KI

MONITORING

9,8 m/s

6 mm

59 mm

50,9 mm

Home
Live graphs
History & Statistics
Sensor settings
User settings
Archive
Organization
Add new dashboard

senmos

History & Statistics

Bridge

Statistics

Sensors

Chosen sensor channels:
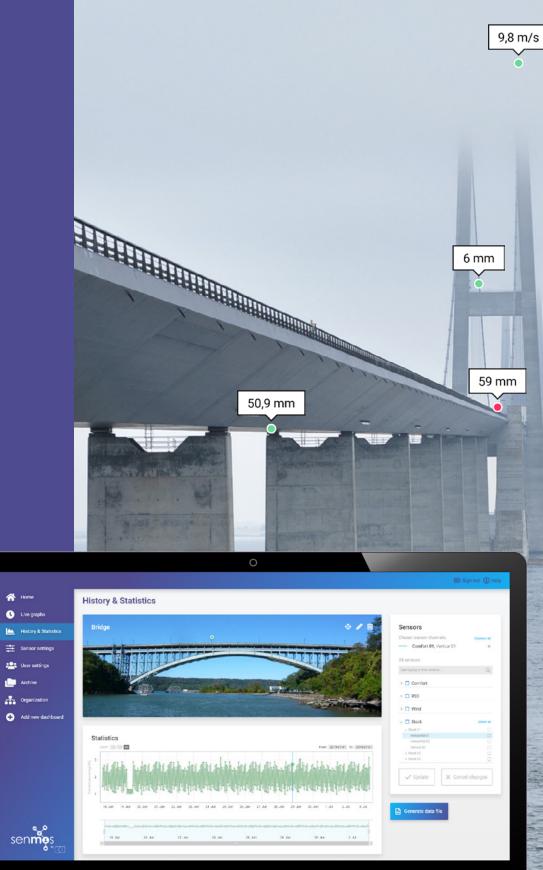Comfort 01, Vertical 01

All sensors:

Comfort
RSS
Wind
Stock

Generate data file

KI MONITORING

KI offers complete solutions for Structural Health Monitoring (SHM). From sensor installation and data acquisition, to visualizing and alerting on our cloud platform Senmos, and finally adding structural value with data analysis among other elements such as maintenance prediction and lifetime estimations.

COMPLETE STRUCTURAL HEALTH MONITORING SYSTEMS

Sensors, dataloggers, infrastructure and cloud platform

DATA AQUISITION AND CLOUD PLATFORM

Server or dataloggers and cloud platform

CLOUD PLATFORM

Send data directly to Senmos cloud platform

KI Consulting Engineers

☁ CLOUD PLATFORM

The cloud platform Senmos, is a full system for storing, analyzing and visualizing SHM data. Senmos lets you access all your data and configure your entire SHM system from a web browser, making it easily accessible from anywhere.

BENEFITS:

Easy installation
Easy and fast installation, Senmos can be set up in a matter of weeks, even with hundreds of sensors. Everything from creating dashboards to setting alarms is easily accomplished through the web application – meaning no need for developers.

Dedicated to Structural Health Monitoring
With an unbelievably large number of cloud systems for data, Senmos sets itself apart by being tailored to the specific purpose of Structural Health Monitoring. Every feature on the cloud platform is created based on our prior experience with creating Structural Health Monitoring systems for clients such as The Great Belt Bridge and VL Steel.

Built to scale
Senmos is built in the cloud with everything that entails - such as easy scaling to thousands of sensors. SHM Systems can quickly evolve, and sometimes it can be beneficial to add more sensors or even parallel monitoring systems. With Senmos you can always add more sensors or create data generating processes with easy adaptation as your needs change.

Low entry fee - subscription
Building custom software is expensive and takes a lot of time. With Senmos the price model is based on subscriptions, and only a small starting fee to initially setting up the system is required.

FEATURES:

Alarms on thresholds
Never be surprised again by changes in the structure, receive alarms at different thresholds for the same sensor, one set for "take a look", and one for when action needs to be taken.

Quickly explore your data through interactive graphs - from years down to milliseconds
Look at years at a time to see seasonal trends and explore down to the hour a change occurred. Exploring data is an important tool to understand what is going on.

