



Multi-Device Connectivity: Up to 128 devices on a single RS485 bus.

This IPX8 Waterproof Vibration Sensor Transducer is designed for demanding structural health monitoring applications, providing precise measurements across 3-axis (XYZ) vibration displacement (up to 2000 μm), velocity (up to 50 mmrotational /s), and amplitude (180°).

Built to withstand harsh conditions, this sensor features a robust, waterproof IPX8-rated enclosure for durability and reliability in challenging environments.

It utilizes Modbus RTU communication, ensuring seamless integration with a variety of monitoring systems. Ideal for applications requiring high-accuracy, long-lasting, and rugged monitoring solutions, this sensor is a reliable choice for continuous structural health analysis.

It comes with free QL-VISIO software for easy dashboard management and supports various output data formats like ASCII, CSV, and MAT. The QL-MINI is ideal for those needing accurate, reliable, and long-lasting measurement solutions.

QL-MINI-SHM

Digital Displacement, Velocity and Inclinometer Sensor

KEY FEATURES

High Performance

Real-time monitoring and data storage for displacement, speed, and amplitude on all three axes (X, Y, Z).

Robust Design

Durable aluminum housing with IP68-rated waterproof and dustproof protection. Equipped with high-quality shielding cable for prolonged durability in harsh environments.

Industrial-Grade

Integrated with a high-performance fusion algorithm for accurate and stable data output. Low noise level enhances measurement accuracy.

Installation Flexibility

Comes with two installation options - magnetic attachment for quick setup or threaded mounting for permanent installation. Designed for stability and ease of removal.

Application Versatility

Suitable for monitoring various rotating machinery such as motors, pumps, fans, turbines, mills, compressors, and centrifuges to prevent damage and economic losses due to early detection of wear, imbalance, or misalignment.

Worry Free Support

Includes a 12-month warranty and lifetime customer service from the QUAKELOGIC team.



Ideal for Use Cases Including:

- Structural Health Monitoring (SHM)
- Real-Time Vibration Analysis for Preventative Maintenance
- Machinery Health and Condition Monitoring

Output Data Types:

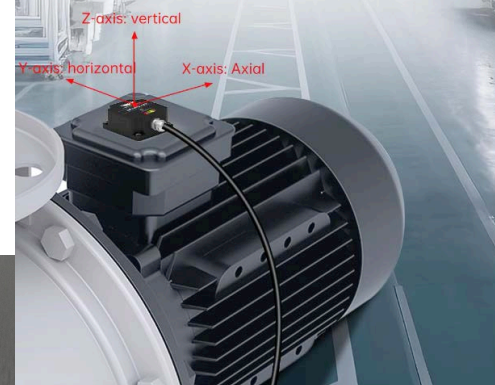
- 3-axis velocity
- 3-axis inclination angle,
- 3-axis vibration displacement, and
- temperature.

Multi-Device Connectivity:



3-axis Measurement Simultaneously

Simultaneously measure 3-axis vibration (velocity, amplitude, displacement, and frequency), providing comprehensive vibration and impact measurements. Inspect whether the machine is damaged timely.



Dashboard

Capture all data at one glance!
More intuitive to view all sensor's attitude motion.

Main Interface	Data list	Graph	3D pose	Raw data
Acceleration Y	Acceleration Z	Angular velocity X	Angular velocity Y	
0.019	1.119	-51.528	25.48	
-0.317	0.249	4.889	6.429	
-0.63	-0.45	-5.265	4.7	
-0.63	0.909	-64.841	34.812	

Multiple-connection

32
sensors

1
software

*Up to multiple connections 128 devices.

Installation Options

Magnetic attachment or threaded mount
Super stable, easy to install and remove



Magnetic Attachment

Magnet attaches to the device to detect vibration
Super suction up to 70kg.



Threaded Mount

Default thread size is M8*1.25mm.
Stable threaded mounting

