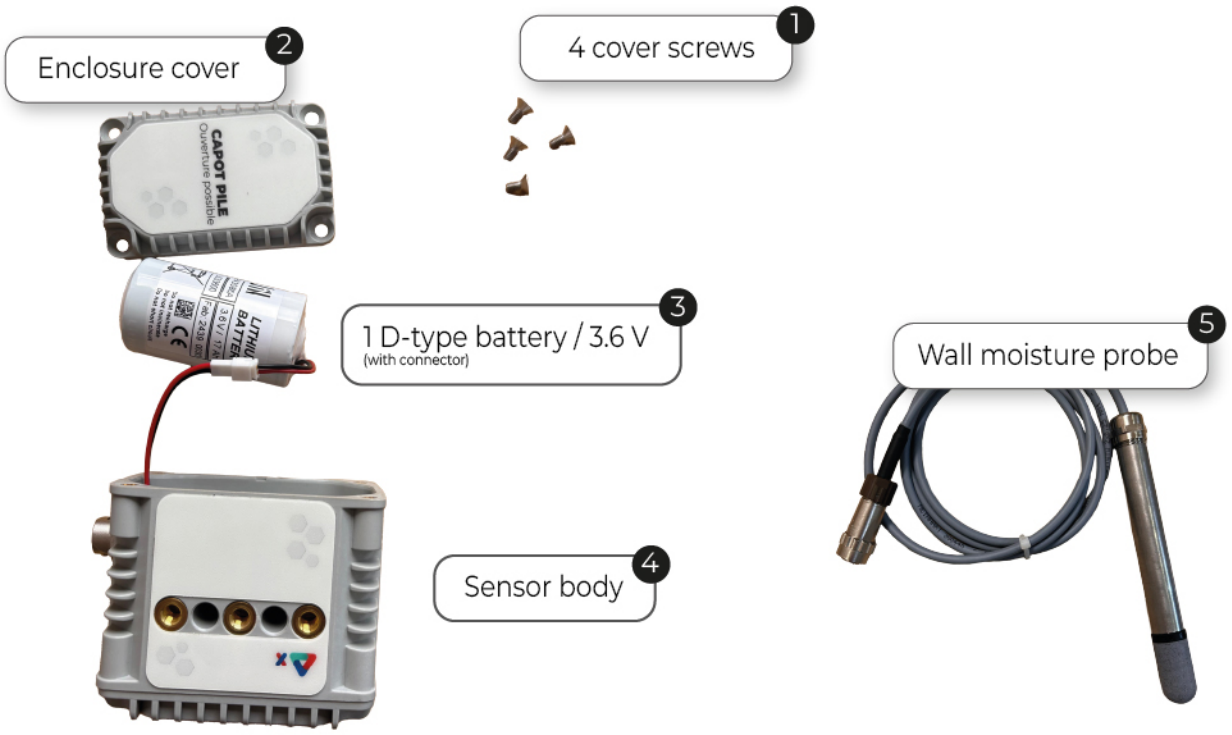
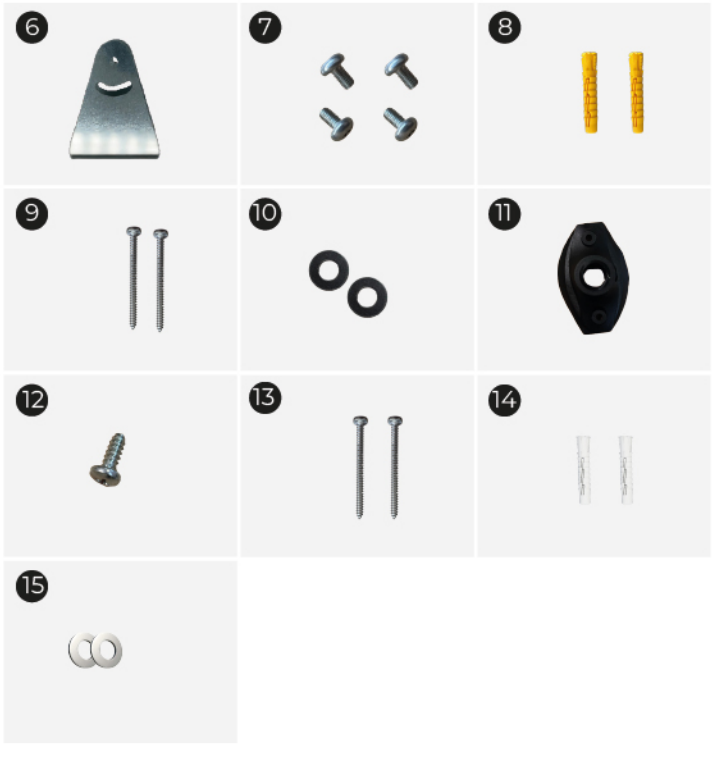


