Catalog
2026



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Got a crack, get FEELBAT

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About

In 2018, in Marseille, a tragic event deeply marked Jean-Christophe HABOT, the founder. Buildings collapsed in his childhood neighborhood, causing several dramatic losses. With his background in building engineering, a question naturally arose: why not develop a way to proactively monitor cracks in order to prevent potential disasters?

This is how FEELBAT was born, driven by the desire to respond to a critical need in building engineering.
The goal?
To make structural monitoring as accessible and efficient as everyday actions facilitated by technology, while contributing to the safety and durability of buildings.

FEELBAT offers innovative connected solutions for the structural monitoring of buildings and infrastructures.

Our sensors provide precise data on cracks, tilting movements, humidity, and much more, enabling remote, real-time monitoring to anticipate potential damage. Quick installation and setup help you save time and stay proactive.

Building experts, surveyors, engineering firms, construction companies, and local authorities — we have the solution to simplify the management of your projects.



Boost your productivity

Monitoring your structures has never been so easy thanks to a real-time application designed by building engineers. Say goodbye to costly surprises and take back control of your buildings' health to ensure the durability of your structures.

Advantages of connected sensors

Early problem detection

Our sensors continuously monitor cracks, tilts, and humidity to respond quickly in case of anomalies.

Decide faster, act earlier.

Process optimization

Data is transmitted automatically, without the need for on-site visits.

Your productivity increases and you react proactively and efficiently.

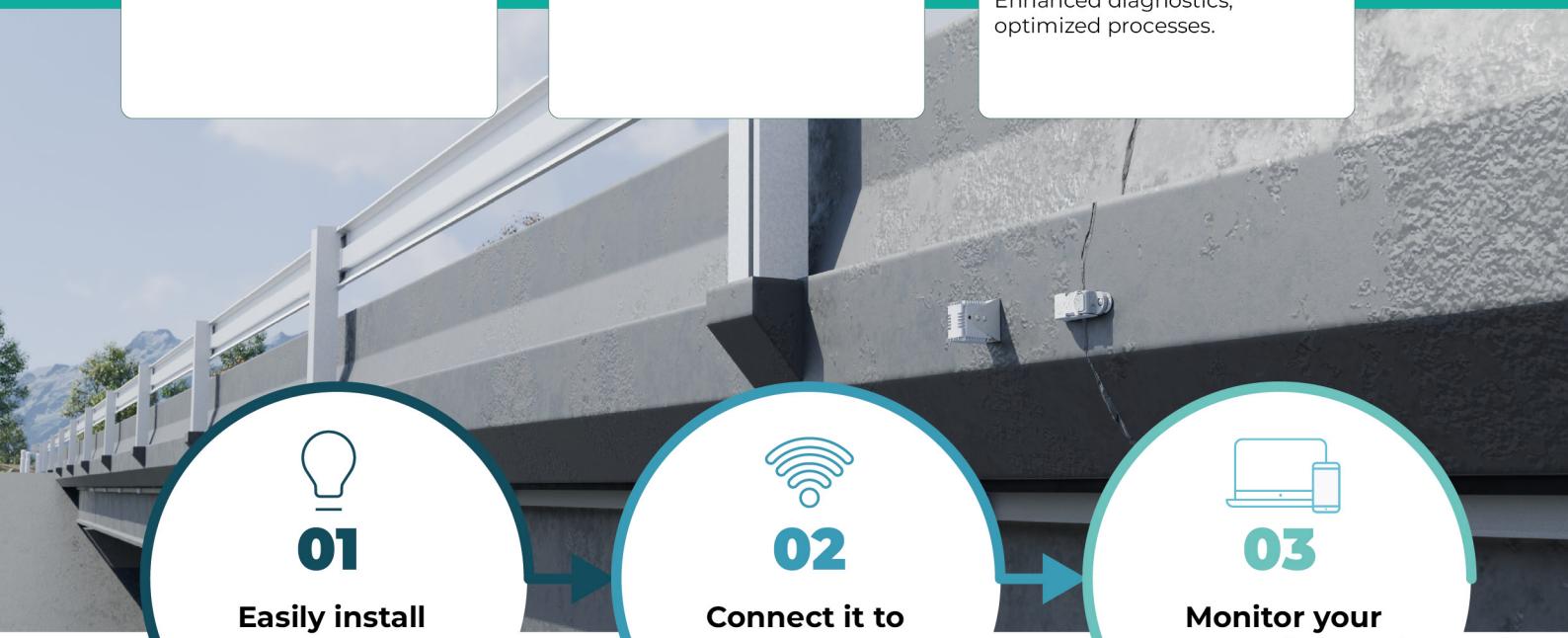
Gain in responsiveness and performance.

Cost reduction & reliability

Monitor continuously and avoid emergency interventions.

By combining data, diagnostic reliability is strengthened through a global view of the structure's condition.

Enhanced diagnostics, optimized processes.



01

Easily install your sensor

02

Connect it to your phone

03

Monitor your structures in real time

MADE IN FRANCE

Made in France

Most of our suppliers are based in France. Manufacturing and assembly are carried out on French territory.



Tailored and turnkey
solutions

Natural risks

Railway

Building / Industry

Civil engineering structures

Geotechnics

Mining

Structural engineering offices
- Correlate data from our sensors and produce effective diagnostics supported by precise curves.

Geotechnical engineering offices
- Automatically monitor groundwater levels and soil moisture to quickly detect soil–structure interactions.

Building & Public Works companies
- Monitor surrounding constructions to measure the impact of your work and react immediately.

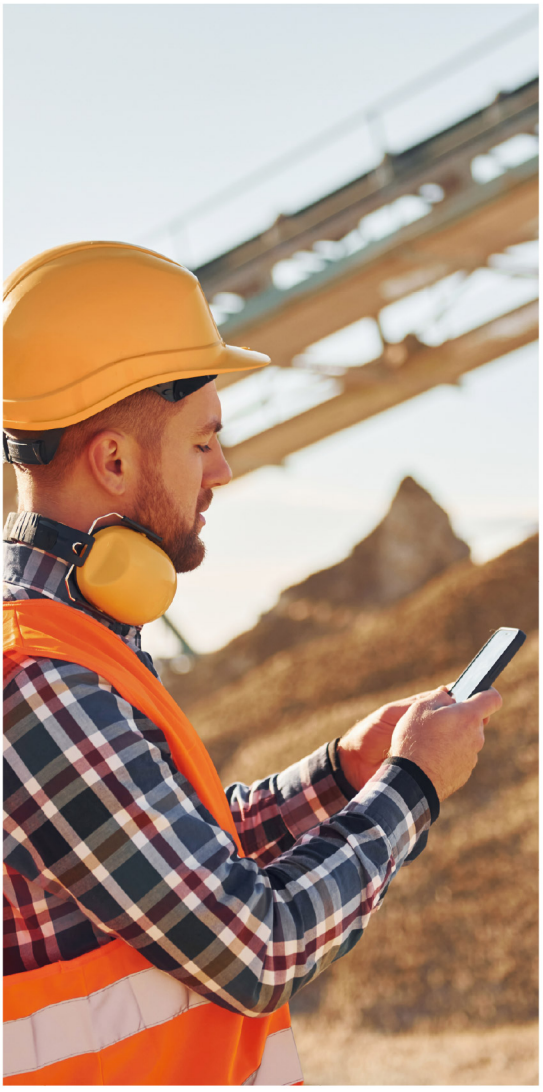
Asset managers / Owners
- Secure users thanks to our system that alerts you of any suspicious structural movement.

Experts
- Link the evolution of cracks, soil moisture, and inclination to analyze the impact of clay shrink–swell.

Property managers (Syndics)
- Gain in proactivity as soon as a disorder occurs, ensuring satisfied co-owners.

Surveyors (Geometers)
- Thanks to connected inclinometers, carry out continuous monitoring without heavy investment or site visits.

Architects, Project Managers
- Your construction sites are continuously monitored before, during, and after works, with permanent access to the data.



Structural monitoring
Specific and durable sensors

Innovative technologies for continuous monitoring

Monitoring tool
Mobile and web application

Remote monitoring via Sigfox, 4G and Bluetooth (and soon LoRaWAN)

Dedicated support
Field experts

Personalized solutions, design assistance, and structural expertise

Anticipate to repair
Continuous monitoring

Optimized maintenance costs and predictive planning

Building health,
a fundamental necessity

Over the past five years, many civil engineering structures and buildings, particularly in major metropolitan areas such as Bordeaux, Lille, Marseille, and Lyon, have suffered collapses, leading to dramatic consequences.

The aging of our structures requires careful monitoring in order to intervene quickly and apply corrective measures.

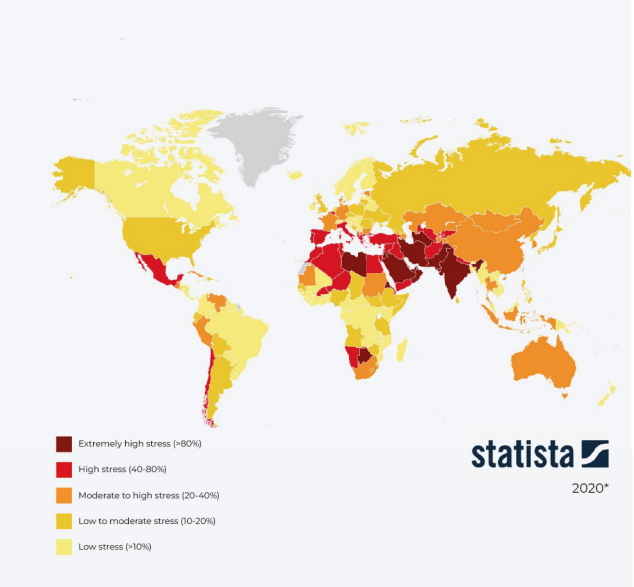
Nearly **10.4 million** detached houses are built on clay soils, and currently more than 4,900 structures show a deteriorated state of health. **The shrink–swell phenomenon is spreading exponentially due to climate change.**

Drought now affects new areas, which are facing unprecedented climatic consequences.

In 2022, 370 municipalities were recognized as being in a state of natural disaster, a 44% increase compared to the previous record in 2003 (4,437 municipalities recognized).

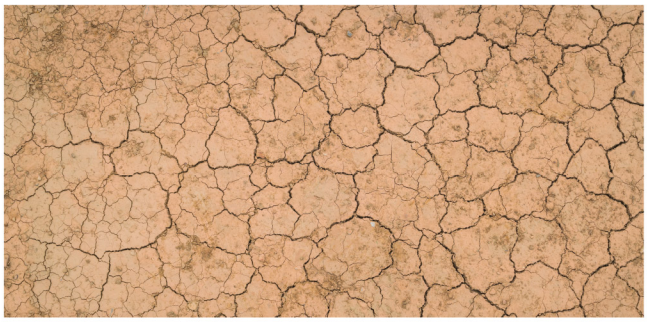
Moreover, stability defects **increased by 11% over the same period**, highlighting significant and costly problems, often linked to poorly identified land, especially on former industrial sites.

Not to mention **maintenance defects: for example, 1,500 municipal decrees have been issued for dangerous buildings** since the end of 2018 in Marseille alone.



Drought
worldwidepar

Drought now affects more than 1.8 billion people worldwide. In a report published at COP28, the United Nations Convention to Combat Desertification recalled that water scarcity has multiple repercussions.





MANUAL CRACK GAUGES

Manual crack gauges

JC1 and JC2 for your cracks

Easy to install, this precise instrument allows users to manually record data related to cracks.
This information can then be easily integrated into the FEELBAT application, providing a simple and organized way to monitor the evolution of deformations.

This combination of manual sensors and digital interface ensures reliable monitoring and optimal crack management, helping to proactively preserve the integrity of structures.

Compact & Resistant

Precise
1/100 mm

Plug & Play
Easy to use and install

Digital
Easy reading for greater accuracy

4 measurement types
Opening, shear, misalignment, angular

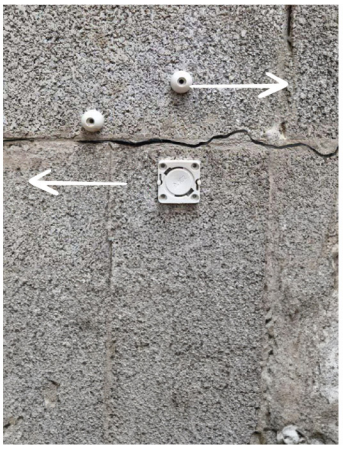
Features

4 measurements types	**Dimensions** 22 x 4,5 x 7 cm	**Weight** 0.85kg
Battery LR44 - 1,5V	**Electronics - digital reading**	**Maximum range** 14 cm
Resolution 0.01 mm	**Mounting** All types of materials	**Gauge installation** adhesive, hammer-in anchor

Available measurements



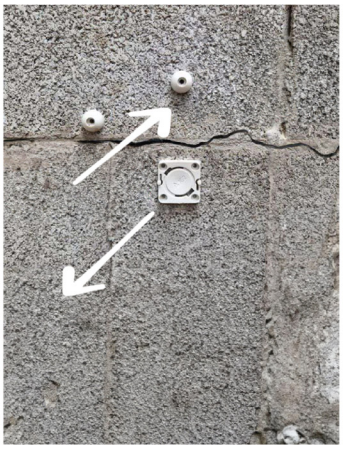
Opening



Shear



Angular measurement



Misalignment



Pack – DELTA L Expert

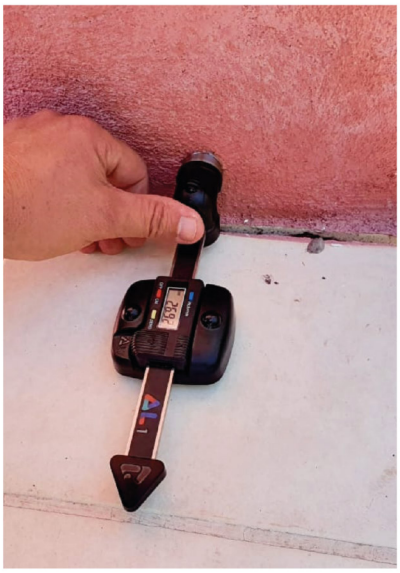
The DELTA L Expert is a complete **crack gauge that allows you to monitor your cracks on all 3 axes** with high precision.

