DL-WM-101 Technical Specification

Wireless Triaxial Acceleration Sensor

Wireless triaxial acceleration sensor for structural vibration monitoring with selectable +/-2 g, +/-4 g, or +/-8 g range, 0.1 mg minimum resolution, 0 to 125 Hz bandwidth, 4G transmission, IP66 enclosure, and 9-24 VDC power.

System Category	DL-WM
Signal Type	Triaxial acceleration
Measurement Range	+/-2 g, +/-4 g, or +/-8 g
Sampling / Response	0 to 125 Hz bandwidth
Communication	4G wireless transmission
Protection / Enclosure	IP66
Power Supply	9-24 VDC
Installation	Surface mounted base with four M4 screws

Key Features

- Selectable acceleration ranges support bridge, tower, high-rise, port, and heritage-structure vibration monitoring.
- Triaxial output, 0.1 mg minimum resolution, and 0 to 125 Hz bandwidth support low-frequency structural response observation.
- 4G wireless transmission reduces field cabling for distributed monitoring points.
- Technical basis may reference GB/T 20485 and GB/T 13823 vibration and shock sensor calibration methods.

Typical Use Cases

- Bridge and tower vibration monitoring where wireless acceleration channels reduce cabling work.
- High-rise, port, wind tower, and heritage structures requiring triaxial vibration trend data.

Deployment Notes

- Keep the sensor base in full contact with the measured surface and control installation tilt within the allowed range.
- Confirm 9-24 VDC supply, 4G coverage, measurement direction, and enclosure requirements before deployment.
- Preserve calibration references such as GB/T 20485.31, GB/T 20485.22, GB/T 20485.21, and GB/T 13823 methods in technical documentation.

Technical Highlights and Standards

- +/-2 g, +/-4 g, or +/-8 g range
- 0.1 mg minimum resolution

- 0 to 125 Hz bandwidth
- 4G wireless transmission
- IP66 enclosure
- GB/T 20485 / GB/T 13823 calibration references