



Datasheet 6D-Sensor

The patented high-tech sensor for digital long-term monitoring of complex movements. The SuessCo 6D-Sensor precisely captures absolute position changes and rotations between two objects. It measures the three spatial axes (X, Y, Z), the corresponding rotational values (3 Euler angles), and temperature data. All data is digitally recorded and wirelessly transmitted to a monitoring platform with an integrated alarm function.



Applications:

- Monitoring of bridges
- Monitoring of infrastructure and buildings
- Movements or settlements on industrial sites
- Long-term monitoring in complex environments

Key features:

- One sensor monitors all 3 axes (X,Y,Z) and rotation values (α, β, γ)
- High accuracy and no drift
- Integrated temperature sensor
- Monitoring platform with alarm

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Dimensions	Key values	Data acquisition
Sensor: 170 mm x 100 mm x 45 mm Weight: Sensor incl. plate : 418g Reference object: 75g	Measurement range: X-Axis: 60 mm Y-Axis: 30 mm Z-Axis: 20 mm Temperature: -20 °C to +54 °C	Max. Battery life: <ul style="list-style-type: none"> • Up to 10 years with hourly measurement interval • Configurable measuring interval • External power supply or PV
Reference object: 26 mm x 118 mm x 26 mm	Repeatable accuracy: Axis X,Y,Z: $\pm 50 \mu\text{m}$ Angles α, β, γ : $\pm 0,1^\circ$ Temperature: $\pm 0,5^\circ\text{C}$	Data transmission and storage: LTE-M, Wi-Fi, monitoring-platform



Reference crack application



Reference bridge application