01 Packing list



Fixings



6. 1 stainless steel U-bracket
7. 4 M6 × 8 screws, stainless steel A2
8. 2 universal wall plugs, 10 × 60, nylon
9. 2 countersunk wood screws 6 × 70, stainless steel A2
10. 2 flat washers M6, stainless steel A2
11. Hm mounting bracket
12. Cross-head screw M5 × 12
13. 2 countersunk wood screws 5 × 60, stainless steel A2
14. 2 universal wall plugs, 8 × 52, nylon
15. 2 flat washers M5, stainless steel A2

02 Recommendations

This installation guide will soon be available as a video

Watch the installation video for the DELTA X-Hm

Mounting advice

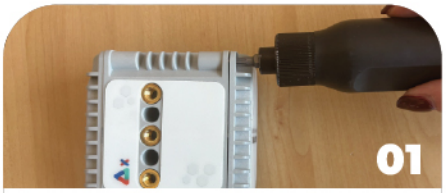
- T20 screwdriver
- T30 screwdriver for retaining screws
- Drill bit adapted to the surface: Ø 20 mm, Ø 10 mm and Ø 8 mm
- T25 screwdriver
- Cross-head screwdriver PH2
- Air blower
- Adhesive insulating tape or equivalent
- Silicone (sealant)

03 Sensor start-up

> We strongly recommend connecting and configuring your sensor via Bluetooth before going to the job site.
> It is essential to prepare your equipment 48 to 72 hours in advance and to test the Bluetooth connectivity beforehand.

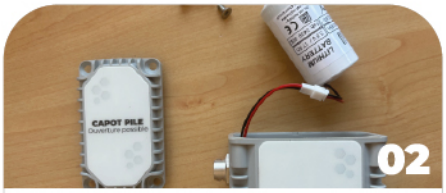
Step 1

Before installing your sensor, you must connect the battery.
Please follow the numbers shown in vert, which correspond to the items in the packing list.



To begin, **remove the DELTA X cover** *(2)* by unscrewing the 4 screws *(1)* using a TORX T20 screwdriver.

⚠ Warning: Do not remove the cover marked "Radio wave" → do not open.



Remove the battery, **then connect it** *(3)*

⚠ Use the keying notch for connection; do not rely on wire colors.

Carefully note the **serial number** (located behind the battery): you will need it to connect the sensor to the application.

Reinstall the cover *(2)* making sure the O-ring seal is correctly positioned before closing.

⚠ Pay attention to the sensor orientation; a keying system is provided to help you (orange arrow).

Press on the cover *(2)* then reinsert the screws *(1)*.

Tighten without forcing.

⚠ Use silicone grease (not supplied) to lubricate the seal during reassembly and ensure watertightness.
Do not overtighten; the screws are only used to hold the cover in place.

Your sensor is almost ready to be installed on site.

Your sensor is now:

- ✓ **Connected**
- ✓ **Prepared**

04 Download the app

To connect your sensor, install the FEELBAT mobile app:

GET IT ON Google Play

Download on the App Store

Download the FEELBAT app from your smartphone's app store.

Accept all access requests to use the app properly.

Sign up, then a confirmation email will be sent to you.

If you encounter any issues, please contact us at: (may end up in your spam folder)
SAV@feelbat.fr

04 Connect your sensor

After signing up, **open the FEELBAT app.**
You will be guided step by step to add and configure your first sensor.

Stay nearby!

