

# DL-WM-102 Technical Specification

## Wireless Dynamic Tilt Sensor

Wireless dynamic tilt sensor for structural inclination monitoring with +/-90 degree range, 0.0055 degree minimum resolution, 1 to 50 Hz sampling, DC to 10 Hz bandwidth, 4G transmission, IP66 enclosure, and 9-24 VDC power.

System Category	DL-WM
Signal Type	Dynamic tilt
Measurement Range	+/-90 deg
Sampling / Response	1 to 50 Hz sampling; DC to 10 Hz bandwidth
Communication	4G wireless transmission
Protection / Enclosure	IP66
Power Supply	9-24 VDC
Installation	Surface mounted base with four M4 screws

### Key Features

- Three-axis tilt output supports bridge, high-rise, tower, port, and heritage-structure inclination monitoring.
- The +/-90 degree range and 0.0055 degree resolution support dynamic tilt and trend analysis.
- 4G transmission and IP66 enclosure support outdoor distributed monitoring points.
- Technical basis may reference ISO 9001, GB/T 191, JJF1119, GJB 150, and GB/T 17626 series tests.

### Typical Use Cases

- Bridge, tower, and high-rise tilt monitoring where wireless communication is preferred.
- Heritage and port structures requiring dynamic inclination monitoring without long cable routes.

### Deployment Notes

- Install the sensor in close contact with the measured surface and verify the measurement direction.
- Confirm power supply, 4G signal quality, and waterproof enclosure requirements before quotation.
- Retain applicable technical references including ISO9001, JJF1119-2004, GJB150, GB/T 17626, and GB/T 4208.

### Technical Highlights and Standards

- +/-90 deg range
- 0.0055 deg minimum resolution
- 1 to 50 Hz sampling
- DC to 10 Hz bandwidth

- 4G wireless transmission
- ISO9001 / JJF1119 / GB/T 17626 references

Branding, supplier names, phone numbers, email addresses, physical addresses, logos, customer lists, prices, and original supplier model identifiers have been intentionally excluded from this public specification.