

COMPACT 3-AXIS MAGNETOMETERS THM1176 AND TFM1186

GO ANYWHERE, MEASURE ANYTHING!



THM1176 and TFM1186 magnetometers: ultra-compact and easy-to-use instruments to measure and map all three components of a magnetic field using Hall and Fluxgate technologies.



Comprehensive family
of 3-axis sensors



DC or AC magnetic
fields up to 8 kHz in
continuous mode



Field intensity from
nanoteslas to 30 T



0.5% accuracy



3-axis
calibration



Dedicated
software



Delivered with a
calibration certificate
up to 3 T



Standard USB



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**.

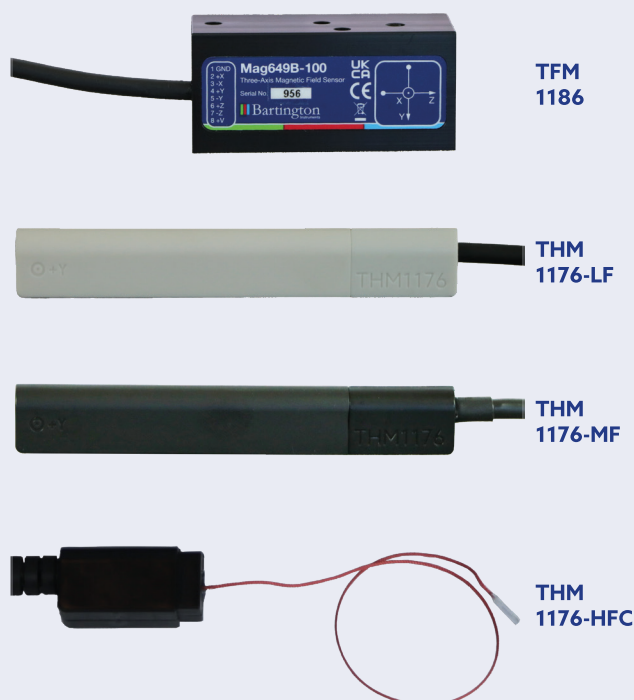
With Metrolab, you measure magnetic fields with **Swiss precision and quality**.

SYSTEM

PROBE	TYPICAL APPLICATION	TECHNOLOGY	KEY SPECIFICATIONS	PROBE DIMENSIONS
TFM1186	Earth-field disturbances	3-axis fluxgate	Range up to 100 μ T Resolution 4 nT Accuracy $\pm 0.5\%$, ± 100 nT	Housing 70 x 30 x 32 mm Cable 3 m
THM1176-LF	Weak/fringe fields	Discrete 3-axis Hall sensor	Range up to 8 mT Resolution 2 μ T Accuracy ± 20 μ T	Housing 113 x 16 x 10 mm Cable 3 m, optionally 6 m
THM1176-MF	General purpose	Integrated 3-axis Hall sensor	Range up to 3 T Resolution 0.05 mT Accuracy $\pm 0.5\%$ up to 1.5 T $\pm 1\%$ up to 3 T	Housing 113 x 16 x 10 mm Sensor 16.5 x 5 x 2.3 mm Cable 3 m, optionally 6 m
THM1176-HFC	Narrow gaps	Integrated 3-axis Hall sensor	Range up to 30 T* Resolution 0.3 mT Accuracy $\pm 1\%$	No housing Sensor 0.5 x 2 x 8 mm Cable 3 m, optionally 6 m



Accuracy specified for total field
Accuracy typically 10x better along primary axes: Bx, By, Bz.
*Calibrated 0.5% up to 1.5 T



EZMag3D SOFTWARE

OPERATING SYSTEMS	Windows, macOS, Linux
KEY MEASUREMENT	Output: Bx, By, Bz, temperature (uncalibrated) Timestamp (167 ns resolution) Sample rate - depends on trigger mode: 0.36 Sa/s to 6.8 kSa/s (1 Sa = Bx, By, Bz)
OPERATING MODES	Teslameter, Spectral analysis, AC analysis, Mapping
MAIN FEATURES	Graphical displays Control of range, units, trigger, acquisition & display rates Save or load settings and measurement file
OPERATING CONDITIONS	Temperature: 0 to 40°C Magnetic: electronics < 3 T; handheld tablet < 1 T

KITS AND ACCESSORIES

Desktop Kit: a magnetometer to plug into the USB port of your computer.

Duo Kit: cost-effective package including your selection of two probes and a carrying case.

Handheld Kit: includes a carrying case with the tablet computer, charger, adapters and cables.

All kits include a USB drive containing the manual and EZMag3D software. Firmware and EZMag3D Software upgrades also included.

THM1176 kits include a zero-gauss chamber.

WARRANTY & CALIBRATION

Warranty: **5 years**

Handheld Kit warranty: **2 years**

Recommended calibration interval:
18 months

CE marked

Specifications are subject to change; for details and up-to-date specifications, see:
www.metrolab.com/products/three-axis-hall-effect-magnetometer-thm1176/

METROLAB TECHNOLOGY SA

110, ch. du Pont-du-Centenaire, 1228 Geneva, Switzerland

+41 22 884 33 11

contacts@metrolab.com

www.metrolab.com