



DELTA X-HS
Monitoring soil water content





The DELTA X-Hs is a connected sensor equipped with an electronic probe. This device measures changes in soil moisture with high accuracy and autonomy.

The probe, which is buried at the foot of structures, provides relevant data for effective diagnostics in the field of clay shrinkage and swelling.



Compact & Durable
Polycarbonate / IP66



Precise
1%



Plug & Play
Easy to use and install



Autonom
Battery 3,6 V - 17 Ah



Connected
LPWAN or
Bluetooth network



01
Closed transmission line

02
Sensor blade

03
Sensor head with enclosed
printed circuit board

04
Connector for DELTA X

Features

Battery 3,6 V - 17 Ah - Autonomy 1 to 7 years*	Protective case IP66	Operating temperature -25 °C to +70 °C
Resolution 1%	Connection Bluetooth & Radio LPWAN	Measurement range 0 to 60% vwc (up to 100% with limited accuracy)
Accuracy 3% jusqu'à 50 vwc** **(Volumetric Water Content)	Measure spacing from 10 min to 24 hours	Outdoor temperature measurement
Internal memory for 250,000 measurements	Probe cable length 10 m	Probe 18.2 cm x 3 cm x 1.2 cm

*depending on frequency, sensor exposure and data transfer mode (Bluetooth, LPWAN, etc.).

The DELTA X-Hs sensor allows for autonomous and automatic monitoring of changes in soil moisture. It offers a reliable solution for detecting water saturation, which is often a precursor to ground movement or structural damage.

Its robust, IP66-certified housing makes it perfectly suited for outdoor environments exposed to the elements.

The DELTA X-Hs can be combined with a crack meter and/or an inclinometer to correlate changes in water content with crack movement or the gradual tilting of a retaining wall. It can also detect phenomena such as clay swelling or the gradual tilting of retaining walls due to water accumulation in the soil.

This integrated approach enhances the overall understanding of soil behaviour and its effects on structures.

The DELTA X-Hs is designed to be accessible to all professionals. It can be easily configured from the Feelbat mobile app or via the Feel Monitoring web portal, facilitating continuous monitoring of soil moisture.

Finally, once activated, the LINKFEEL service automatically transmits sensor data to the secure FEELBAT cloud via the LPWAN radio network, combining low power consumption, long range and reliable communication.

SIMPLE AND EASY TO INSTALL

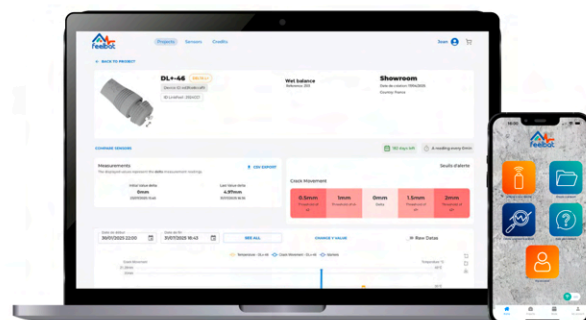
01 The different application cases



02 View your data in real time and remotely

Install your sensors, configure them, and monitor your structures in real time wherever you are.
Receive alerts if a predefined threshold is exceeded, for effective prevention and optimal security.

Edit PDF reports in just a few clicks!



Our other products



DELTA L Expert Pack

The DELTA L Expert is a comprehensive crack meter that allows you to **monitor cracks on three axes** with high precision. The gauges can be fixed with a hammer-in plug or two-component adhesive. Simply take your measurements and enter them into the app for regular monitoring.

Opening - Shearing - Misalignment



DELTA L+

The DELTA L+ is a **connected electronic sensor** that allows you to **monitor a crack** with high precision and autonomy.

It allows you to monitor crack movements nearby or remotely, as well as the outside temperature, from your smartphone.

Opening - Shearing - Angle measurement - Misalignment



DELTA R

The DELTA R is a connected dual-axis tilt sensor that allows you to **monitor the tilt movement of walls or structures** with high precision and autonomy.

It allows you to monitor tilt movements on both axes as well as the external temperature from your smartphone.

Two measurement axes: Y - X



DELTA L+ mini

The DELTA L+ MINI provides autonomous and accurate crack monitoring, while assessing the impact of solar exposure on the cracked substrate.

It can be installed in seconds using adhesive, without drilling.

The smallest connected crack sensor in the world!



Pack DELTA L+ extenso

The Extenso pack allows you to measure and monitor movements and displacements in structures such as tunnels, bridges, or buildings.

It enables you to assess the stability and integrity of the structure by detecting changes in convergence, thereby helping you to take preventive measures.

10 ML fil INVAR or 20 ML fil INVAR



DELTA X-P

The X-P sensor, a piezometric sensor, allows automatic monitoring of the groundwater level.

The piezometric probe is equipped with a reinforced cable with waterproof connectors and an atmospheric correction system.

X ml reinforced cable (several cable lengths available)



If you crack...
you FEELBAT

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