Simply take your measurements and record them in the application for regular monitoring.

REF : EXDL

199 € excl. VAT

The Expert pack, the most complete in the range, is ideal for **precise monitoring of cracks on the three axes: opening, shear and misalignment.**



Included in the pack

- 1 DELTA L1 electronic measuring ruler
- 10 JC1 polycarbonate gauges for monitoring 5 cracks
- 1 DELTA L2 measuring tool
- 1 DELTA L0 calibration block
- 3 JC2 gauges for monitoring 3 cracks in shear and misalignment
- 25 hammer-in anchors for fixing (drilling Ø 5 mm)

Gauges can be fixed using hammer-in anchors or two-component adhesive *(sold separately).*



Pack – DELTA L Essential

The DELTA L Essential is a crack gauge that allows you **to monitor crack opening** with high precision.

Simply take your measurements and record them in the application for regular monitoring.

REF : ESDL

149 € excl. VAT

The Essential pack is ideal for monitoring crack opening.
This pack allows you to monitor 5 cracks.



Included in the pack

- 1 DELTA L1 electronic measuring ruler
- 1 DELTA L0 calibration block
- 10 JC1 polycarbonate gauges for monitoring 5 cracks
- 10 hammer-in anchors for fixing (drilling Ø 5 mm)

Gauges can be fixed using hammer-in anchors or two-component adhesive *(sold separately).*



DELTA L MAX50

The DELTA L MAX50 pack allows you **to monitor cracks or fractures** with several centimeters of displacement on both axes — opening and shear — thanks to a measuring ruler with a travel of approximately 50 cm.

REF : DLMAX50

899 € excl. VAT

The system is used in the same way as the DELTA L monitoring tool, with JC1 gauges and the same features available in the FEELBAT application.



Included in the pack

- 1 DELTA L MAX50 electronic measuring ruler
- 1 storage case
- 1 set of 5 pairs of JC1 stainless steel gauges
- 1 DELTA L0 MAX calibration block

For calibration, you can use the DELTA L0 MAX device *(included)*



DELTA L MAX100

The DELTA L MAX100 pack allows you **to monitor cracks or fractures** with several centimeters of displacement on both axes — opening and shear — thanks to a measuring ruler with a travel of approximately 100 cm.

REF : DLMAX100

999 € excl. VAT

The system is used in the same way as the DELTA L monitoring tool, with JC1 gauges and the same features available in the FEELBAT application.



Included in the pack

- 1 règle de mesure électronique DELTA L MAX100
- 1 boite de rangement
- 1 lot de 5 paires de jauges JC1 Inox
- 1 étalon DELTA L0 MAX

For calibration, you can use the DELTA L0 MAX device *(included)*

DELTA L Expert Fixings



M5 x 25 Hammer Anchors

Pack of 25 hammer anchors for hollow or solid supports (wood, brick, concrete, stone).

The anchors are galvanized, premium quality, 5 × 37 mm length (may vary from 5 to 7 mm depending on stock).

Sold in the Essential and Expert packs and individually in bags.

REF : SCHFR

10 € excl. VAT



Two-Component Adhesive 10 g

High strength and ultra-fast setting on all supports (concrete, wood, metal, stone, plaster).

Economical 10 g format for extended use.

Durable bonding in 3 to 4 minutes, with initial grip in 1 minute.

REF : KIT7

12 € excl. VAT

Consumables / Accessories



JC1 Light Grey
Polycarbonate measuring marker for 5 cracks

10 units - 5 pairs
REF : PACJC1G

38 € excl. VAT



JC1 Stainless Steel Grey
Stainless steel measuring marker for 5 cracks
10 units - 5 pairs
REF : PACJC1I

120 € excl. VAT



JC1 Light Grey
Polycarbonate measuring marker for 50 cracks

100 units - 50 pairs
REF : 10XPACJC1G

350 € excl. VAT



JC1 Stainless Steel
Stainless steel measuring marker for 50 cracks

100 units - 50 pairs
REF : 10XPACJC1I

999 € excl. VAT



JC2
Shear and differential movement measuring plate

X3
REF : PACJC2G

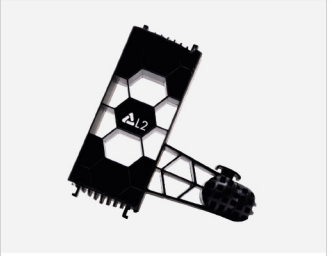
49 € excl. VAT



DELTA L0
Calibration device

REF : DL0

60 € excl. VAT



DELTA L2
Measuring tool

Shear and differential movement
REF : DL2

60 € excl. VAT



2 Button Batteries
LR44 / A 76 - 1,5 V

For DELTA L1
REF : PIL1x2

4 € excl. VAT

Use case

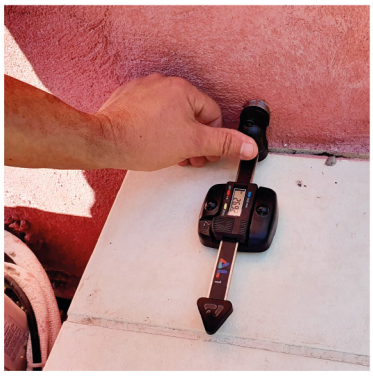




















CONNECTED CRACK SENSORS

Cracks

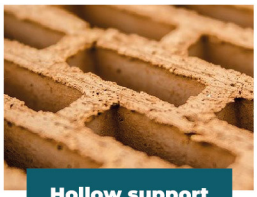
DELTA L+, DELTA XL100, DELTA L+ Mini & DELTA X-L100S

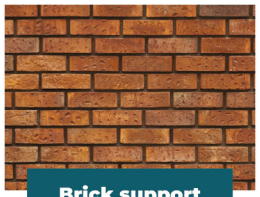
FEELBAT connected crack sensors are designed to ensure accurate and continuous monitoring of structural crack openings. Thanks to their Plug & Play technology, they are easy to install without heavy civil works and transmit data in real time.

Measurements can be viewed on an intuitive web platform or via the FEELBAT mobile application, offering a clear visualization of trend curves and customizable alert configuration.

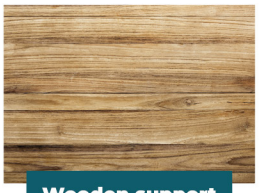
- **Compact & Résistant**
- **Precise**
- **Plug & Play**
- **Autonomous**
- **Connected**

Adaptable to all types of materials


Hollow support


Brick support


Metal support


Wooden support


Stone support

Our range of connected crack sensors



DELTA L+
Crack monitoring



DELTA X-L100
Large-amplitude crack monitoring



DELTA L+ mini
The smallest connected crack sensor in the world



DELTA X-L100S
Submersible crack sensor



DELTA L+

The DELTA L+ is a connected sensor designed **to monitor cracks** with precision and full autonomy. It measures crack movements on site or remotely and records the external temperature, all accessible directly from a smartphone.

REF : DLL+

319 € excl. VAT

Features

Crack and temperature monitoring	**Dimensions** 13 cm x 5,5 cm	**Weight** 250 g
Battery 3,6 V - 2,6 Ah - **Battery life** 1 to 4 years*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range 0 to 25 mm (±1)	**Accuracy** ± 0.1 FS - ± 1 °C	**Resolution** 0,01 mm - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Protection rating** IP66

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA L+ crack sensor
- 1 3.6 V battery
- 2 connection caps with plastic ball joint
- 1 hex head screw M6 × 20, stainless steel A4
- 2 M6 nuts, stainless steel A4
- 8 screws for thermoplastic, ZI stainless steel A2

Mounting advice

- Solid support (PF1)
- Hollow support (PF12)
- Magnetic support (PF8)
- Tri-axis support (TRIAXE)



LinkFeel token included
Remote connection for 1 year

DELTA L+ – Complete

This mounting pack is designed for installing the DELTA L+ crack sensor **on hollow or solid supports.**
The DELTA L+ can be mounted on a flat surface or at an angle.
DELTA L+, mountings and connection token included.

REF : DLL+FULL

399 € excl. VAT

Included in the pack

- 1 DELTA L+ pack
- PF11 pack – solid support **OR** PF12 pack – hollow support
- 1 LinkFeel token (1 year of connection)

Mounting advice

- Refer to the installation manual depending on the type of support.

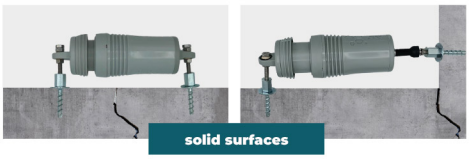


DELTA L+ – Solid surface

This mounting pack is designed for the installation of the DELTA L+ crack gauge **on solid surfaces** (concrete, solid brick, stone, etc.).
The DELTA L+ can be mounted on a flat surface or at an angle.
DELTA L+ included.

REF : DLL+PF11

348 € excl. VAT



Included in the pack

- 1 DELTA L+ pack
- PF11 pack – solid surface mounting

Mounting advice

- Air blower
- 10 mm open-end or socket wrench for screws and nuts
- 13 mm open-end (or socket) wrench for concrete anchors
- Hammer (for angled ball joint mounting)
- PH1 Phillips screwdriver
- Drill bit suitable for the surface – Ø 6 mm

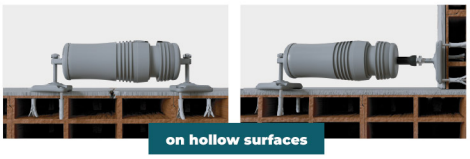


DELTA L+ - Hollow surface

This mounting pack is designed for the installation of the DELTA L+ crack gauge **on hollow surfaces** (hollow brick, concrete blocks, drywall, etc.).
The DELTA L+ can be mounted on a flat surface or at an angle.
DELTA L+ included.

REF : DLL+PF12

348 € excl. VAT



Included in the pack

- 1 pack DELTA L+
- + pack PF12 - support creux

Mounting advice

- Air blower
- 10 mm open-end or socket wrench for screws and nuts
- 13 mm open-end (or socket) wrench for concrete anchors
- Hammer (for angled ball joint mounting and anchors)
- PH1 Phillips screwdriver
- Drill bit suitable for the surface – Ø 5 mm

DELTA L+ Mounting Kits



SOLID SURFACE MOUNTING KIT

DELTA L+ mounting kit for **solid surfaces, flat or angled surfaces**, with galvanized concrete anchors.
This pack does NOT include the DELTA L+ crack sensor.

REF : PF11

29 € excl. VAT

Included in the pack

- 2 concrete anchors with female sleeve M6 × 35
- 4 nuts M6, INOX A4
- 2 hex head bolts M6 × 60, INOX A4
- 1 right Igus ball joint for angled mounting
- 1 flat washer M6, INOX A2

Mounting advice

- Drill bit suitable for the surface Ø 6 mm
- Air blower
- 2 open-end (or socket) wrenches of 10 mm for bolts and nuts
- Open-end (or socket) wrench of 13 mm for concrete anchors
- Hammer (for installing the ball joint)



HOLLOW SURFACE MOUNTING KIT

DELTA L+ mounting kit for hollow surfaces, flat or angled surfaces, with galvanized concrete anchors.
This pack does NOT include the DELTA L+ crack sensor.

REF : PF12

29 € excl. VAT

Included in the pack

- 6 nuts M6, INOX A4
- 2 hex head bolts M6 × 60, INOX A4
- 8 hammer-in anchors PZ M5, zinc-plated steel
- 2 polycarbonate brackets, DELTA FIX
- 1 right Igus ball joint for angled mounting
- 1 flat washer M6, INOX A2

Mounting advice

- Drill bit suitable for the surface Ø 5 mm (for anchors)
- Air blower
- 2 open-end or socket wrenches of 10 mm for bolts and nuts
- Phillips screwdriver PH2
- Hammer

DELTA L+ Mounting Systems



MAGNETIC MOUNTING KIT

Drill-free mounting **using magnets for DELTA L+ and DELTA R,** allowing crack or angle measurements without weakening the structure.
This pack does NOT include the DELTA L+ crack sensor.

REF : PF08

35 € excl. VAT

Included in the pack

- 2 pot magnets, ferrite, Ø 32 mm, M6 thread
- 1 Igus ball joint for angle measurements
- 1 flat washer M6, INOX A2
- 2 spacers M6
- 4 nuts M6, INOX A4
- 2 hex head bolts M6 × 60, INOX A4

Mounting advice

- 10 mm open-end or socket wrench
- Phillips screwdriver PH1
- Hammer



TRI-AXIS MOUNTING KIT

The tri-axis bracket is designed to **measure crack movements along three axes: opening, shear, and displacement,** providing a complete and precise analysis of structural evolution.
This pack does NOT include the DELTA L+ crack sensor nor the fixings..

