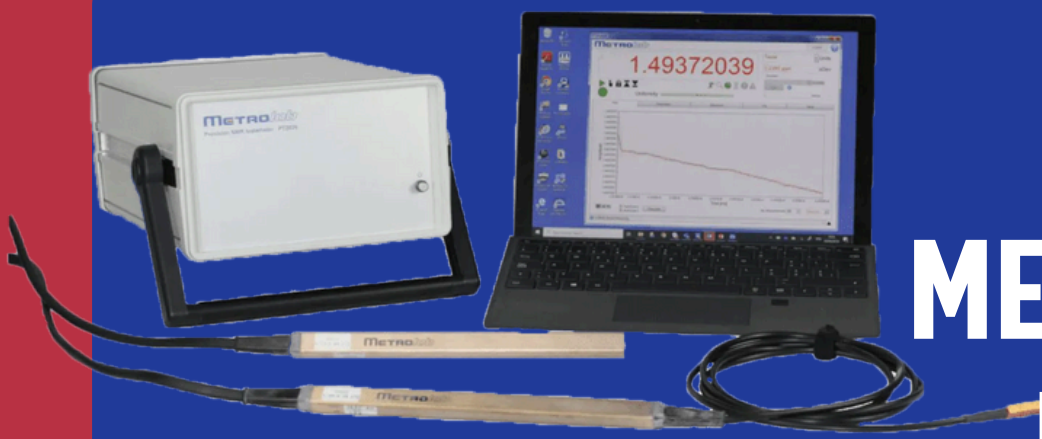
ECHO Magnet Services B.V.



NMR PRECISION TESLAMETER

METROLAB PT 2026

The World's Most Precise Magnetometer

The Metrolab PT 2026 represents the pinnacle of magnetic field measurement technology. Leveraging the unmatched precision of Nuclear Magnetic Resonance (NMR), the PT2026 achieves an astounding accuracy of under 10 parts per billion in optimal conditions, making it the most precise NMR magnetometer available today.

Applications

- High-precision field measurement
- Field monitoring
- Calibration
- Field regulation

PT 2026

Unmatched Performance

- Wide Measurement Range: Measures magnetic fields from 38 mT to >30 T.
- High Precision: Achieves 10 ppb precision using pulsed-wave (PW) NMR detection.
- Fast Measurement Speed: Up to 33 Hz, ideal for high-speed applications.
- Robustness to Inhomogeneous Fields: Tolerates field gradients of 1.35 mT/cm in a 1T field (1350 ppm/cm).

Why Choose the PT2026?

- Industry-leading precision and measurement range.
- High tolerance for inhomogeneous fields and harsh environments.
- Seamless integration with laboratory systems and custom applications.
- Expandable architecture to meet evolving requirements.

Whether for research, calibration, or field regulation, the PT2026 sets a new benchmark in precision and reliability for magnetic field measurement.

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Key Innovations and Features

1

Advanced Technology for Maximum Precision

The PT2026 employs pulsed-wave NMR detectors and advanced signal processing, enabling it to measure even minute effects such as the decay of current in superconducting magnets.

2

Compact and Versatile Probe Design

• Probe 1426-thin: Features a slim measurement head with a coaxial cable connection, allowing access to gaps as narrow as 1.5 mm, ideal for high-radiation environments.

3

Seamless Laboratory Integration

• Connectivity: USB and Ethernet interfaces with support for USBTMC/USB488 and VXI-11 protocols.
• Customizable Software: Includes powerful, ready-to-use software, with support for National Instruments LabVIEW® and SCPI commands.
• Trigger Capabilities: Trigger-in and trigger-out functionalities allow precise timing for magnetic-field measurements.
• High-Precision External Reference: Supports a 10 MHz external reference clock for enhanced stability and reduced calibration requirements.

4

Expandable and Upgradable

-Field Regulation and Multipoint Measurements

• MUX6026 Multiplexer: Enables the measurement of multiple points using multiple probes.
• RG8026 NMR Field Regulation Module: Provides closed-loop magnetic field regulation with ppm-level precision.

5

Magnetic Field Mapping

The PT2026 serves as the core unit of the Magnetic Field Camera (MFC2046). With a firmware upgrade and the addition of the FCA7046 Field Camera Adapter, users can map magnetic fields with probe arrays such as the MFC9046or MFC9146.

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