

# NMR PRECISION TESLAMETER PT2026

## THE GOLD STANDARD FOR MAGNETIC FIELD MEASUREMENTS



*Global Market leader for precision magnetometers*

Based on Pulsed-wave Nuclear Magnetic Resonance detection, the NMR Precision Teslameter PT2026 sets standards for NMR magnetometers.



High accuracy  
Ultra high precision



Integrated 3-axis  
Hall effect sensor



Versatile software  
interface



Extended range  
38 mT - 30 T



Specialized probes  
for high radiation



Specialized probes  
for small spaces



Fast measurement  
rate up to 33 Hz



High tolerance to  
field gradients



ISO 17025 ACCREDITED

### ABOUT METROLAB

We are the **global market leader** for precision magnetometers.

Established in Switzerland in **1985**, we have won the trust of all the large physics laboratories and all leading players in Magnetic Resonance Imaging, **across the world.**

With Metrolab, you measure magnetic fields with **Swiss precision and quality.**

## SYSTEM

MEASUREMENT PRINCIPLE	Pulsed-Wave NMR
FREQUENCY RANGE	1 MHz - 1.1 GHz
PRECISION	±0.1 Hz (stable field, low gradient, no averaging), < 0.01 ppm in uniform 1.5 and 3.0 T field (typical)
ACCURACY	±5 ppm, independant of temperature
REPRODUCIBILITY BETWEEN INSTRUMENTS	±1 ppm
MAX FIELD GRADIENT	> 1 mT/cm
MEASUREMENT RATE	Up to 33 Hz
SIZE	210 x 125 x 324 mm (main unit, optional rack mount)
COMPUTER INTERFACE	USB / USBTMC, Ethernet / VXI-11; IEEE 488.2; SCPI
SOFTWARE	Dedicated PT2026 software
API	Access to all system features; LabVIEW® 2020 driver and C++ API
TRIGGER	Trigger In or Trigger Out
CLOCK CONNECTOR	10 MHz; External Reference in or Internal Reference out

## PROBES

Model 1326 probes have the same form factor as PT2025 model 1062 probes. A single connector makes it easy to plug and unplug. An integrated 3-axis Hall probe speeds up the search for the NMR signal.

Model 1426 probes have a remote passive measurement head that fits into small gaps and is ideal for high-radiation environments that would damage electronic components.

Model 1526 probes have a remote active measurement head that fits into small gaps. The local treatment of the NMR signal improves the signal-to-noise ratio and allows longer cables.



MODEL 1326



MODEL 1426



MODEL 1526

	Model 1326	Model 1426	Model 1526
STANDARD RANGES PROTON PROBES (P)	0.038 to 11.7 T Covered by 5 probes	0.19 to 10.57 T Covered by 4 probes	0.038 to 11.7 T Covered by 5 probes
STANDARD RANGES DEUTERIUM PROBES (D)	10.0 - 30.0 T	8.0 - 22.8 T	10.0 - 30.0 T
WIDE-RANGE PROTON PROBE FOR HIGHLY UNIFORM FIELDS	0.2 - 3.0 T	Not available	0.2 - 3.0 T
HALL PROBE ASSISTANCE	Integrated	Optional	
SEARCH TIME	With Hall assist < 1s • Without Hall assist < 10s *		
PROBE ELECTRONICS SIZE	16 x 12 x 231 mm	16 x 12 x 231 mm	16 x 12 x 231 mm
MAIN CABLE LENGTH	10 m, custom available up to 100 m (incl. multiplexers)		
REMOTE HEAD SIZE	Not applicable	9.2 x 6.2 x 31.5 mm (P) ** 16.2 x 6.2 x 31.5 mm (D)	10.9 x 6.2 x 60.1 mm (P) 15.9 x 6.2 x 60.1 mm (D)
REMOTE HEAD CABLE LENGTH	Not applicable	0.5 m (4.3 mm)	1.5 m std, up to 10 m

\*10 s worse case scenario full range

\*\*Thin probes: down to 1.5 mm thick

## ACCESORIES & UPGRADES

**NMR probe multiplexer, MUX6026**, 4 or 8 channel multiplexers. Connect multiplexers with multiplexers to control up to 512 probes.

**Probe-extension/multiplexer cable, 3026-10M**, standard length 10 m, custom length up to 100 m.

**Transit case, TC8026**, holds one PT2026 NMR teslameter, four probes, one multiplexer, and one probe-extension/multiplexer cable.

**NMR field regulation module RG8026**, coupled with a PT2026 and probe, the RG8026 provides closed-loop magnetic field regulation at the level of parts per million!

## WARRANTY & CALIBRATION

Warranty: **5 years**

Recommended calibration interval:  
**12 months**

CE marked

Specifications are subject to change; for details and up-to-date specifications, see:

[www.metrolab.com/products/nmr-precision-teslameter-pt2026/](http://www.metrolab.com/products/nmr-precision-teslameter-pt2026/)

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