REF : TRIAXE

98 € excl. VAT

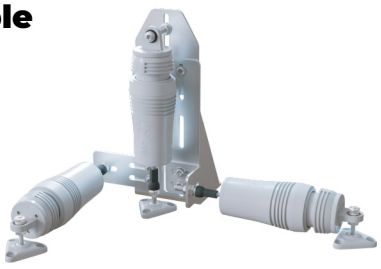
Included in the pack

- 1 TRI-AXIS INOX assembly
- 10 Torx countersunk screws M6 × 16, INOX A2
- 13 flanged Nylstop nuts M6, INOX A2
- 4 universal nylon anchors, 10 × 60 (10 mm drilling, M6 screw)
- 4 Torx wood screws, rounded head 6 × 70, INOX A2
- 4 flat washers M6, INOX A2
- 2 nuts M6, INOX A4
- 1 hex head bolt M6 × 60, INOX A4

Mounting advice

- Air blower
- Torx screwdriver T25
- Torx screwdriver T30
- 10 mm open-end wrench
- Drill bit suitable for the surface Ø 10 mm
- Hammer (for inserting nylon anchors)

Installation example



Consumables / Accessories



AA Battery
LS14500

REF : PIL2

18 € excl. VAT



Pack of 5 AA Batteries
LS14500

REF : PILE3

75 € excl. VAT



Threadlocker 271
5ml

REF : COL3

10€ excl. VAT



x2 Ball joint connections
plastiques N°2

REF : ROT2X2

15 € excl. VAT



x2 Ball joint connections
inox N°1

REF : ROT4X2

59 € excl. VAT



x2 ball joint connections
Straight N°3

REF : ROT3X2

20 € excl. VAT



x6 Zinc-plated anchor bolts
M6 x 85 mm

REF : GO75

15 € excl. VAT



x6 Zinc-plated anchor bolts
M6 x 55 mm

REF : GO45

12 € excl. VAT



x4 Concrete anchors
female sleeve - M6 6 x 35

REF : CHB01

10 € excl. VAT



x25 Hammer-in wall plugs
M5 - 47mm

REF : SCHFR

10 € excl. VAT



Zinc-plated drive rod
for sleeve - M6 + 10 sleeve

REF : TIG01

30 € excl. VAT



x10 Drive-in sleeves
zinc-plated steel with collar
M6 x25 mm

REF : DOU01

8 € excl. VAT



Additional DELTA L+ connection

REF : CODL

23 € excl. VAT



Protective enclosure
300 x 200 x 130

REF : BOIT302013

68 € excl. VAT

Use case







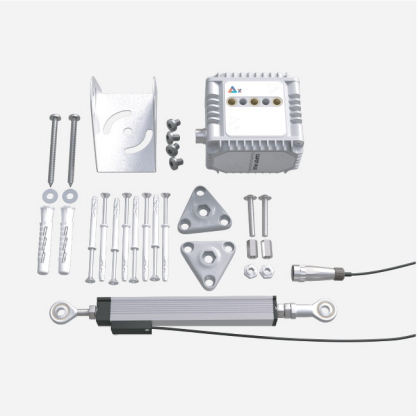












DELTA X-L100

The DELTA X-L100 is a connected electronic potentiometric sensor specifically designed **to monitor large-amplitude crack movements.**
It offers a **displacement range from 0 to 100 mm.** Equipped with a displacement sensor, it features dedicated ball joints for easy fixing at both ends.

REF : DELXL100

739 € excl. VAT

Features

Large-amplitude crack monitoring	**Cable length** 2 m	**Crack gauge size** 175 mm
Battery 3,6 V - 2,6 Ah - **Battery life** 1 to 7 years*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range 0 to 100 mm (±1)	**Accuracy** ± 0.2% FS - ± 1 °C	**Resolution** 0.01 mm - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Probe protection rating** IP65

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA X sensor
- D batteries 3.6 V
- U bracket inox
- 4 M6 × 8 screws, inox A2
- 2 universal wall plugs 10 × 60, nylon
- 2 wood screws round head 6 × 70, inox A2
- 2 flat washers M6, inox A2
- 1 potentiometric probe
- 2 hex socket head screws with flange, M5 × 35, inox A2
- 2 spacers M5, inox A2
- 2 Nylock nuts M5, inox A2
- 2 DELTA FIX
- 8 hammer-in wall plugs PZ head M5, zinc-plated steel

Mounting advice

WARNING - Fixings are Ø5 mm at the ball joints

- T20 screwdriver
- T30 screwdriver for locking screw
- TORX 25 screwdriver
- Ø10 mm drilling for nylon wall plug
- PH3 Phillips screwdriver
- 8 mm open-end wrench
- 3 mm Allen key

DELTA X-L100
sold separately



Logger X

REF : DLLX

449 € excl. VAT



Potentiometric probe
X-L100

REF : SXL100

325 € excl. VAT



Cable Extension

REF : EXTX

On request

Use case

















DELTA L+ mini

The DELTA L+ mini provides **accurate and autonomous crack monitoring**, as well as monitoring of the impact related to sun exposure on façades.
It can be fixed by bonding using our patented device or mechanically fixed.
Linkfeel connection token and fixings included in the pack!

REF : DLL+miniJET

399 € excl. VAT

Features

Crack and light level monitoring	**Dimensions** 14,5 x 4,7 x 3,5 cm	**Weight** 150 g
Battery 3.6 V - 2.6 Ah - **Battery life** 1 to 5 years*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range 0 to 20 mm (±1)	**Accuracy** ± 0.1% FS - ± 1 °C	**Resolution** 0.01 mm - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Protection rating** IP66

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA L+ Mini sensor and its mounting pack
- As a gift: 2 JCI crack gauges
- 1 one-year connection token

Mounting advice

- Screwdriver with T15 bit
- Screwdriver with T20 bit
- 10 mm open-end or socket wrench (for M6 nuts)
- Hammer (to drive in wall plugs)
- Ø5 mm drilling for hammer-in wall plug
- Ø10 mm drilling for nylon wall plug
- PH3 Phillips screwdriver



DELTA L+ mini

The DELTA L+ mini provides **accurate and autonomous crack monitoring**, as well as monitoring of the impact related to sun exposure on façades.
It can be fixed by bonding using our patented device or mechanically fixed.
Fixings included in the pack!

REF : DLL+mini

350 € excl. VAT

Included in the pack

- Kit “7” two-component adhesive 10G
- Square for angled installation
- 1 Torx round head screw, M6 × 15, inox A2
- 1 low nut M6, inox A2
- 2 flat washers M6, inox A2
- 2 universal wall plugs 10 × 60, nylon
- 2 Torx wood screws, round head 6 × 70, inox A2
- 2 hammer-in wall plugs PZ M5, zinc-plated steel
- As a gift: 2 JCI crack gauges

Mounting advice

- Screwdriver with T15 bit
- Screwdriver with T20 bit
- 10 mm open-end or socket wrench (for M6 nuts)
- Hammer (to drive in wall plugs)
- Ø5 mm drilling for hammer-in wall plug
- Ø10 mm drilling for nylon wall plug
- PH3 Phillips screwdriver

DELTA L+ mini Mounting Kits



BI-COMPONENT ADHESIVE MOUNTING KIT

The pods are fixed directly onto the surface, previously prepared using the supplied adhesive. The mixer ensures a uniform application of the product. The pusher is used to facilitate sensor positioning during installation.

REF : PFMIN01

35 € excl. VAT

Included in the pack

- 1 pusher
- 2 isopropyl alcohol wipes 70%
- 4 pods
- 1 bi-component adhesive 10 g
- 3 mixers
- 4 plastic screws Ø 3.5, INOX A4

Mounting advice

- Quick adhesive fixing (sets in 3 seconds)



Tri-axis Mounting Kit

The tri-axis bracket is designed to **measure crack movements along three axes: opening, shear, and offset**, providing a complete and precise analysis of structural evolution.

This pack does not include the DELTA L+ mini crack sensor.

REF : TRIAXE

98 € excl. VAT

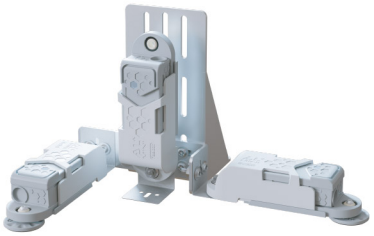
Included in the pack

- 1 tri-axis INOX assembly
- 10 Torx countersunk screws, M6 × 16, INOX A2
- 13 Nylstop countersunk nuts, M6, INOX A2
- 4 universal wall plugs 10 × 60, Nylon (drilling Ø10, M6 screw)
- 4 Torx wood screws, round head 6 × 70, INOX A2
- 4 flat washers M6, INOX A2
- 2 nuts M6, INOX A4
- 1 hex head screw M6 × 60, INOX A4

Mounting advice

- T25 screwdriver
- T30 screwdriver
- 10 mm open-end wrench
- 13 mm open-end wrench
- Drill bit Ø10 mm adapted to the surface
- Hammer (to insert Nylon wall plugs)

Installation example



Consumables / Accessories



Threadlocker 271
5 ml

REF : COL3

10€ excl. VAT



6 x Galvanized anchor bolts
M6 x 85 mm

REF : GO75

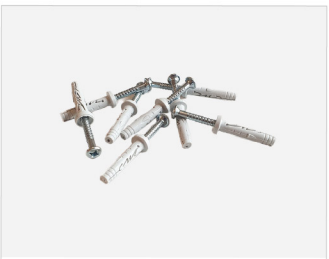
15 € excl. VAT



6 x Galvanized anchor bolts
M6 x 55 mm

REF : GO45

12 € excl. VAT



25 x Hammer-in wall plugs
M5 - 47 mm

REF : SCHFR

10 € excl. VAT



Bi-component adhesive
10 g

REF : KIT4

12 € excl. VAT



Protective enclosure
300 x 200 x 130

REF : BOIT302013

68 € excl. VAT



DELTA L+ mini battery
Battery 17500

REF :PIL6

14 € excl. VAT



5 x DELTA L+ mini batteries
Battery 17500

REF :PILE6

60 € excl. VAT

Use case





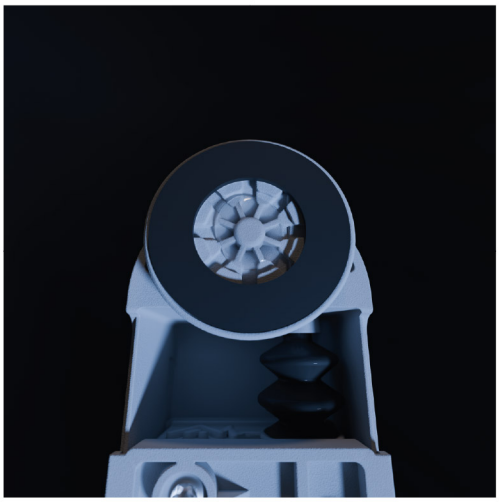


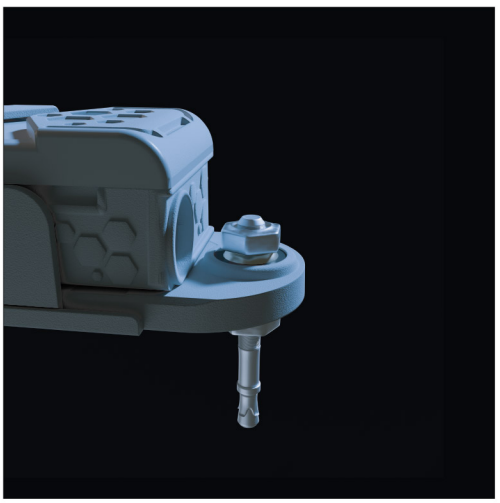


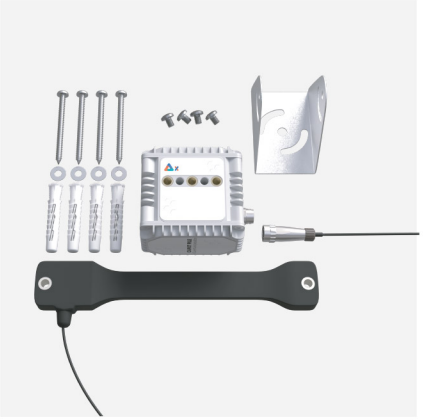












DELTA X-L100S

The DELTA X-L100S is a submersible crack-monitoring sensor offering a 100 mm stroke, designed for the most demanding environments.
Combined with the DELTA X logger, it measures temperature and automatically records and transmits data for precise and continuous monitoring. Only the sensor is submersible.

REF : DXS100

1 484 € excl. VAT

Features

Submersible crack monitoring	**Cable length** 10 m	**Weight** 300 g
Battery 3.6 V - 2.6 Ah **- Battery life** 1 to 7 years*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range 100 to 250 mm (±1)	**Accuracy** ± 0.5% FS - ± 1 °C	**Resolution** 0.01 mm - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Probe protection rating** IP68

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA X sensor
- 1 D battery 3.6 V
- 1 U bracket – inox
- 4 M6 × 8 screws – inox A2
- 4 universal nylon wall plugs 10 × 60
- 4 Torx wood screws, round head 6 × 70 – inox A2
- 4 flat washers M6 – inox A2
- 1 submersible probe – 100 mm stroke

Mounting advice

WARNING - Fixings use Ø5 mm at the ball-joint level

- T20 screwdriver
- Ø10 mm drilling for nylon wall plugs
- T30 screwdriver for locking screw
- T25 screwdriver

DELTA X-L100S
sold separately



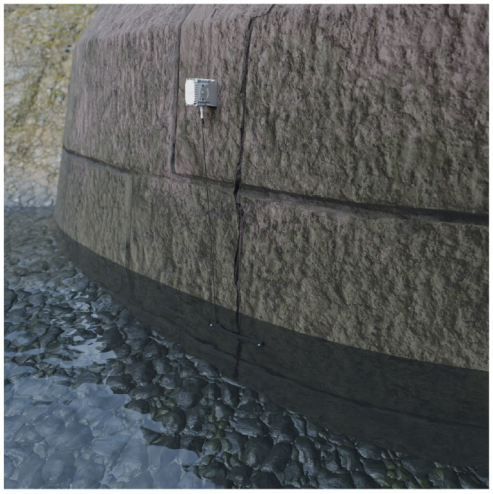
Logger X

REF : DLLX

449 € excl. VAT

Use case









THE EXTENSO PACK

Convergence

DELTA L+ Extenso Pack

With the DELTA L+ Extenso Pack, you transform your sensor into a convergence meter.
The DELTA L+ Extenso Pack enables accurate displacement measurements over long distances. Thanks to its plug & play technology, it is easy to install without heavy works and transmits data in real time.

