

**We provide exceptional sensing and insights to create solutions for a cleaner, healthier and more productive world**

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#### ACCELERATE YOUR PRODUCT INNOVATION

HBK provides integrated solutions and domain expertise across the test and measurement product life cycle, bridging the gap between the physical world of sensors, testing and measurement and the digital world of simulation, modelling software and analysis.



#### SIMPLIFYING STRUCTURAL HEALTH MONITORING

## HBK weldable strain gauges and MicroStrain wireless technology

Structural health monitoring (SHM) is critical for ensuring the safety and longevity of infrastructure, machinery, and equipment. HBK offers two innovative solutions that make SHM easy: HBK weldable strain gauges and MicroStrain by HBK wireless technology.



# Simple, rapid deployment even in challenging applications

## LESS TIME ON SURFACE PREPARATION, MORE TIME COLLECTING DATA

Weldable strain gauges require less surface preparation than bonded strain gauges, and the welding is easy to perform with minimal equipment. MicroStrain by HBK wireless solutions can be easily mounted with magnets or 3M VHB 4941 and do not require long cable runs or conduits.

Take simplicity to the next level by adding SensorCloud to unlock the power of the cloud. SensorCloud provides secure data storage, real-time analysis, and customisable alerts and ensures that insights into your critical assets are just a click away.

### Why HBK?

HBK offers comprehensive solutions for your wireless monitoring needs. From the precise measurement of strain with our high-quality strain gauges to the efficient collection and transmission of data through our robust wireless nodes and gateways, we provide a variety of seamless measurement and monitoring systems. Our proprietary LXRS wireless protocol offers scalable, time-synchronised networks. This means many wireless nodes can send data to a single base station, all sampling within  $\pm 50 \mu s$  of each other.

Our advanced software empowers you to analyse data, uncover critical insights, and make informed decisions. With HBK, you get the efficiency and reliability of a complete end-to-end solution from a single trusted source.



# Using the MicroStrain SG-Link-200 with HBK weldable strain gauges

## SG-LINK-200 technical specifications

- 3 analogue input channels, plus internal temperature sensor
- Accuracy:  $\pm 1\%$  full scale (typical)
- Continuous sampling: 1/hour to 512 Hz (3 channels)
- Burst sampling: 32 Hz to 4095 Hz
- Operating temperature:  $-40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$
- Environmental protection: IP68 ruggedised enclosure
- $89.8 \times 127 \times 51.3$  mm, 326 grams with battery

## Two unique products, one powerful solution

- Ideal for structural health monitoring in bridges, pipelines, industrial machinery, and more
- Wireless technology means no cable cost, no conduit, and minimal installation labour requirements
- Reliable performance even in adverse environmental conditions
- SensorCloud cloud data storage offers customisable alerts and scripted for tailored monitoring



## HBK weldable strain gauges

HBK has a long legacy of designing and manufacturing strain gauges with industry-leading quality. With weldable strain gauges, traditional installation procedures are greatly simplified. No more waiting for adhesive to cure, no clamping required, and weldable strain gauges can even be mounted in cold weather and on minimally prepped surfaces.

