

QI2500 – Spec Sheet

General

Sensor Type: Wireless triaxial vibration and temperature sensor

Use Cases: Manufacturing, food processing, mining, ski lifts, industrial HVAC, conveyors, pumps, compressors, gearboxes

Setup Interface: Browser-based (Wi-Fi AP mode) — no external network required

Mechanical

Dimensions: 1.5" diameter × 3.25" height

Sensor Weight: 230 g

Standard Magnet Weight: 160 g

Base Material: 304 stainless steel (food-grade)

Cap Material: HDPE(food-grade)

Seal/Coating: Internal electronics are conformally coated for additional protection

Mounting: Flat or curved magnetic base options or permanent installation using the ¼-28 threaded mount

Environmental

IP Rating: IP68 (fully waterproof)

Operating Temperature: -4 °F to 160 °F (-20 °C to 70 °C)

Humidity: Suitable for high-humidity environments

Electronics & Sensing

Microcontroller: Industrial with 2.4 GHz Wi-Fi

Accelerometer: high-g MEMS

Frequency: 0–16,000 Hz

Acceleration: up to 60 g ($\approx 588 \text{ m/s}^2$)

Velocity: up to 375 mm/s RMS

Lines per Axis: 4096

Sample Rate: 500 Hz to 32 kHz, adjustable via divider

Data Storage: 10,000 data sets

Temperature Range: -4 °F to 160 °F (-20 °C to 70 °C)

Wireless Communication

Radio: 2.4 GHz Wi-Fi

Protocol: 802.11 b/g/n

Range: Up to 100 ft (depending on environment)

Connection Mode: Built-in access point ("QI2500-AP-####")

Power

Battery Type: CR123A lithium

Battery Life: 1–2 years typical (depends on data interval)

Low Battery Alert: Red LED blink

User Interface

Control Button Modes:

Single press – Start (data collection)

Double press – Setup mode (solid green)

Triple press – Hibernate (yellow)

LED Alerts:

Blue – operating

Yellow – caution alert

Red – critical alert

Yellow solid/blink – hibernation