Measurements can be viewed via an intuitive web platform or via the FEELBAT mobile application, offering clear visualization of trend curves and customizable alerts.

Compact & Resistant

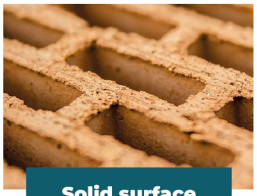
Precise

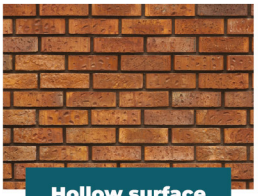
Plug & Play

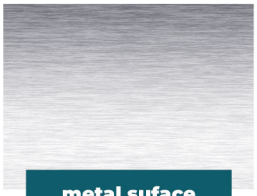
Autonomous

Connected

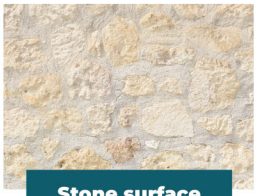
Adaptable to all types of materials


Solid surface


Hollow surface


metal suface


wooden surface

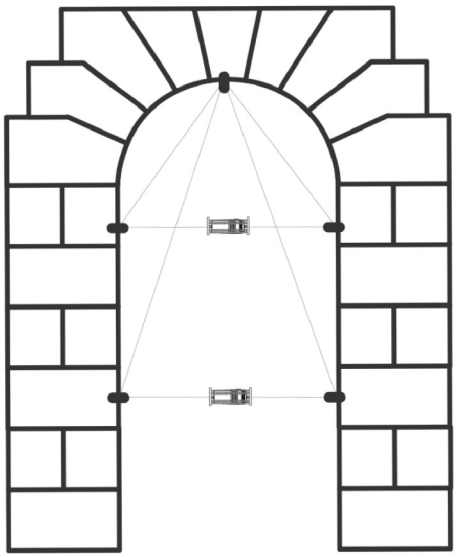

Stone surface

When should convergence measurement be used?

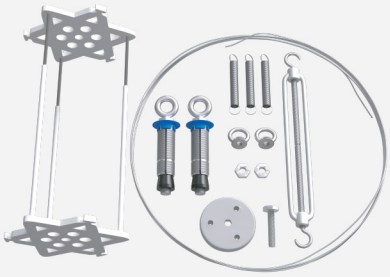
Different use cases

Convergence measurement is used in many contexts, such as:

- Monitoring the evolution of an arch
- Measuring the behavior of vertical walls
- Monitoring the deflection of a floor
- Tracking cracking or movement between two tunnel walls
- Monitoring a structure or building during construction works
- Preventive actions for short-, medium-, or long-term maintenance
- During demolition works



10 ML



Extenso Pack – DELTA L+

The Extenso Pack includes **all the components required for installing the extensometer.**
It allows the stability or structural integrity to be assessed by detecting convergence variations.
A DELTA L+ sensor is required (sold separately).

REF : PEX10

349 € excl. VAT

Features

Convergence monitoring	**Dimensions** 20 cm x 85 cm	**Weight** 450 g
Battery 3,6 V - 2,6 Ah - **Battery life** 1 to 4 years*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range 0 to 25 mm (±1)	**Accuracy** ± 0.1 FS - ± 1 °C	**Resolution** 0,01 mm - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**INVAR wire**

**Depending on the measurement interval and network used.*

Included in the Pack

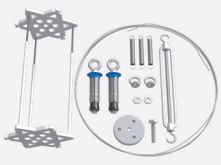
- 1 extenso assembly
- 3 return springs
- 2 low-profile M6 nuts, INOX A2
- 1 turnbuckle 6 × 110, galvanized steel
- 2 M6 eye nuts, INOX A4
- 2 eye anchors
- 1 cover with hexagonal screw M6 × 20, INOX A4
- 2 M6 nuts, INOX A4
- 10 m INVAR extenso wire

Mounting advice

- Drill with bit adapted to the surface (Ø16 mm for eye anchors)
- 10 mm open-ended wrench (M6 nuts and eye nuts)
- 10 mm open-ended wrench (for M6 × 20 screw)
- PH1 Phillips screwdriver (connection cover)
- Hammer
- 2.5 mm Allen key
- Scissors or cutting pliers

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20 m

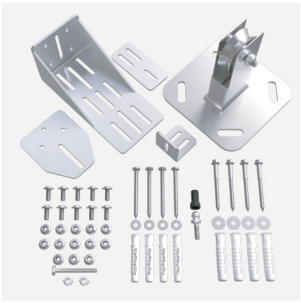


Pack Extenso
20 m INVAR wire

REF : PEX20

469 € excl. VAT

Extenso Pack Mounting Accessories



Angle Mounting Pack with Offset Pulley

It allows you to measure the distance between two walls when this distance exceeds 6 to 8 meters. With an angle bracket mounting, the sensor can be offset in an accessible area, making maintenance easier.
Also available with a 45 cm offset pulley.

REF : FPEX15

235 € excl. VAT

Included in the pack

- 1 TRI-AXE mounting pack
- 1 straight Igus joint
- 1 offset pulley 15 cm
- 4 universal anchors, 12×60, NYLON
- 4 wood screws, hex head, 8×70, INOX A2
- 4 flat washers M8, inner Ø 8.4; outer Ø 18, INOX A2

Mounting advice

- Ø10, Ø12, Ø16 mm drill bits adapted to the material (for universal nylon anchors 12×60)
- Open-end wrench or socket wrench 13 mm (for 8×70 hex-head wood screws)
- PH1 Phillips screwdriver (if additional tightening of the cover or accessories is needed)
- Hammer
- Air blower
- T25 screwdriver
- T30 screwdriver
- 10 mm open-end wrench

Consumables / Accessories



INVAR Wire Spool
10 ML

REF : INV10

129 € excl. VAT



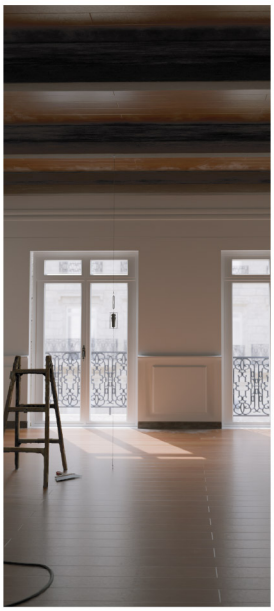
INVAR Wire Spool
20 ML

REF : INV20

242 € excl. VAT

Use case











TILT AND DEFORMATION SENSORS

Tilt and deformation

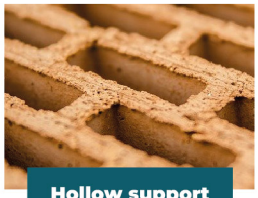
DELTA R and Inclinometric Line

Connected tilt sensors and inclinometric lines from FEELBAT are designed to provide accurate and continuous monitoring of structural movements and deformations. Thanks to their Plug & Play technology, they are easy to install, require no heavy work, and transmit data in real time.

Measurements are accessible through an intuitive web platform or via the FEELBAT mobile app. The interface offers a clear visualization of tilt variations, long-term trend monitoring, and customizable alerts to anticipate any critical structural evolution.

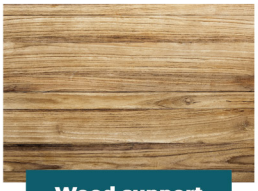
- **Compact & Resistant**
- **Precise**
- **Plug & Play**
- **Autonomous**
- **Connected**

Adaptable to all types of materials


Hollow support


Brick support


Metal support


Wood support


Stone support

Our range of sensors



DELTA R
Tilt monitoring



Ligne inclinométrique
Deformation monitoring



DELTA R

The DELTA R is **a bi-axial tilt sensor** designed to accurately monitor the tilt movements of walls or structures. Fully autonomous, it also measures outdoor temperature, which can be viewed directly from a smartphone.
Fixings included

REF : DLLR

425 € excl. VAT

Features

Biaxial tilt monitoring	**Dimensions** 8 x 8 cm / Th. 5 cm	**Weight** 350 g
Battery 3.6 V - 2.6 Ah - **Battery life** 1 to 7 years*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range ± 10°	**Accuracy** ± 1° (angles) - ± 1 °C	**Resolution** 0,01 ° - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Protection rating** IP66

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA R sensor
- 1 D-cell battery 3.6 V
- 1 stainless-steel U-mount
- 4 M5 × 8 screws, INOX A2
- 2 universal anchors 10 × 60, NYLON
- 2 round-head wood screws 6 × 70, INOX A2
- 2 flat washers M6, INOX A2

Mounting advice

- T20 screwdriver
- Ø10 mm drilling for nylon anchors
- T30 screwdriver for retaining screw
- T25 screwdriver
- Air blower



DELTA R

The DELTA R is **a bi-axial tilt sensor** designed to accurately monitor the tilt movements of walls or structures. Fully autonomous, it also measures outdoor temperature, which can be viewed directly from a smartphone.
Fixings and 1-year Linkfeel token included

REF : DLLRJET

475 € excl. VAT

Included in the pack

- 1 DELTA R pack
- 1 Linkfeel token included

Mounting advice

- T20 screwdriver
- Ø10 mm drilling for nylon anchors
- T30 screwdriver for retaining screw
- T25 screwdriver
- Air blower

DELTA R Mounting Accessories



MAGNETIC MOUNTING KIT

Drill-free mounting **using magnets for DELTA L+ and DELTA R,** allowing crack or angle measurements without weakening the structure.
This pack does NOT include the DELTA R crack sensor.

REF : PF08

35 € excl. VAT

Included in the pack

- 2 pot magnets, ferrite, Ø 32 mm, M6 thread
- 1 Igus ball joint for angle measurements
- 1 flat washer M6, INOX A2
- 2 spacers M6
- 4 nuts M6, INOX A4
- 2 hex head bolts M6 × 60, INOX A4

Mounting advice

- 10 mm open-end or socket wrench
- Phillips screwdriver PH1
- Hammer

Consumables / Accessories



Type D Battery
3,6v DELTA R

REF : PIL4

35 € excl. VAT



Threadlocker 271
5 ml

REF : COL3

10 € excl. VAT



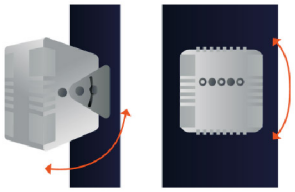
Protective enclosure
300 x 200 x 130

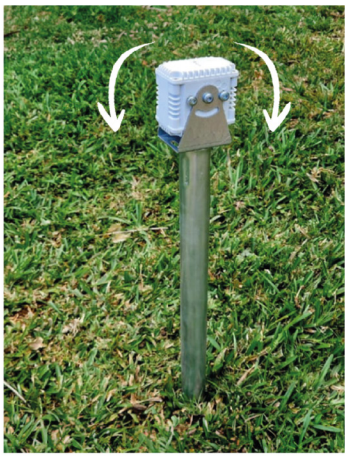
REF :BOIT302013

68 € excl. VAT

Use case

2 angle measurements
X et Y

























Inclinometric Line

The inclinometric line makes it possible **to monitor global structural deformations and millimetric displacements over long distances.**
Each aluminium segment is mounted on bi-axial articulated brackets, allowing freedom of movement and enabling full tracking of structural variations.

**** Want to know more? Call us! ! ****

Features

Deformation monitoring	**Segment dimensions** 0,5 to 2 m	Modular design
Battery 3.6 V - 2.6 Ah - **Battery life** 1 to 7 years*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range ± 10 °	**Accuracy** ± 0,01 ° - ± 1 °C	**Resolution** 0,01 ° (angular) - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	Specific technical modules