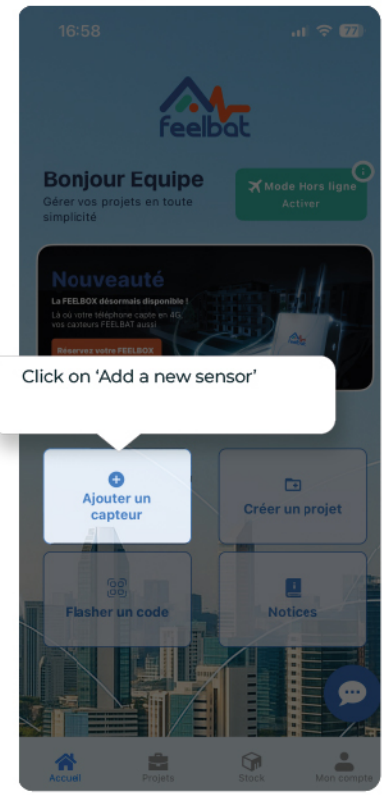
When connecting your sensor, it must be close to you in order to receive the Bluetooth signal.

Position yourself at a maximum distance of 30 to 40 meters from the sensor, in open field (no obstacles between you and the device).

Without a LINKFEEL token, you will not be able to receive data remotely, and data synchronization will only be possible via Bluetooth.

If you wish to activate remote connectivity, you must have at least 10 credits.
To do so, please contact your sales representative or write to us.

⚠ **Do not forget to enable Bluetooth on your phone.**



05 Install your sensor

Using a drill fitted with a bit suitable for the material (Ø 20 mm), **drill on the marked points.***

⚠ Remember to remove dust using an air blower.

Use the Hm mounting bracket *(11)* to mark the drilling points.

⚠ Make sure to properly center the clamp.

Drill on the marked points.

Insert the 8 × 52 wall plugs *(14)* into the holes.
Drive the plugs in using a hammer.

Unscrew the grey tip of the Hm probe.
Make sure to remove the tip straight, in a clean and dry environment, free from dust and rain.

Position the Hm mounting bracket *(11)* **on the Hm probe** *(5)*.
During reassembly, screw the tip back on, aligned with the axis, without forcing.

⚠ If resistance is felt, stop tightening and realign the tip.

Tighten the Hm mounting bracket *(11)* onto the Hm probe *(5)* using the cross-head screw *(13)* and a PH2 screwdriver, without forcing, to the desired depth.

Wrap adhesive insulating tape* around the beginning of the probe to ensure watertightness.

⚠ *Not supplied.

Insert the Hm probe into the previously drilled hole.

Before pressing the Hm mounting bracket against the wall, apply silicone* in the gap between the probe and the hole to improve sealing.

⚠ *Not supplied.

Insert the 5 × 60 screws *(13)* **and the M5 washers** *(15)* **into the wall plugs.**

Tighten using a T25 screwdriver until the wall plugs are properly anchored.

*It is possible to insert the probe into the wall without using the Hm mounting bracket.

You can use the square bracket *(5)* to mark your reference points.

Using a drill fitted with a bit suitable for the material (Ø 10 mm), **drill on the marked points** (≈ 6 cm deep).

⚠ Remember to remove dust using an air blower.

Position the wall plugs *(8)* **supplied with the sensor.**

Drive the wall plugs in using a hammer.

Then place the square bracket, followed by the washers *(9)* **and the screws** *(10).*
Tighten using a T25 screwdriver until the wall plugs are correctly anchored.

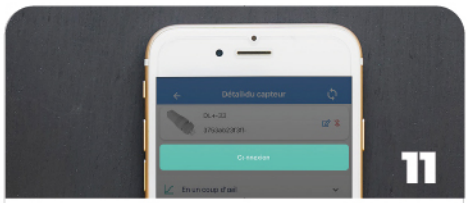
Place your sensor, then insert the screws *(7)* into the dedicated slots and tighten using a T30 screwdriver.

⚠ Orient the "Do not open" label upwards to optimize signal reception.

Connect the probe to the sensor.

Wrap the probe cable around the sensor to avoid damaging it.

Insert the probe into the hole previously drilled (approx. 1 m).



Remember to reset your data before leaving the site by clicking: Connection → Configuration → Action → Reset data.

Your sensor is now:

- ✓ **connected**
- ✓ **configured**
- ✓ **prepared**
- ✓ **installed**

If you have not yet activated your LINKFEEL token, it is not too late!

