



**SUESSCO**  
SENSORS

# BRIDGE MONITORING IN 6 DIMENSIONS

*Maximum safety. Early damage detection. Extended lifespan.*

Monitor bridge bearings in real-time with SuessCo's 6D-Sensor technology. Extend the service life of your infrastructure and lower maintenance costs with patented technology from SuessCo Sensors. Digital. Precise. Sustainable.



*„The 6D sensor enables you to see the heartbeat of your structure!  
We finally understand the movements of the bridge.“*

Fred Ganster, Bridge Engineer Germany

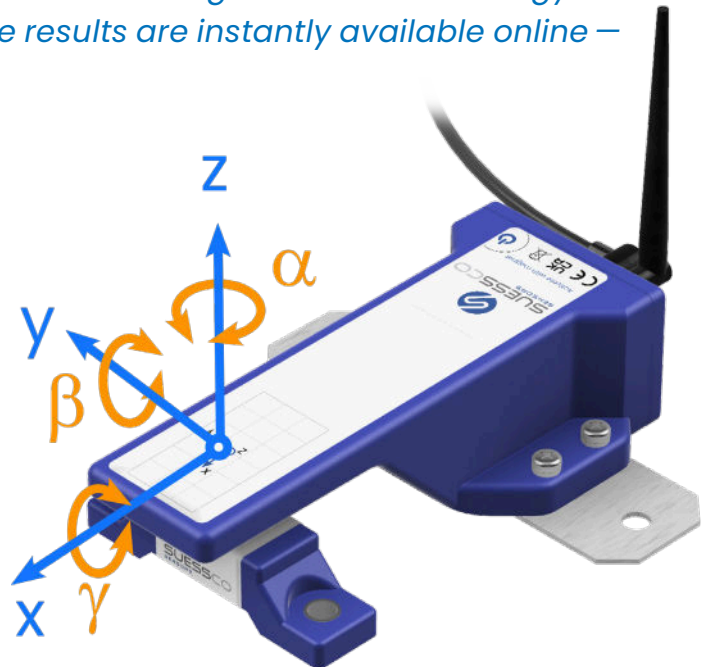
# 6D INNOVATION

## The Sensor at a Glance

*The patented SuessCo 6D-Sensor uses innovative magnetic field technology to detect even the smallest movements. The results are instantly available online – for many years of safe operation.*

### 1 Sensor, 6 Dimensionen

The sensor measures displacements and rotations in six dimensions, as well as temperature. It enables precise analysis of structural movements. Continuous monitoring allows for early detection of structural damage, reduced maintenance costs, and improved long-term bridge safety.

**Measurement range:**

X-Axis: 60mm

Y-Axis: 30 mm

Z-Axis: 25 mm

**Repeatable accuracy:**

Axis X,Y,Z:  $\pm 50 \mu\text{m}$

Angles  $\alpha, \beta, \gamma$ :  $\pm 0,1^\circ$

Temperature:  $\pm 0,5^\circ\text{C}$

**Measurement interval:**

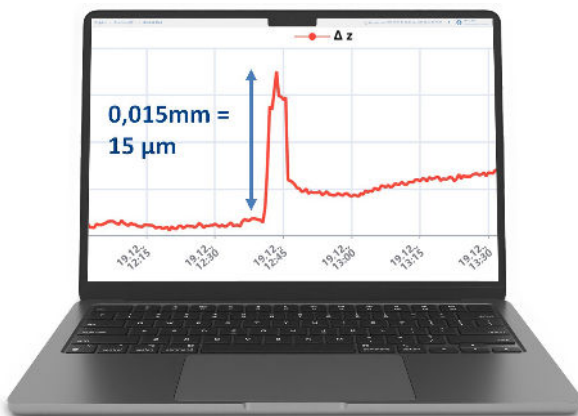
Adjustable

**Battery life:**

10 years @ 1 hour interval

**Communication:**

LTE-M, WiFi



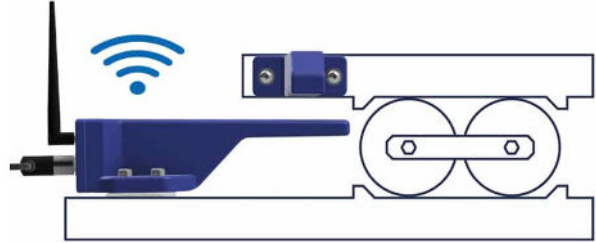
## Data Monitoring Dashboard

The provision and display of data in the SuessCo Datahub is included with every sensor package. Our user-friendly monitoring system visualizes movement and temperature data on an intuitive interface. It enables alerts when thresholds are exceeded.

This way, you always have a real-time overview of your infrastructure's condition and can act immediately.

# FUTURE OF BRIDGE MONITORING

SuessCo sensors monitor bearing movements in real-time and detect displacements, rotations, and temperature changes with high precision. Thanks to magnetic field-based technology, the system provides drift-free data with no mechanical wear. This ensures bridge safety, functionality, and extended lifespan of your infrastructure.



## *Your SuessCo Advantages:*

- + **Precise Monitoring:** Captures even the smallest displacements and tilts.
- + **Patented Magnetic Field Technology:** Maintenance-free, highly accurate, and long-term stable.
- + **Enhanced Safety:** Early detection of critical changes with an alert function.
- + **Cost Efficiency:** Reduces maintenance costs and extends the bridge's lifespan.



## The smart solution

### *Case Study Danube Bridge:*

Several 6D-Sensors measure the movements of bridge segments, while an integrated temperature sensor provides additional valuable information. Our SuessCo Case Study offers practical insights into the project. Curious? Download now! [suessco.com/en/case-studies/](https://suessco.com/en/case-studies/)

## Precision & Reliability

The integrated monitoring solution consists of sensors and a web dashboard and is easy to deploy – without requiring specialized knowledge. SuessCo Sensors combines cutting-edge scientific research with proven practical implementation quality.





**SUESSCO**  
SENSORS

# SUESSCO SENSORS

## The Future of Monitoring.

*Leading operators of bridges, tunnels, and critical infrastructure in Europe already rely on SuessCo Sensors technology.*



### Why?

Highest precision, maximum safety, optimal cost efficiency. Protect your structure with state-of-the-art monitoring solutions from SuessCo Sensors.

## SuessCo 3D-Sensor

SuessCo also provides a fully integrated solution for crack monitoring.

Learn more at [www.suessco.com](http://www.suessco.com)



*SuessCo sensors are available across Europe through our SuessCo Distributors.*

*Find out more: <https://suessco.com/en/distributors/>*



Download data sheet now