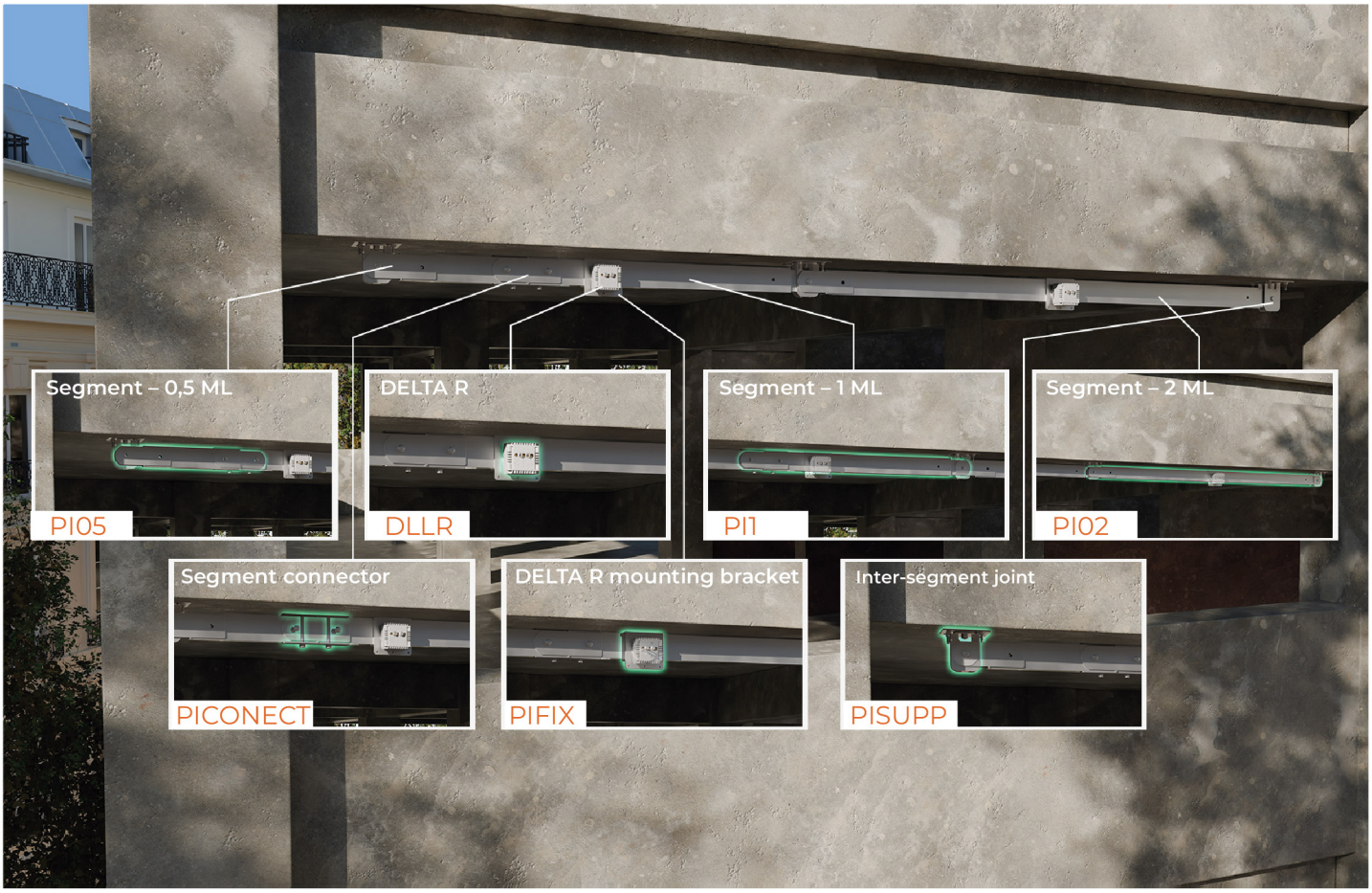
**Depending on the measurement interval and network used.*

Included in the pack

- See the list of individual elements

Mounting advice

- Drill bit adapted to the surface
- Hammer
- Anchors (4 per inter-segment joint)
- Screwdrivers: T20 – T30
- Wrenches: 10 – 12 – 17



Elements of the Inclinometric Line



ALUMINIUM INCLINOMETRIC SEGMENT – 0.5 M

Each aluminium segment is mounted on bi-axial articulated brackets, providing freedom of movement to track all structural variations.

REF : PI05

188 € excl. VAT



ALUMINIUM INCLINOMETRIC SEGMENT – 1 M

Each aluminium segment is mounted on bi-axial articulated brackets, providing freedom of movement to track all structural variations.

REF : PI1

224 € excl. VAT



ALUMINIUM INCLINOMETRIC SEGMENT - 2 M

Each aluminium segment is mounted on bi-axial articulated brackets, providing freedom of movement to track all structural variations.

REF : PI2

276 € excl. VAT



SEGMENT CONNECTOR

This connector allows free assembly of inclinometric line segments to achieve the desired length.
For example, it enables you to connect a 2 m segment with a 1 m segment to obtain a total length of 3 m.

REF : PICONECT

57 € excl. VAT

Included in the pack

- 4 M10 nuts, INOX A2
- 2 M10 × 60 hex-head screws, INOX A2
- 1 clamp assembly

Mounting advice

- x2 17 mm wrenches



ARTICULATION BRACKET

Inclinometric line segment bracket – lateral mounting.
It must always be used together with the inter-segment articulation.
Important: this bracket is an add-on to the underside mounting support; it is sold separately.

REF : PIEQU

52 € excl. VAT

Included in the pack

- 1 inclinometric segment bracket
- 4 universal anchors, 12 × 60, NYLON
- 4 hex-head wood screws, 8 × 70, INOX A2
- 4 flat washers M8, inner Ø 8.4; outer Ø 18, INOX A2

Mounting advice

- 13 mm wrench



INTER-SEGMENT ARTICULATION

This 2-axis articulation is designed to connect two inclinometric line segments while allowing flexible movement. Ideal for underside mounting.

REF : PISUPP

86€ excl. VAT

Included in the pack

- 1 hex-head screw M10 × 60, INOX A2
- 1 M10 nut, INOX A2
- 2 low-profile M10 nuts, INOX A2
- 1 M8 nut, INOX A2
- 1 Teflon disc D93
- 4 Teflon discs D70
- 1 support assembly
- 4 universal anchors, 12 × 60, NYLON
- 4 hex-head wood screws, 8 × 70, INOX A2
- 4 flat washers M8, inner Ø 8.4; outer Ø 18, INOX A2

Mounting advice

- x2 17 mm wrenches
- One 13 mm wrench



DELTA R MOUNTING BRACKET

This bracket allows you to fasten the DELTA R easily and securely.
The DELTA R is not included.

REF : PIFIX

57€ excl. VAT

Included in the pack

- 8 Torx screws M6 × 8, INOX A2
- 4 Torx countersunk screws M4 × 12, INOX A2
- 2 smooth-base M6 nuts, INOX A2
- 1 DELTA R mounting bracket assembly

Mounting advice

- T30 screwdriver
- T20 screwdriver
- 10 mm wrench

Use case



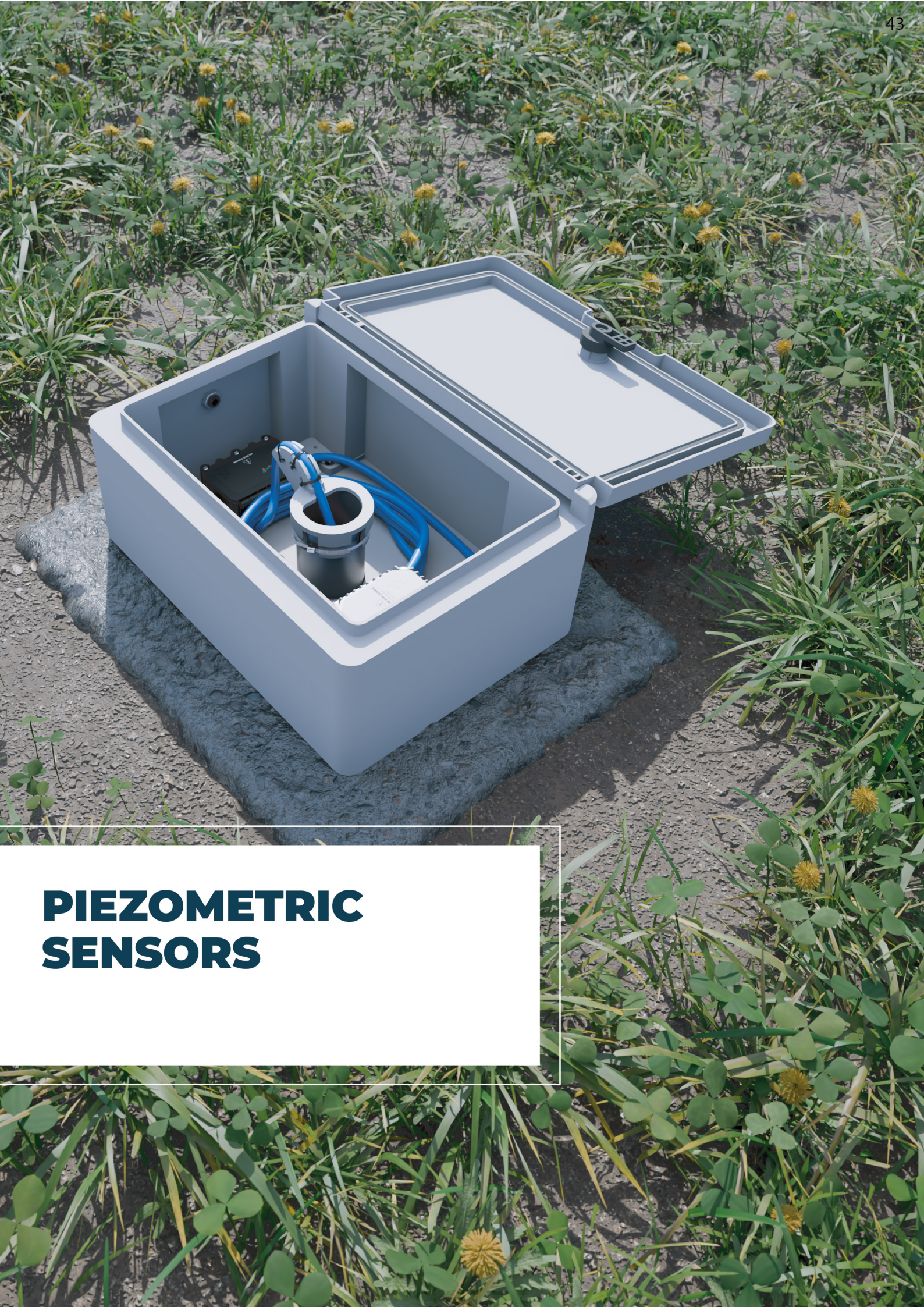












PIEZOMETRIC SENSORS

Groundwater Level Monitoring

DELTA X-P

The DELTA X-P is a piezometric sensor that continuously measures the groundwater level and its variations, for example after a rainfall event. Easy to install (plug & play) and requiring no heavy works, it transmits data in real time and remotely.

Measurements are accessible through an intuitive web platform or via the FEELBAT mobile app.

Compact & Resistant

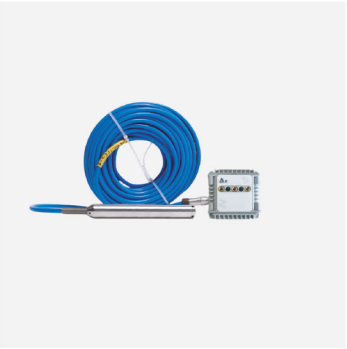
Precise

Plug & Play

Autonomous

Connected

Our range of connected piezometers



DELTA X-P

Groundwater monitoring without mounting support



DELTA X-P F1

Groundwater monitoring with external mounting support



DELTA X-P F2

Groundwater monitoring with secured mounting enclosure



DELTA P

Groundwater monitoring

10 m



DELTA X-P - 10 M

The DELTA X-P sensor is supplied with an **immersed piezometric probe designed to monitor groundwater level variations.**
The piezometric probe is equipped with a reinforced cable and a waterproof connector, also integrating an atmospheric pressure compensation system.

REF : DLXP10

799 € excl. VAT

Features

Groundwater level monitoring	**Dimensions** Ø 21,4 mm II length 170 mm	**Weight** 150 g
Battery 3.6 V - 2.6 Ah - **Battery life** 1 to 7 years*	**Connexion** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range 0–10 m or 0–20 m	**Accuracy** ± 0.3% FS - ± 1 °C	**Resolution** 0,01 mm - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Probe protection rating** IP68

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA X logger unit
- 1 piezometric probe with 10 m cable

Mounting advice

Important: the mounting kit is not included

- TORX T20 wrench
- Manual piezometric probe

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20 m



DELTA X-P
Probe with 20 m cable

REF : DLXP20

899 € excl. VAT

X m

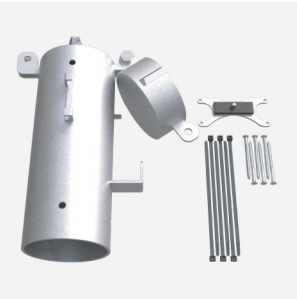


DELTA X-P
Variable cable length available on request

REF : DLXPX

on request

DELTA X-P Mounting Kits



PACK DE FIXATION 1

The X-P mounting kit provides a complete solution to install your DELTA X-P sensor in outdoor environments.
This pack includes all the elements required for optimal assembly, ensuring stable and durable installation.

REF : PFXP01

250 € excl. VAT

Included in the pack

- 1 galvanized steel mounting pole
- 6 cable ties
- 6 wood screws
- 1 atmospheric enclosure mount

Mounting advice

The padlock is not included in the pack

Important: the DELTA X-P sensor is not included



PACK DE FIXATION 2 - Enclosure

The X-P enclosure mounting kit provides a complete solution to install and secure your DELTA X-P sensor in outdoor or industrial environments.
This pack includes all components needed for optimal installation, ensuring stable mounting and protection against external elements.