Click on Connection, select LINKFEEL activation, and run a network test.
You must be connected via Bluetooth to activate the token.
Once activated, the sensor will start communicating within a few seconds to 4 hours, depending on site exposure.

Watch the video

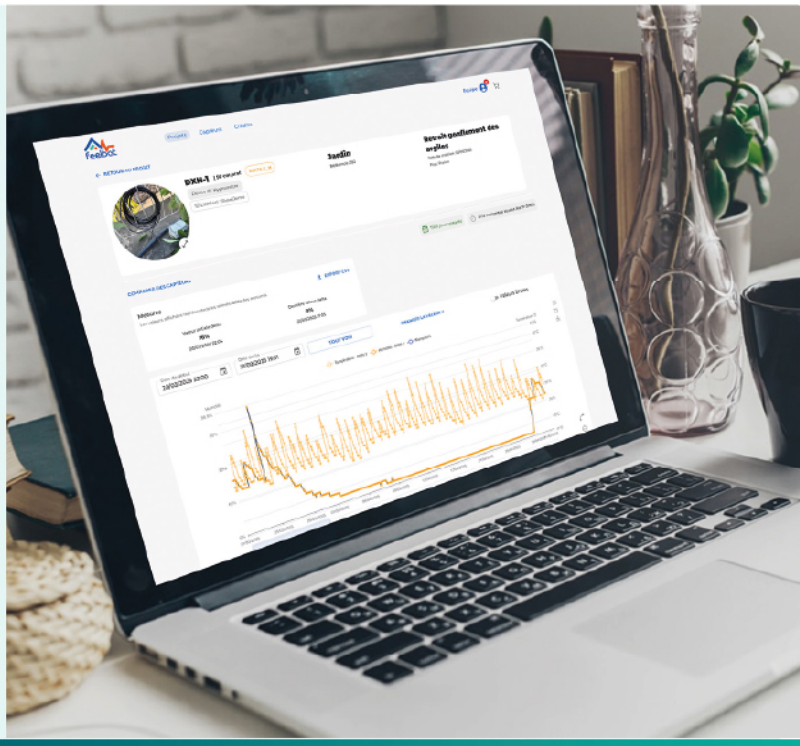
06 Webmonitoring

Go further!

All the features available on the application are also accessible via the web, making it easier to analyze and compare charts.

- ✓ SIMPLIFIED PROJECT MANAGEMENT
- ✓ ZONE VISUALIZATION
- ✓ CURVE ANALYSIS
- ✓ PDF REPORT GENERATION

ACCESS THE WEB APPLICATION



Test Button

The test button allows you **to check Sigfox coverage** when the exact address or location of the sensors has not yet been defined, thus ensuring the proper functioning of the device.

Solutions to extend your network and ensure data recovery from your sensors

The FEELBOX

The FEELBOX is a 4G gateway that ensures data transmission from your FEELBAT sensors when Sigfox coverage is insufficient.
Wherever a 4G connection is available, your sensors can transmit their measurements.

The Repeater

The repeater extends the range of sensors in low Sigfox coverage areas.
It can relay up to 15 sensors (140 messages/day) and operates on battery power with a battery life of 1 to 7 years depending on use.
A 1-year subscription is included, renewable with a LINKFEEL token.

Sigfox Microstation

The Sigfox microstation extends Sigfox coverage indoors or in poorly covered areas.
It operates on 220 V with Ethernet or 3G/4G connection (optional).
An IP65 enclosure is recommended for outdoor use.
3G/4G USB dongles are available as an option (SIM card not included).

If you have any questions, please contact us:
SAV@feelbat.fr

07 Use case





Flooding, rising damp?

In the event of flooding, the DELTA X-Hm enables precise monitoring of residual moisture levels in materials and helps verify proper drying of the building over time.
In cases of rising damp, it helps objectify moisture evolution and confirm the effectiveness (or not) of the solutions implemented.

Automatic measurements avoid repeated site visits and provide quantified evidence that can be used in expert reports.
Remote monitoring makes it possible to decide the right time for intervention, extended monitoring, or case closure.