Customizable dashboards with a quick overview of your structure
Create dashboards that help your team quickly asses the current status of your structure, with features such as live values on maps, live graphs of data, tables with current figures, and displaying important information for quick access.

Sensor configuration
All configuration can be done online, from setting which type of sensor is in each datalogger and

location, to setting user defined thresholds for alarms.

Download data
Download your data without effort to work with it further on the data processing tool of your choice. Data can be exported in multiple formats for greater compatibility.

User defined access to third party
Researchers, students, consultants, data analysts - give them all access to exactly what you want with simple user management.

One place for all your structures and locations
Fine grained separation of sensors, projects, and organization. Makes it easy to access multiple locations and structures in one place with quick access to all of them.

DAQ DATA AQUISITION

K+I offers multiple ways of acquiring data, either through K+I's own datalogger, a K+I installed server on location for sending data to the cloud, or directly from your equipment to the cloud through a REST API.

DAQ K+I DATALOGGERS

Our own datalogger built for both dynamic and quasistatic measurements. The datalogger connects directly to the internet on location and sends data to the Senmos cloud platform.

4G modem
The datalogger has both an ethernet port for wired connection, and 4g modem for the locations where wired internet is difficult or not possible. External antenna can be added for remote locations with low connectivity.

Battery powered
When sampling at very low rates (once an hour or less), our dataloggers can be set to a low energy mode so that they only log data when necessary, running for months without an external power source.
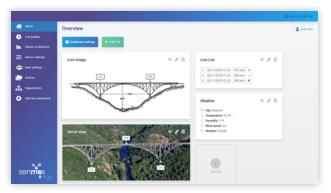
Configuration and updates from the cloud
Our datalogger can always be connected to and configured from the cloud. Any configuration can easily be made remotely from the Senmos cloud platform.
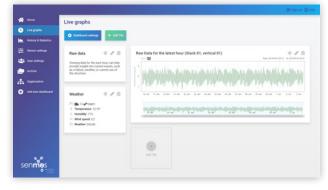
Up to 16 channels for data acquisition
Data acquisition of up to 16 channels at high sampling rates of up to 3.5KHz and with a high definition of 24bit.

LOCAL SERVER FOR DATA ACQUISITION

By setting a server locally at the site, we can get data from databases or local data systems and send it to the cloud. Once on the cloud, all features on the Senmos cloud platform will be available to the user.

Dashboards to give quick overviews of the structure. With features such as: Images with live values, graphs with live data, tables with sensor values, and much more.

Set up specific data views where you need them, often looking at a certain period of time can be more valuable than seeing a single number.

Use the historic data tool, to easily look at all the sensor data in an intuitive way.

We can make custom enclosures and parts for sensors to adapt them to any environment.

www.ki.dk

DIRECT THROUGH REST API

Send data directly to the cloud through a REST API. This lets you control exactly what stays local and what is uploaded to the cloud. With this option, many separate systems can be unified in one single location, making all data easily available on the same platform.

SENSORS

We can install any type of sensor needed at your structure. We use a wide range of sensor providers to make sure the correct sensor and precision is being used for the job. Some of the sensor types we offer are:

- Strain gauges
- Displacement sensors
- Inclinometers
- Accelerometers
- Thermometers
- Weather stations
- GPS/RTK (Real time kinematics)
- Moisture sensor

STRUCTURAL ENGINEERING

A strong background in structural engineering enables us to use and process the measures data in ways that will provide structural and economical value. Among these are:

- Fatigue analysis and lifetime estimations of structural elements
- Load estimations on critical elements
- Real time modal analysis
- Vibration analysis
- Maintenance prediction and optimization

PRICE MODEL

Get an offer on sensors, dataloggers, and installation. All sensors and dataloggers are owned by the clients, enabling use on multiple projects.

Senmos is sold as a subscription, with a low startup fee for setting up the Senmos cloud platform for the structure. The monthly subscription fee is based on the number of connected sensors. Included in the monthly subscription is maintenance, upgrades, and full telephone and email support during normal DK working hours.

CONTACT

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