REF : PFXP02

149 € excl. VAT

Included in the pack

- 1 ABS enclosure Ø 90 mm pre-drilled, with integrated DELTA X mounting, lockable door
- 1 cable guide 60–75
- 3 nylon cable ties
- 8 smooth-base nuts M6, INOX A2
- 4 hex-head screws M6 × 100

Mounting advice

Important: the DELTA X-P sensor is not included

- 10 mm socket wrench for nuts
- Concrete bag (for pole installation)
- Trowel
- Manual piezometric probe
- T20 screwdriver

DELTA X-P Probe

sold separately



Logger X

REF : DLLX

449 € excl. VAT



Piezometric probe
10 m

REF : SXP10

449 € excl. VAT



Piezometric probe
20 m

REF : SXP20

549 € excl. VAT

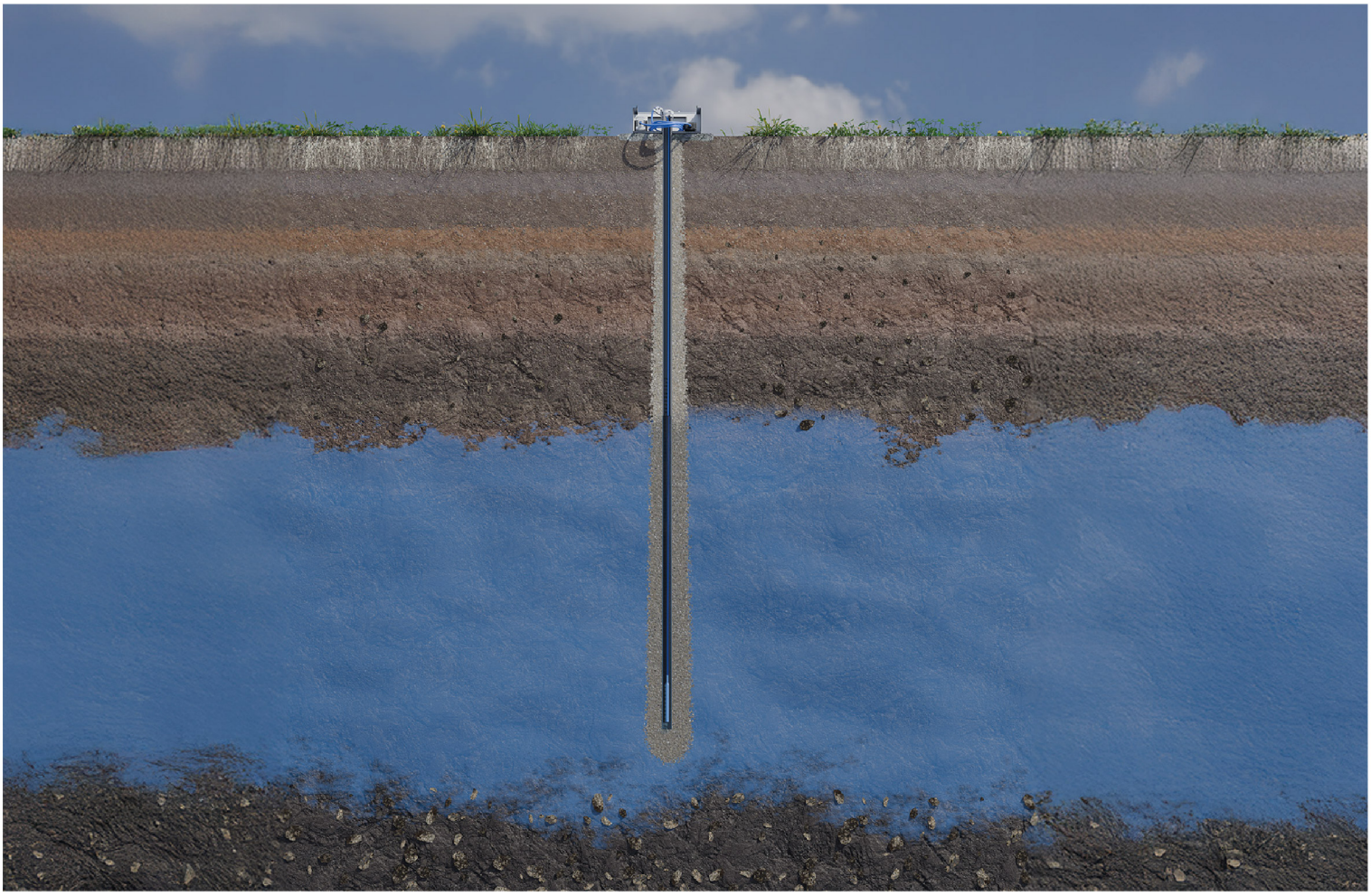


Piezometric probe
Variable length on request

REF : EXTX-P

On request

Use case











DELTA P

The immersed DELTA P **piezometric probe allows discreet monitoring of groundwater level variations.**

Thanks to its compact design and low-visibility installation, it is less exposed to risks of theft or damage.

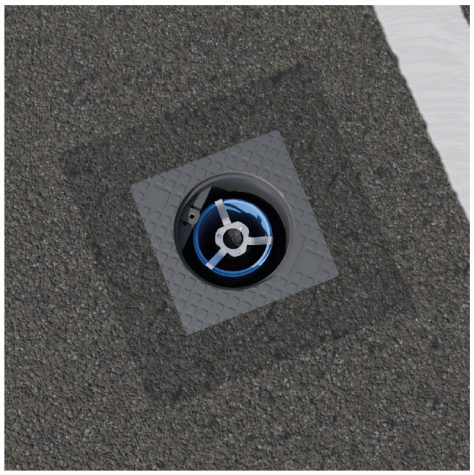
On request – Custom cable length available

Features

Groundwater level monitoring	**Dimensions** Ø 21,4 mm II length 170 mm	**Weight** 330 g
Battery 3.6 V - 2.6 Ah - **Battery life** 1 to 7 years*	**Connexion** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range 0–10 m or 0–20 m	**Accuracy** ± 0.3% FS - ± 1 °C	**Resolution** 0,01 mm - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Probe protection rating** IP68

**Depending on the measurement interval and network used.*







X m



DELTA P
Variable length on request

REF : EXTP

On request



HUMIDITY SENSORS

Humidity Measurement Sensors

DELTA X-Hs and DELTA X-Ha

FEELBAT soil and ambient humidity sensors provide high-precision measurement of humidity variations, both indoors and outdoors. Easy to install (plug & play), they transmit data in real time and remotely.

Measurements are accessible through an intuitive web platform or via the FEELBAT mobile application, offering clear visualization of humidity variations, detailed historical tracking, and alert configuration to detect any abnormal evolution.

- **Compact & Resistant**
- **Precise**
- **Plug & Play**
- **Autonomous**
- **Connected**

Our humidity sensor range



DELTA X-Hs
Soil humidity level monitoring



DELTA X-Ha
Ambient humidity monitoring



DELTA X-Hm
Material humidity monitoring



DELTA X-Ra
Rain gauge sensor



DELTA X-Hs

The DELTA X-Hs is a connected sensor equipped with an electronic probe. **This system measures soil humidity with high precision and full autonomy.**
The probe is buried at the foot of the structures and provides relevant data for effective diagnostics, particularly in the context of clay shrink–swell (RGA).

REF : DLXH

699 € excl. VAT

Features

Soil moisture monitoring	**Dimensions** 18,2 x 3 x 1,2 cm	**Cable length** 10 m
Battery 3.6 V - 2.6 Ah - **Battery life** 1 to 7 years*	**Connectivity** Bluetooth & LPWAN Radio	**Measurement interval** from 10 min to 24 h
Measurement range 0 to 60 vwc	**Accuracy** ± 3% up to 50 VWC - ± 1 °C	**Resolution** 1% - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Probe protection rating** IP68

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA X sensor
- 1 battery 3.6 V
- 1 stainless-steel U-bracket
- 4 screws M6 × 8, INOX A2
- 2 universal anchors 10 × 60, NYLON
- 2 hex-head wood screws 6 × 70, INOX A2
- 2 flat washers M6, INOX A2
- 1 Hs probe

Mounting advice

- T20 screwdriver
- 10 mm drill bit for nylon anchor
- T30 screwdriver for mounting
- T25 screwdriver

DELTA X-Hs Probe

sold separately



Logger X

REF : DLLX

449 € excl. VAT



Soil humidity probe

REF : SXH

275 € excl. VAT



Cable Extension

REF : EXTX

On request

Use case













DELTA X-Ha

The DELTA X-Ha sensor is equipped with a measurement probe designed **to monitor ambient humidity variations.** Values are expressed as a percentage (0–100%).

REF : DLXHA

699 € excl. VAT

Features

Ambient humidity monitoring	**Dimensions** 100 x 122 x 50,5 mm	**Cable length** 10 m
Battery 3.6 V - 2.6 Ah - **Battery life** 1 to 7 years*	**Connectivity** Bluetooth & LPWAN Radio	**Measurement interval** from 10 min to 24 h
Measurement range 0 to 100%	**Accuracy** ± 3% RH - ± 1 °C	**Resolution** 1% - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Probe protection rating** IP65

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA X sensor
- 1 battery 3.6 V
- 1 stainless steel U-bracket
- 4 screws M6 × 8, INOX A2
- 2 universal anchors 10 × 60, NYLON
- 2 round-head wood screws 6 × 70, INOX A2
- 2 flat washers M6, INOX A2
- 1 Ha probe
- 2 universal anchors 6 × 45, NYLON
- 2 flat washers M4, INOX A2
- 2 wood screws 4 × 40, INOX A2

Mounting advice

- T20 screwdriver
- T30 screwdriver for mounting screws
- T25 screwdriver

DELTA X-Ha
sold separately



Logger X

REF : DLLX

449 € excl. VAT



Ambient humidity probe

REF : SHA

275€ excl. VAT



Cable Extension

REF : EXTX

On request

Use case











DELTA X-Hm

The DELTA X-Hm sensor is equipped with a measurement probe designed **to monitor the evolution of moisture within materials.**
Values are expressed as a percentage (0–100%).

REF : DLXHM

699 € excl. VAT

Features

Material moisture monitoring	**Dimensions** 18,2 x 3 x 12 cm	**Cable length** 10 m
Pile 3,6 V - 2,6 Ah - **Autonomie** 1 à 7 ans*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Measurement range 0 to 100%	**Accuracy** ± 3 % RH - ± 1 °C	**Resolution** 1% - 1 °C
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Probe protection rating** IP65

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA X sensor
- 1 battery 3.6 V
- 1 stainless steel U-bracket
- 4 screws M6 × 8, INOX A2
- 2 universal anchors 10 × 60, NYLON
- 2 round-head wood screws 6 × 70, INOX A2
- 2 flat washers M6, INOX A2
- 1 Hm probe
- 2 wood screws 5 × 60, INOX A2
- 2 universal anchors 8 × 52, NYLON
- 2 flat washers M5, INOX A2

Mounting advice

- T20 screwdriver
- T30 screwdriver for mounting screws
- Drill bit adapted to the material Ø 25 mm
- T25 screwdriver

DELTA X-Hm
sold separately



Logger X

REF : DLLX

449 € excl. VAT



Material moisture probe

REF : SHM

275€ excl. VAT



Cable Extension

REF : EXTX

On request

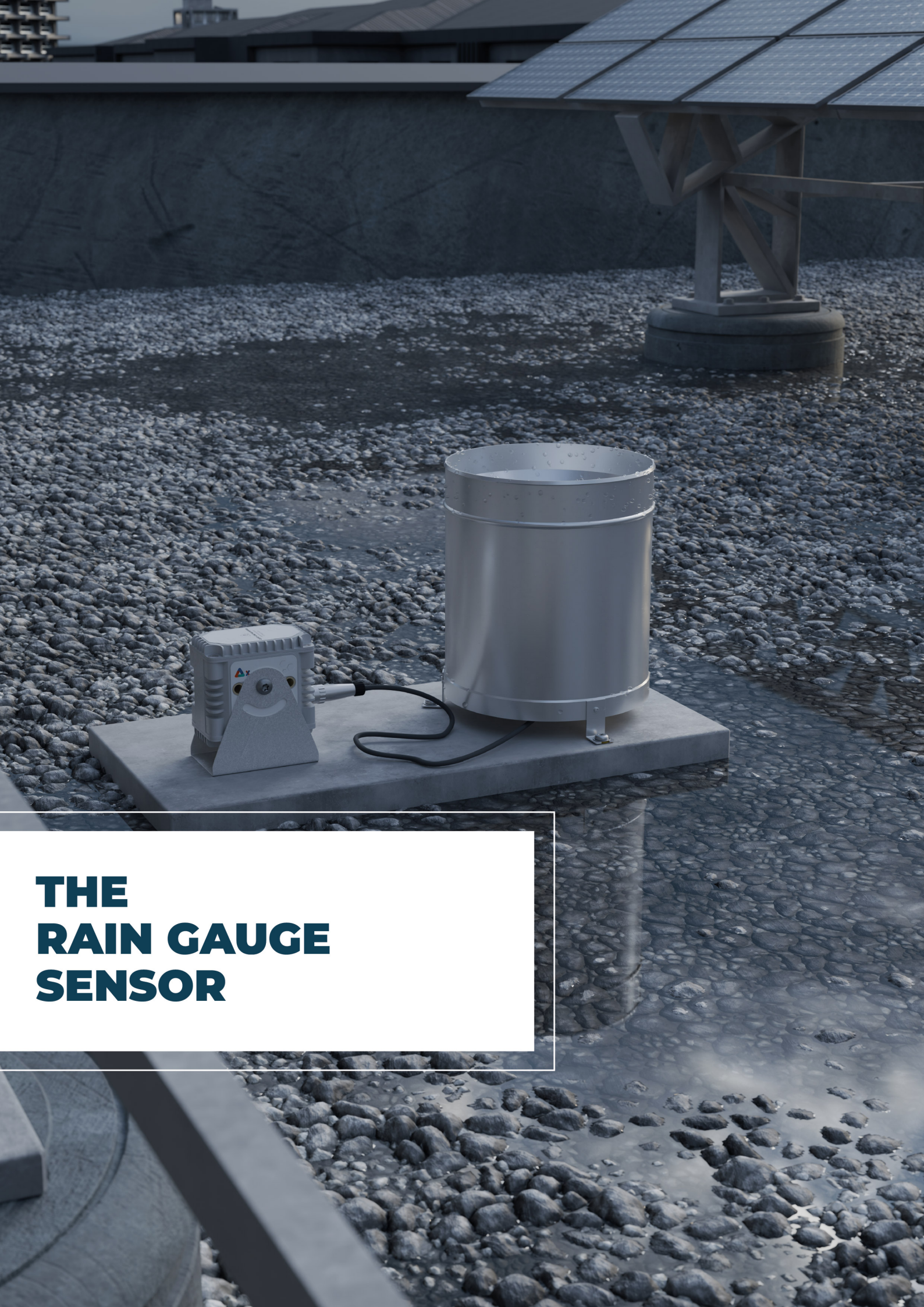
Use case











THE RAIN GAUGE SENSOR



DELTA X-Ra

The DELTA X-Ra sensor is a tipping bucket rain gauge designed to measure precipitation reliably, accurately, and without secondary calculations.

