

QTFM, Total Field Magnetometer

QuSpin's total-field magnetometer is a high-performance optically pumped atomic sensor that gives high-accuracy magnetic field readings with low intrinsic noise. Its small size and low power make it ideal for survey applications with mobile platforms. The QTFM is easy to setup, easy to use, and very reliable.

Highlights:

- Ultra-high sensitivity
- Small, light, and low power
- Rugged and portable
- Large temperature range
- Only requires a PC, laptop, or UART-enabled MCU to operate



Applications:

- Magnetic anomaly detection
- Mineral and energy prospecting
- Unmanned mobile platforms

Product Specifications:

Field Sensitivity: Better than 1 pT/VHz in 0.1-100 Hz band (2 pT/VHz in 0.01 to 0.1 Hz band)

Dead Zone: single equatorial plane, ± 7 deg

Heading Error: below 3 nT (uncompensated)

Dynamic Range: 1,000 nT to 100,000 nT

Power: 2 W total (sensor+electronics), 3 W at startup

Power Supply: 5 to 19 V from external supply, or USB power from PC or laptop

Operating Temperature: -25C to +60C (preliminary)

Calibration: none required

Outputs: UART, USB

Dimensions: 19 x 19 x 47 mm (sensor), 19 x 35 x 89 mm (electronic control unit)

Weight: 18 g (sensor)

Type: Rubidium optically-pumped Mz configuration

Included items:

Sensor head, Electronic Control Unit, Cables, Power/Coms adapter board, User interface software, Waterproof carrying case

