

THREE-AXIS HALL MAGNETOMETER THM1176-LF – “Low Field”

Earth’s field and below

With an 8 mT range and micro-Tesla resolution, the THM1176-LF is ideal for measuring environmental disturbances involving weak magnetic fields. Its three-axis sensor reliably measures total field, regardless of the probe’s orientation. And the battery-powered handheld kit frees you to go measure wherever needed.

A family resemblance

The newest member of the THM1176 family has the same features as its high-field sibling: ultra-compact form factor, USB interface, standards-based communication protocols, full-featured instrument command set, turnkey operation on a desktop or handheld computer, and easy programmability via LabVIEW. The same software drives any of the probes in the THM1176 family.



High as well as low fields

We offer “Duo” kits that include both the THM1176-HF (High Field) and the THM1176-LF, providing you with the tools to measure fields ranging from a few μT to 20 T, at a significant discount of the two instruments purchased separately.



Specifications

Only the specifications that differ from the THM1176-HF are provided.

Range	$\pm 8 \text{ mT}$
Accuracy	$\pm 20 \mu\text{T}$
Resolution	$\pm 2 \mu\text{T}$ (x $1/\sqrt{N}$ if oversampled)
Units	T, mT, μT , G, mG
Probe size	113 x 16 x 10 mm (probe cap cannot be removed)
Field sensitive volume	6 x 3.4 x 3 mm
Angular error	0.2° (σ of distribution; with software angle correction)



Part Numbers

- THM1176-HF-PC Desktop kit with High-Field 3-Axis Hall Magnetometer**
- 3-axis High-Field Hall Magnetometer with 3 meter cable
 - Full-range calibration on 0.1, 0.5 and 3T ranges; 20T range calibrated to 3T
 - Zero Gauss Chamber
 - CD with acquisition software for Windows and Mac, LabVIEW source code, and user's manual
 - Software license from Metrolab, including free updates
- THM1176-LF-PC Desktop kit with Low-Field 3-Axis Hall Magnetometer**
- 3-axis Low-Field Hall Magnetometer with 3 meter cable
 - Full-range calibration
 - Zero Gauss Chamber, Software CD and License, as in THM1176-HF-PC
- THM1176-HF-PDA Handheld kit with High-Field 3-Axis Hall Magnetometer**
Includes desktop kit THM1176-HF-PC, plus:
- Industrial-quality PDA
 - Heavy duty battery (2600 mAh)
 - Adaptor cable
 - Pre-installed acquisition software, with licenses from Metrolab including free updates, and National Instruments
 - CD with acquisition software for Windows, Mac and PDA (Windows Mobile), LabVIEW source code, and user's manual
 - Carrying Case
- THM1176-LF-PDA Handheld kit with Low-Field 3-Axis Hall Magnetometer**
Includes desktop kit THM1176-LF-PC, plus PDA, Battery, Adaptor, Software, Licenses, Software CD and Carrying Case, as in THM1176-HF-PDA.
- THM1176-DUO-PC Desktop kit with High- and Low-Field 3-Axis Hall Magnetometers**
- 3-axis High-Field Hall Magnetometer with 3 meter cable (calibrated to 3T)
 - 3-axis Low-Field Hall Magnetometer with 3 meter cable (calibrated over full range)
 - Zero Gauss Chamber, Software CD and License, as in THM1176-HF-PC
- THM1176-DUO-PDA Handheld kit with High- and Low-Field 3-Axis Hall Magnetometers**
Includes desktop kit THM1176-DUO-PC, plus PDA, Battery, Adaptor, Software, Licenses, Software CD and Carrying Case, as in THM1176-HF-PDA.