REF : DLXRa

699 € excl. VAT

DELTA X-Ra
sold separately



Logger X

REF : DLLX

449 € excl. VAT



Rain gauge probe

REF : SEM2E

275€ excl. VAT



Cable Extension

REF : EXTX

On request

Use case











VIBRATION SENSOR



DELTA V

The DELTA V sensor **provides accurate monitoring of structural vibrations and tilt**, fully autonomously.

Circulaire 86, IN 1226, BS 7385, SN 640 312a (VSS 40 312) and DIN 4150-3 standards are integrated, with real-time alerts if thresholds are exceeded.

REF : DLLV

974 € excl. VAT

Features

Acceleration, Peak Particle Velocity (PPV), frequency analysis, angle calculation	**Dimensions** 130 x 90 x 60 mm	**Sampling frequency** 500 Hz to 4 kHz*
Battery 3.6 V - 13 Ah - **Battery life** 1 to 3 years*	**Connectivity LTE-M or Bluetooth**	**Bandwidth 1 to 150 Hz**
Acceleration resolution 1 µg	**X, Y angle resolution** 0.01°	**PPV resolution** 0.01 mm/s
Frequency analysis FFT 1024 points	**Internal memory** 1,000,000 individual measurements / 5,000 complete acquisitions	**Protection rating** IP66

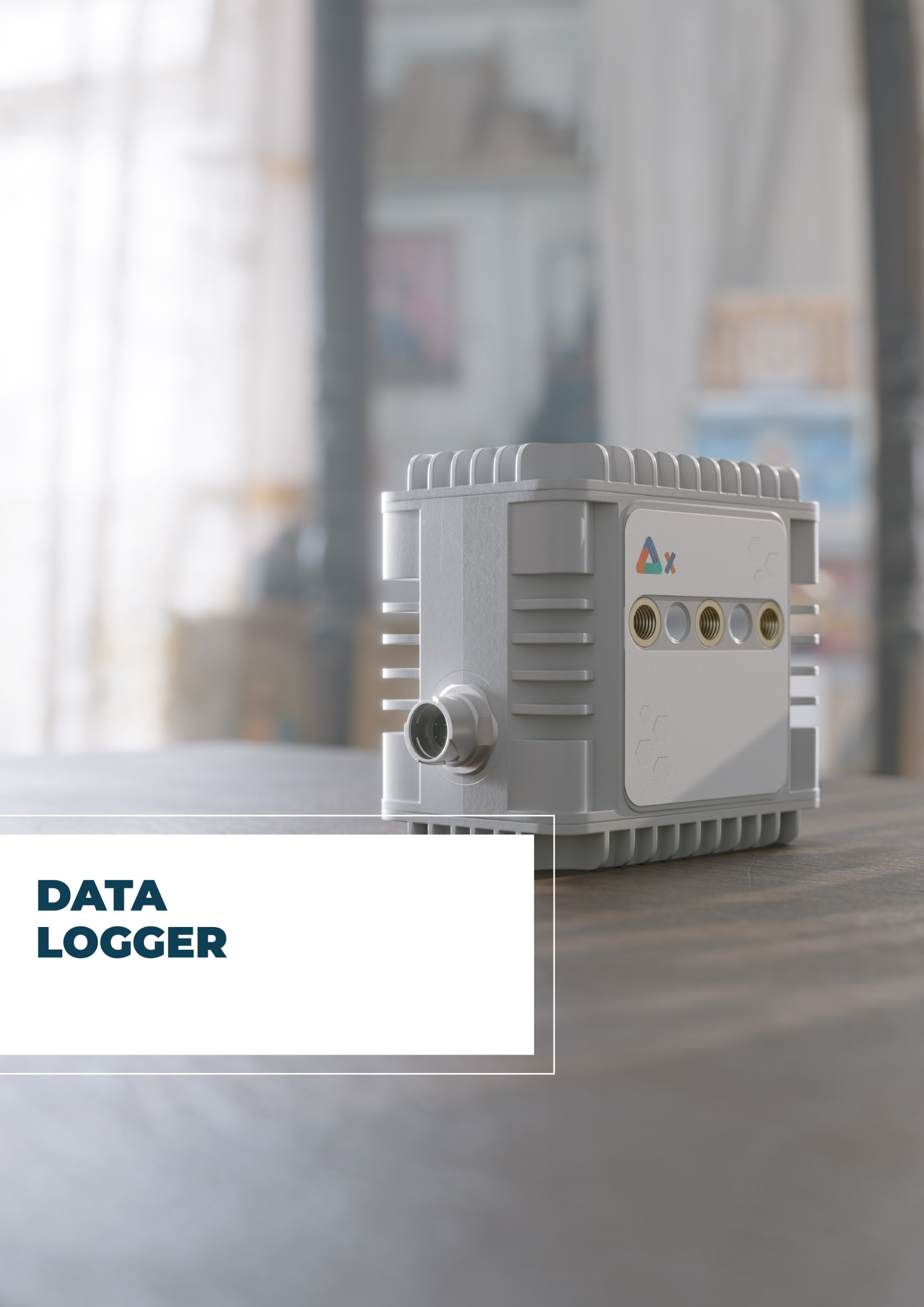
**Depending on the measurement interval and network used.*

Use case









DATA LOGGER

Logger
DELTA X

The DELTA X logger is the ideal solution to connect all your FEELBAT sensors.
Easy to install (plug & play) and requiring no heavy works, it transmits data in real time and remotely.

Measurements can be viewed on an intuitive web platform or via the FEELBAT mobile application, providing clear visualization of trend curves and configurable alerts.

- **Compact & Resistant**
- **Precise**
- **Plug & Play**
- **Autonomous**
- **Connected**

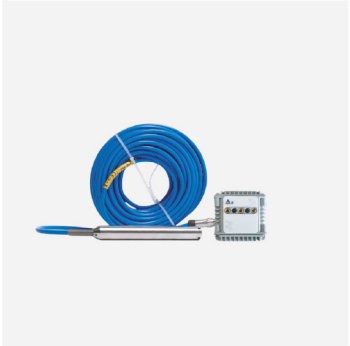
Our range of compatible sensors



DELTA X-L100
Large-amplitude crack monitoring



DELTA X-L100S
Submersible crack monitoring



DELTA X-P
Groundwater level monitoring



DELTA X-Hs
Soil moisture monitoring



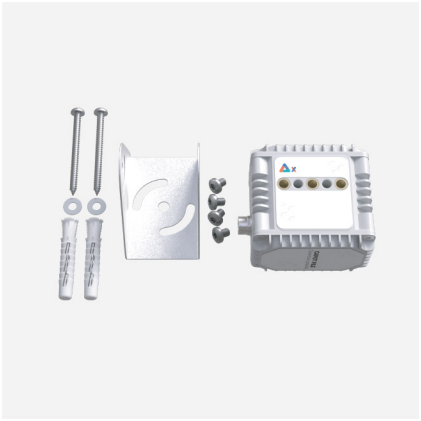
DELTA X-Ha
Ambient humidity monitoring



DELTA X-Hm
Material moisture monitoring



DELTA X-Ra
Rain gauge sensor



DELTA X

The DELTA X is a logger equipped with a 4–20 mA port, allowing the connection of sensors from the FEELBAT range.

Thanks to its fast installation, it provides accurate, centralized, and remote monitoring.

REF : DLLX

449 € excl. VAT

Features

Logger	**Dimensions** 8 x 8 / Th. 5 cm	**Weight** 350 g
Battery 3.6 V - 2.6 Ah - **Battery life** 1 to 7 years*	**Connectivity** Bluetooth & LPWAN radio	**Measurement interval** from 10 min to 24 h
Integrated connectors	**Versatile**	**Compatible** 4 - 20 mA
Internal memory 250,000 measurements	**Operating temperature** -20 °C to +60 °C	**Protection rating** IP66

**Depending on the measurement interval and network used.*

Included in the pack

- 1 DELTA X logger
- 1 D-type 3.6 V battery
- 1 stainless steel U-bracket
- 4 M6 × 8 screws, stainless steel A2
- 2 universal wall plugs, 10 × 60, nylon
- 2 round-head wood screws 6 × 70, stainless steel A2
- 2 flat washers M6, stainless steel A2

Mounting advice

- T20 screwdriver
- Ø10 mm drilling for nylon wall plug
- T30 screwdriver for fastening screws
- T25 screwdriver

Compatible probes

Sold separately



Potentiometric probe

REF : SXL100

325 € excl. VAT



Soil moisture probe

REF : SXH

275 € excl. VAT



Piezometric probe
10 m

REF : SXP10

449 € excl. VAT



Piezometric probe
20 m

REF : SXP20

549 € excl. VAT



Ambient humidity probe

REF : SHA

275 € excl. VAT



Material moisture probe

REF : SHM

275 € excl. VAT



Rain gauge probe

REF : SEM2E

275 € excl. VAT

Data retrieval

Via Bluetooth or long-range connection

BLUETOOTH

Connection to your sensors when you are nearby (up to 30 meters in open field) to retrieve your data.

RÉSEAU SIGFOX*

Connection to your sensors from anywhere to retrieve your data using the Linkfeel token.

Data retrieval

Nearby - bluetooth



DELTA Feel electronic sensors can operate without requiring a Linkfeel token.

The sensors record data autonomously, and you can retrieve it via Bluetooth connection from your smartphone, within a maximum distance of 30 meters in line of sight.

Once the data has been retrieved, you can upload it to the FEELBAT cloud using your 3G/4G connection.
This allows you to access and view the data from another smartphone or computer.

Data retrieval

Remote - Linkfeel token



DELTA Feel electronic sensors can be activated with a Linkfeel token, enabling remote data transmission for one year or more.

The sensor stores the data internally and sends it via the Sigfox or LTE-M network to the FEELBAT cloud, allowing you to consult it on your smartphone or computer and receive alerts if required.

However, in some remote locations (non-covered areas) or underground, the Sigfox network may not be available.
This is why we provide our customers with alternative solutions.



Test Button

The test button is the ideal tool for situations where the exact site address has yet to be determined or when selecting the precise location for your sensors. Once activated, it allows you to test Sigfox network coverage in the area, ensuring the proper operation of your monitoring system.

REF : DET2

90 € excl. VAT Includes 1 year of connection



Repeater

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

REF : RPT1

139 € excl. VAT Includes 1 year of connection



SIGFOX Microstation

The Sigfox microstation extends Sigfox coverage in indoor environments or poorly covered areas.
It operates on 220 V power with Ethernet or optional 3G/4G connectivity.
An IP65 enclosure is recommended for outdoor use.
3G/4G USB keys are optional, SIM card not included.

REF : BOX1

599 € excl. VAT



FEELBOX

The FEELBOX, our new 4G gateway, provides optimal network coverage for your FEELBAT sensors when the Sigfox network is insufficient.
Where your phone has 4G coverage, your FEELBAT sensors will too.
Operates with Linkfeel tokens (not included).

REF : GFBX

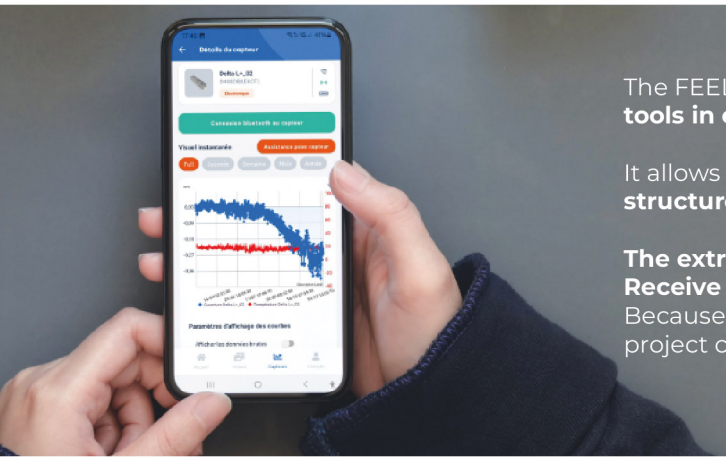
350 € excl. VAT

The mobile App

Download the app

GET IT ON Google Play

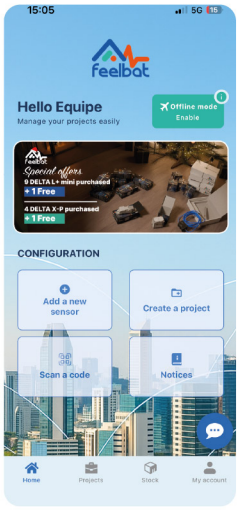
Download on the App Store



The FEELBAT app is **the only mobile application that brings together all tools in one simple and easy-to-use solution.**

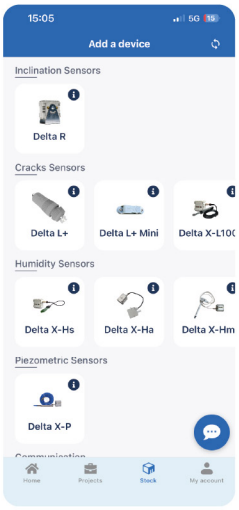
It allows you **to install your sensors, configure them, and monitor your structures in real time**, whether you are on-site or working remotely.

The extra benefit?
Receive alerts when thresholds are exceeded.
Because prevention is essential, you and all collaborators involved in the project can receive alerts whenever a predefined threshold is crossed.



Create your project

Start by creating a project to which you can associate different sensors and monitor them easily.



