

PENLÍNK

Structural Health Monitoring

Our high-resolution sensors are used for assessing the structural integrity of bridges, tunnels, dams and other formations and machines. For these applications, resolution is the most important performance requirement.

Damages in structures appear as tiny variations at first but will amplify with the aging of the structure. Our sensors will reveal failures at a very early stage, thus accomplishing high-performance monitoring of critical structures.

Sensors for Structural Health Monitoring

During the last few years there has been an increased interest in studying and predicting the failure of such structures by instrumenting them with numerous sensors and collecting data on their response to stresses and vibrations. SHM is applied to predict and monitor the ongoing safety of a wide range of critical structures.

Using our sensors for SHM, inspections and operating costs are reduced, enabling a thorough understanding of the integrity of the structures while also providing seismic protection and real-time information. Our sensors gather data from vibrations and stress in the structure, which facilitating reduced maintenance and thus cost savings, as well as increased longevity and improved safety of the structures and large machines.



AI-Q-560

Bias accuracy <1mg with an input range <15g



N-Series

1 & 2 Axis Unhoused Gyros



A-Series

3-Axis Housed Gyros



E-Series

2-Axis Housed Gyros



F-Series

1-Axis Housed Gyros



U-Series

1 & 2 Axis Housed Gyros

The Ultimate Sensors

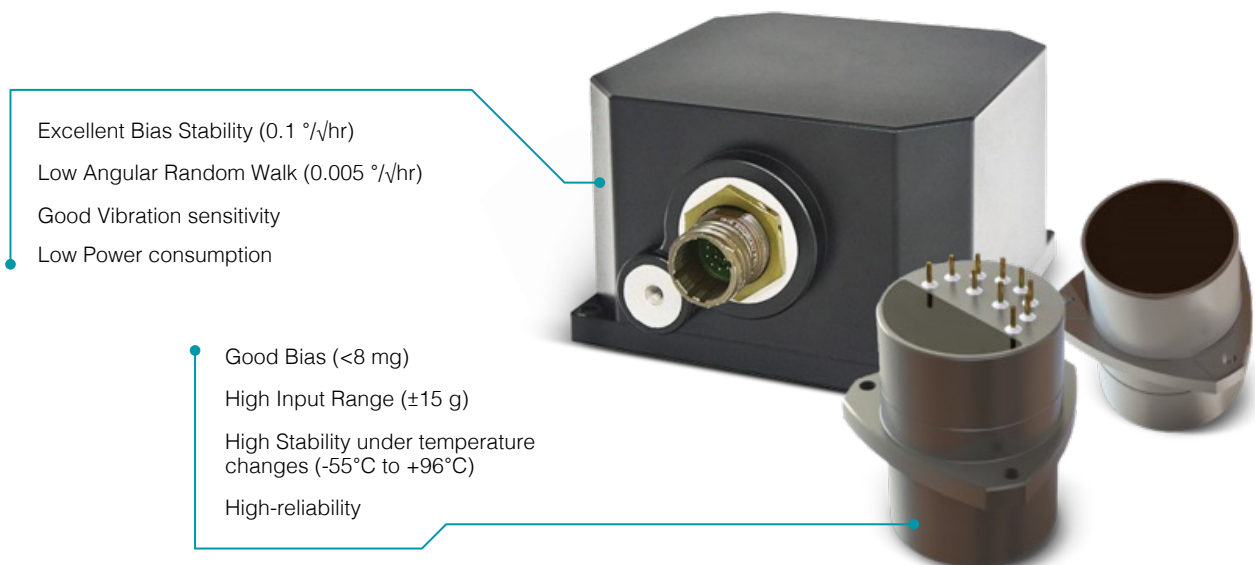
High accuracy, low noise and excellent reliability. That is what our accelerometers and gyroscopes can guarantee in action for structural health monitoring!

Gyroscopes

We have risen to the challenge by developing a low-cost CVG (Coriolis Vibratory Gyroscope) able to meet the market demand for low-cost accurate True-North-Finding and pointing systems. Although our CVG has been developed primarily for stabilization control systems and tactical grade systems, some specific refinements of the control loop electronics are leading to few 0.01 °/hr bias stability and ARW better than 0.01 °/√hr as required for 1 mrad accuracy.

Accelerometers

Beside gyroscopes we also offer accelerometers for structural health monitoring. Our AI-Q-21XX Series can provide tactical grade and navigation performance for SHM, due to its analogue voltage output, excellent long-term repeatability, and compact design. The AI-Q-21XX Series is an optimal solution as it is also a form, fit and function replacement for other quartz servo accelerometers currently available on the market.



Get in touch with us today to start your next project!

WWW.PENLINK.SE



Engineering &
Product design



Inspection &
Quality management



Simulation &
Design verification



Assembly &
Testing



Advanced
Manufacturing



Value-Added
Products & Services

We supply only the best solution for each and every industry, get in touch with us to learn more about your possibilities when working with Penlink.

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