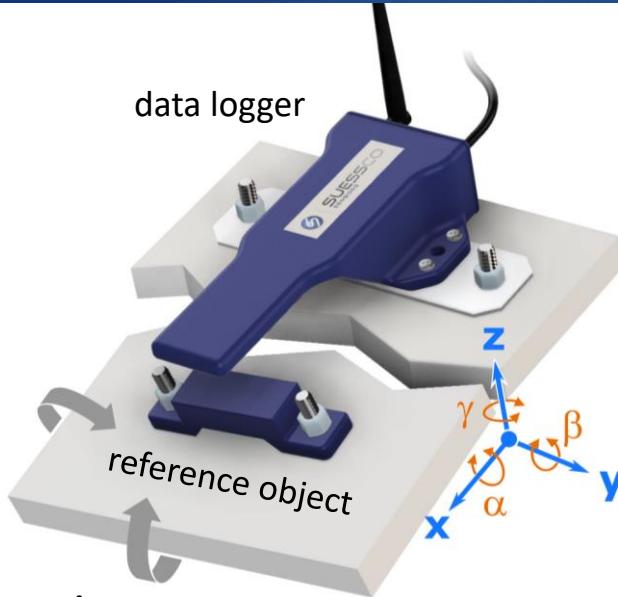




6D-Sensor



Dimensions

- Reference object: 26 mm x 118 mm x 26 mm
- Data logger: 170 mm x 100 mm x 45 mm

Key values

- Measurement range
 - X: 60 mm Y: 30 mm Z: 20 mm
 - α, β, γ : 360 °
 - Temp.: -30 °C bis 60 °C
- Accuracy
 - x, y, z: $\pm 50 \mu\text{m}$
 - α, β, γ : $\pm 0,1^\circ$
 - Temp.: $\pm 0,5^\circ\text{C}$

Data acquisition

- Measuring interval
 - Individually configurable
- Power supply
 - battery life approx. 2.5 years with 15 minutes measurement intervall
 - Optional external power supply or PV
- Data transmission and storage
 - LTE, NB-IoT
 - Cloud and local at the logger

Advantages

- One sensor for motion measurement of 3 axes (X,Y,Z) and rotation (angles)
- Easy to install
- High accuracy and no drift
- Integrated temperature sensor
- Extension with external sensors such as humidity, vibration, etc. possible
- Monitoring platform with alarm and API

Fields of application

- Condition monitoring of infrastructures and buildings (bridges, buildings, industrial plants, wind power, tunnels, dams, walls, etc.)
- Monitoring of cracks
- Movements of equipment, robot arms, etc.

Summary

The unique magnetic field technology in combination with KI of SuessCo Sensors allows to detect the absolute position change and rotation between two objects. The three longitudinal axes (x, y, z) and the corresponding rotation values (3 Euler angles) are recorded and transferred to a monitoring platform including alarm function.



Application examples

Dashboard

SUESSCO SENSORS

Projects overview list

| Project name ↑ | Address | Project number |
|------------------------|-----------------------------|----------------|
| Bahnbrücke (BR1) | Hainbach 1, 9020 Klagenfurt | 142-54-32 |
| Baustelle (BS1) | Aleerstraße 1, 8020 Graz | 123-93-45 |
| Bundeskanzleramt (BK1) | | |
| Demo Bau Messe (DM1) | All around the globe | 987-654-321 |
| Donaubrücke (BR2) | | |
| Industrieanlage (IA1) | | |
| Kirche (K1) | | |

Items per page: 20 | 1 - 11 of 11 | < >

Hierarchical overview

- Bahnbrücke (BR1)
 - Abschnitt 1 (AB1)
 - BR1-AB1-PD-1
 - BR1-AB1-PD-2
- Demo Bau Messe (DM1)
- Baustelle (BS1)
 - GNSS-Postionsmessung (GP)
 - BR1-GP-GS-1
 - Risierung (RM)
 - BR1-RM-PD-1

Projects overview map




SUESSCO SENSORS

Project: Bahnbrücke (BR1)
Section: Abschnitt 1 (AB1)
Sensor: BR1-AB1-PD-1

Start time: 09.03.2022, 08:51 MEZ
 End time: 04.10.2023, 09:51 MESZ

Additional information about position:
 Lagerüberwachung Pfeiler 2 links

Update sensor overview infos
 Zu beobachten Y-Abweichung und Plateau

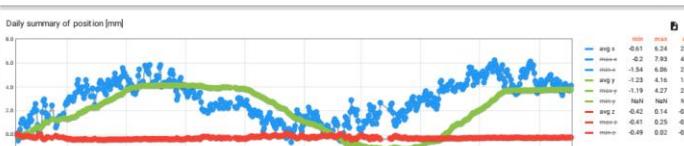
Update sensor details
 Time of installation: 09.03.2022, 10:00 MEZ

Sensor image

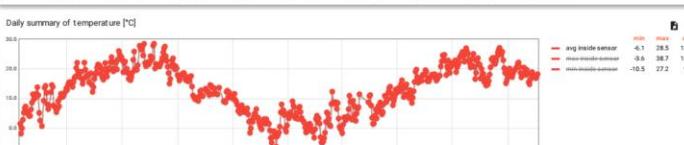

Analysis of the total measurement duration

| | x [mm] | y [mm] | z [mm] | t [°C] |
|-------|----------|----------|----------|----------|
| max | 7.87 | 4.27 | 0.25 | 38.67 |
| | 22.08.23 | 29.08.22 | 11.03.22 | 25.07.22 |
| min | -1.54 | -1.31 | -0.49 | -10.49 |
| | 11.03.22 | 12.04.23 | 26.07.22 | 18.12.22 |
| delta | 9.11 | 5.58 | 0.74 | 49.16 |

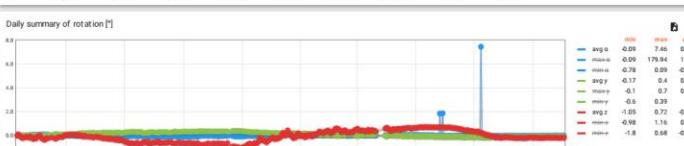
Daily summary of position [mm]



Daily summary of temperature [°C]



Daily summary of rotation [°]



Overview image
 Beispielbild Infrastruktur (z.B.: Brücke) Sensor 2
 Sensor 1

Sensor map