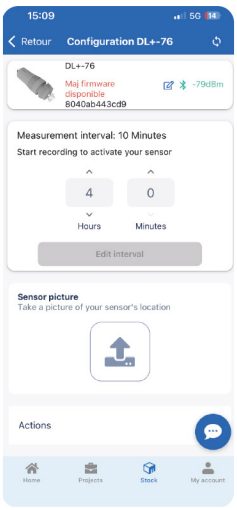
Add your sensor

Add the various sensors present on your site, according to their type.



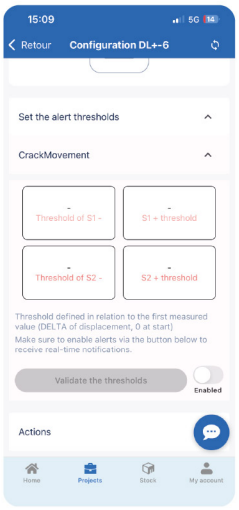
Connect your sensor

Connect your sensors via Bluetooth.



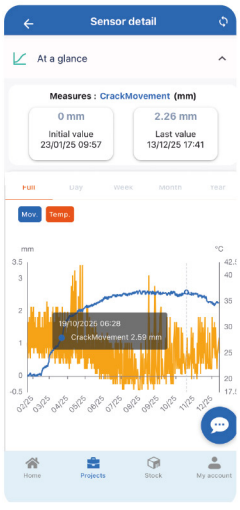
Configure measurement intervals

Edit the measure-ment intervals according to your monitoring needs.



Configure thresholds

Set alert thresholds to receive notifica-tions in case of exceedance.



View your data

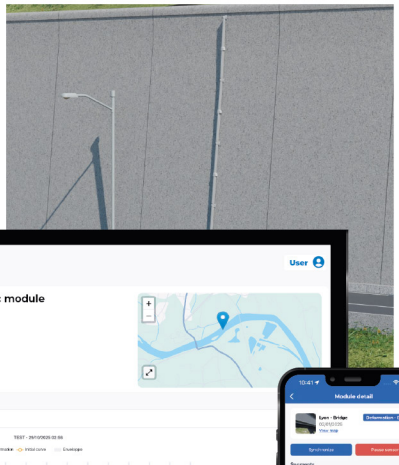
Monitor all your data in real time, with predefined measurement intervals.

Technical Modules

A module designed for every structure.







FEELBAT technical modules adapt DELTA R sensors to different types of structures in order to **simplify installation, improve measurement reliability**, and provide directly actionable data.

YOUR BENEFITS

GUIDED INSTALLATION

Quick configuration based on the type of structure being monitored.

ACTIONABLE DATA

Measurements are converted into relevant indicators for structural analysis.

CLEAR VISUALIZATION

Intuitive reading of movements, deformations or variations.

SMART ALERTS

Automatic detection of abnormal movements and exceeded thresholds.

TIME SAVINGS ON SITE

Less manual setup, faster commissioning.

5 MODULES

BEAM



Beam monitoring

Measurement of structural deformations and inclinations.

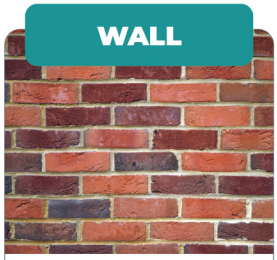
HALF-BEAM



Half-beam monitoring

Precise monitoring of movements on half-beams, supports or brackets.

WALL



Wall and façade monitoring

Monitoring of horizontal and vertical deformations of walls or façades.

COLUMNS



Column / mast monitoring

Control of the inclination of columns, masts, catenaries and vertical supports.

RAILS



Railway infrastructure

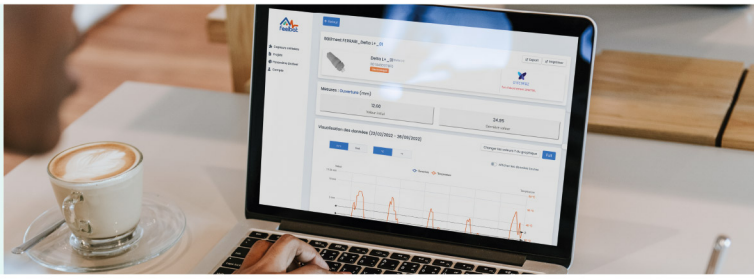
Monitoring of tracks (left, right, cant and longitudinal leveling) and railway structures.

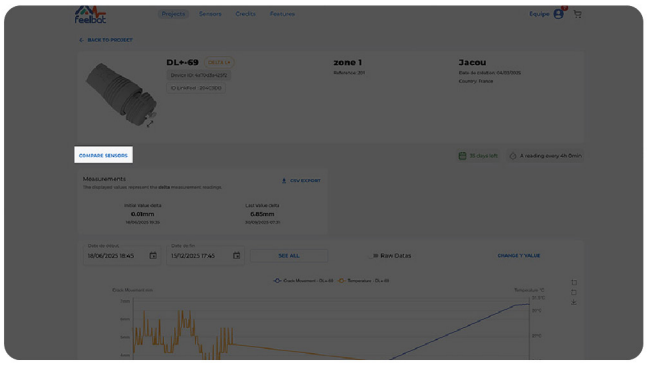
Install — **Connect** — **Analyze** — **Decide**

The web application

Go further!

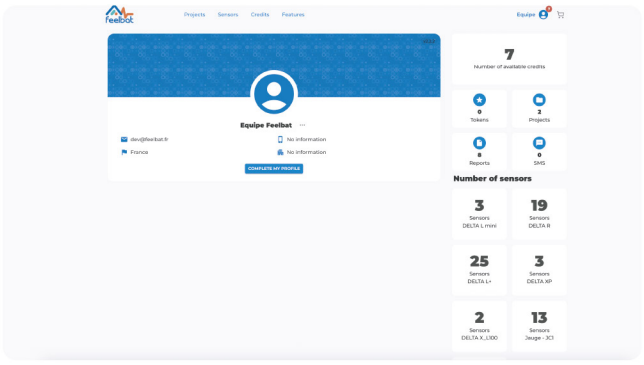
All features available in the mobile app will also be accessible on the web to make analysis and graph comparison easier.





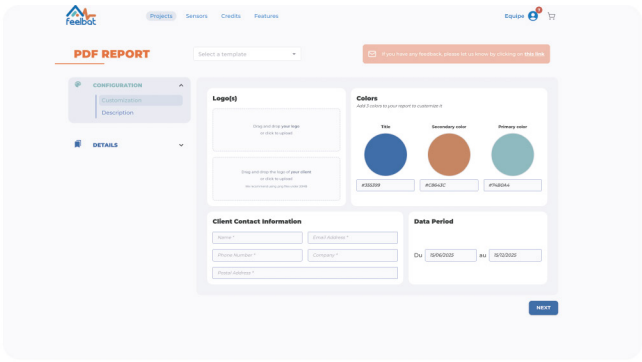
Compare sensors

On your sensor page, easily compare similar models or sensors measuring the same parameter (e.g., XCI vs DELTA L+).



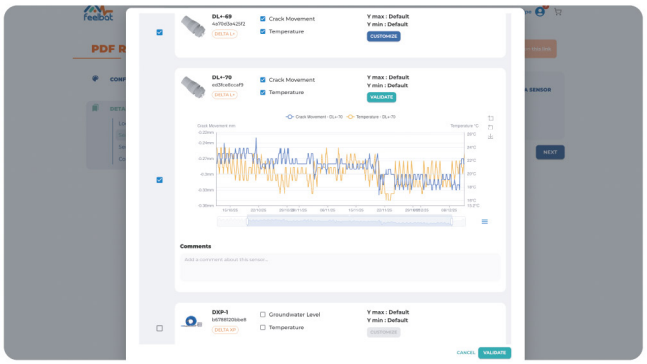
Access your information

Quickly access your sensors, subscriptions, LinkFeel tokens, and their expiration dates.



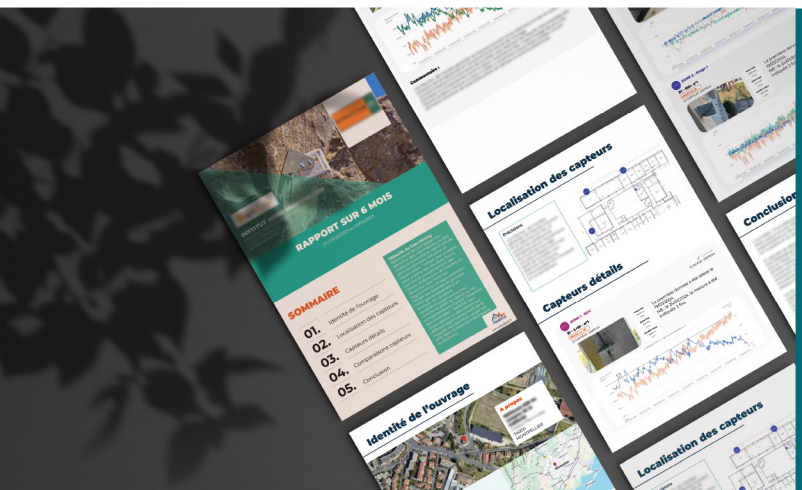
Automate your reports

Generate your PDF report in just a few clicks, including all your essential data.



Customize your report

Colors, logos, curves... Customize your PDF report to fit your needs.



PDF REPORT

Generate your reports automatically and customize them in just a few clicks!

See a sample report

Support and Training

Personalized assistance



Phone support in less than

24h

ADVICE

FEELBAT is made up of structural engineering specialists dedicated to advising and technically supporting you according to your specific needs. They assist you in validating the choice and positioning of sensors.

SUPPORT

Technical support is provided upstream of the project to create the right conditions for success. In addition, phone support on the day of installation can be scheduled to answer all your questions.

TRAINING

Our solution is designed to be simple yet comprehensive. A one-hour remote training session is available to help you get started with the application and fully use all features according to your needs.

Prerequisite: you must create an account and download the FEELBAT application before the training session.

Duration, schedule and delivery format

- Minimum participants: 1 person
- Maximum participants: 5 people
- Duration: 1 hour
- Format: videoconference

ASSISTANCE SESSION

Do you need help preparing your site or installing your sensors?
One of our experts will assist you during a 30 min video call to guide you and answer all your questions.

REF : FORMA1

99 € excl. VAT

Buy credits to unlock web and mobile features

Excl. VAT price	Bonus	Number of credits
10 €		1 credit
250 €	1 FREE	26 credits
1 000 €	5 FREE	105 credits
2 500 €	15 FREE	265 credits
3 000 €	30 FREE	330 credits

Features available with your credits

	Included	Optional purchase	Cost (credit)
Management			
Number of sensors	Unlimited		
Number of basic projects*	2 included at account creation	+1	2 credits
Upgrade basic project to Expert (Level 1)*	0	1	+3 credits
Project Archiving	0	1 year	1 credit
Project Archiving	0	5 years	3 credits
Connectivity			
LINKFEEL token (1 year remote connection – Sigfox or FEELBOX 4G)	0	1 token	10 credits/year
PDF Reports			
Number of report generations	3	10 reports	5 credits

Add 2 credits to create a basic project, then +3 additional credits to upgrade it to Expert mode and unlock advanced features.

*Project offer details	Basic Project 2 credits per project	Expert Project +3 credits per project
Project sharing Reading mode	✓	✓
Advanced project sharing Data presentation, full project report	✗	✓
Measurement interval per project	= / > 4h	Up to 10 min
Email alerts	✗	Unlimited
SMS alerts	✗	100 SMS **5 credits**
Level 1 monitoring files Temperature curves ax+b (possibility of weighting the curves to refine the analysis)	✗	✓
Deformation module Beam, half-beam, wall, column & rail.	✗	✓

Old Account Process

1. You start by purchasing credits.
Example: you pay €500 and receive 50 credits + 2 bonus credits = 52 credits total.

2. You use your credits as you wish.
Each feature is activated using a specific number of credits.

- **Want to connect for 1 year?**

You spend 10 credits (LINKFEEL token).
You have 42 credits remaining.

- **Want to add 4 additional projects beyond the 2 free ones?**

Each project costs 2 credits.
4 projects = 4 × 2 = 8 credits.
You have 34 credits remaining.

- **Want 2 of these projects in Expert mode (measurements every 10 minutes)?**

Expert mode costs 3 credits per project, so 2 × 3 = 6 credits.
You have 28 credits remaining.
💡 In Expert mode, you get all features (except SMS alerts).

- **Want to receive SMS alerts?**

A pack of 100 SMS costs 5 credits (valid for all Expert mode projects).
28 − 5 = 23 credits remaining.

✅ You therefore still have 23 credits, which you can use later.
Good news: credits never expire.

Account Creation Process

1. When you open your account, you already have features available
You get:
2 basic projects, 3 PDF report generations, Project sharing in read-only mode, A measurement interval ≥ 4 hours

2. Then, the same process applies,
You purchase credits and use them as you wish.

- **Want to upgrade your 2 basic projects to Expert mode?**

Go to your projects, click on the orange frame, then select
“Upgrade my project to Expert mode” for only 3 credits.

Sensor Maintenance



DELTA L+ Maintenance

- Battery replacement
- Inspection of components and measurements, with replacement of faulty parts
- (in the event of damage caused by improper use, an additional quotation will apply)
- Replacement of sealing gaskets
- Firmware update

REF : DLL+MAINT

89€ excl. VAT



DELTA R Maintenance

- Battery replacement
- Inspection of components and measurements, with replacement of faulty parts
- (in the event of damage caused by improper use, an additional quotation will apply)
- Replacement of sealing gaskets
- Firmware update

REF : DLLRMAINT

99€ excl. VAT

Got a crack?
Get FEELBAT

Monitor. Anticipate. Take action.
Your connected structures in real time.
FEELBAT secures your decisions.

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