07 Useful Information

FEELBAT products are covered by the legal warranty of conformity.
This warranty covers defects of conformity with respect to the sales contract that appear within two years following delivery of the product.
They are also covered by the warranty against hidden defects, which applies to defects not apparent at the time of sale and which render the product unfit for use or significantly reduce its use.
As such, the warranty does NOT apply in the following cases:

- The sensor has fallen
- The housing is damaged (impacts, cracks, marks)
- The sensor is used for non-compliant purposes
- The sensor has been immersed in water
- The sensor is stored or used outside the temperature range (-25 °C to +70 °C)
- The fixings restrict the linear operation of the sensor
- The sensor is used beyond its measurement range
- The sensor was purchased more than 2 years ago

Have a question?

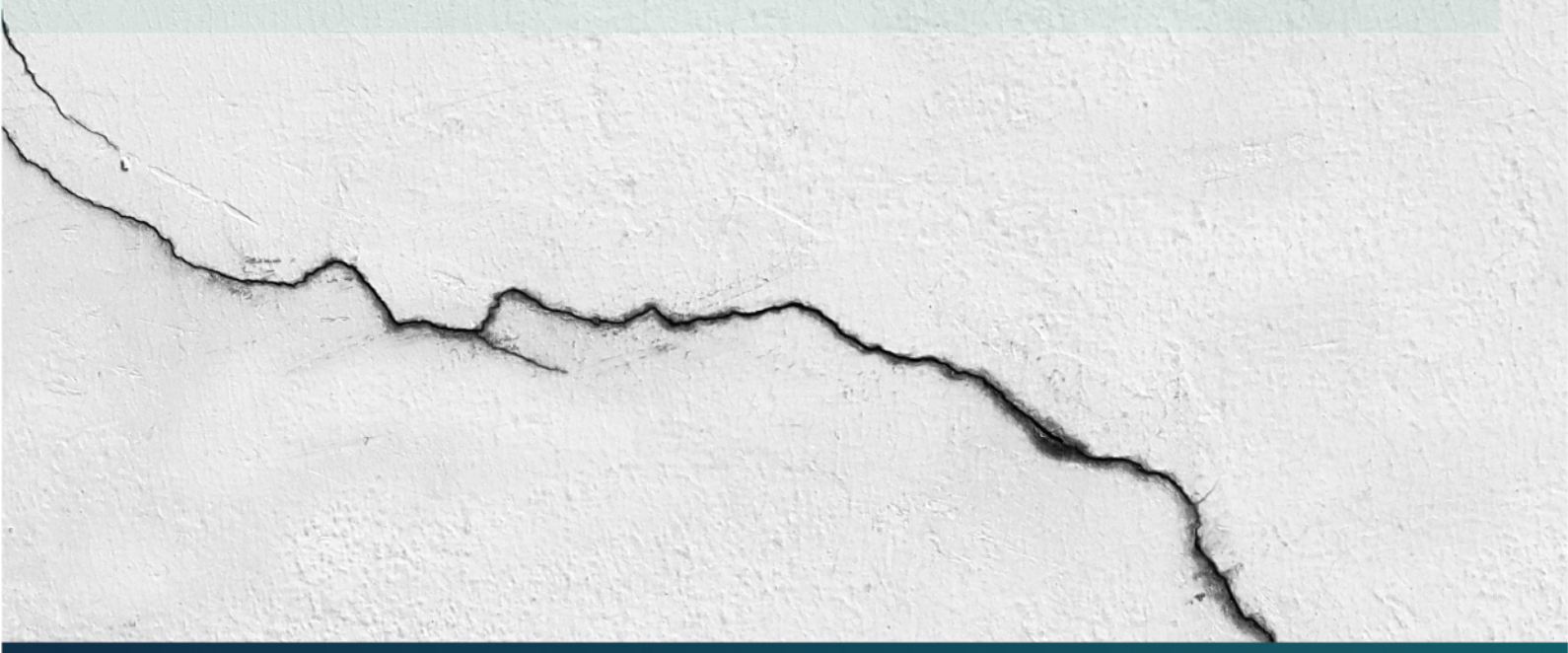
Visit our FAQ: it gathers answers to the most frequently asked questions and guides you step by step in using our solutions.

Access the FAQ

If you have a crack
You FEELBAT

Discover our tutorial videos

Watch the help videos



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