

# 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  $\mu\text{T}$  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.

<b>Range</b>	$\pm 8 \text{ mT}$
<b>Accuracy</b>	$\pm 20 \mu\text{T}$
<b>Resolution</b>	$\pm 2 \mu\text{T}$ (x $1/\sqrt{N}$ if oversampled)
<b>Units</b>	T, mT, $\mu\text{T}$ , G, mG
<b>Probe size</b>	113 x 16 x 10 mm (probe cap cannot be removed)
<b>Field sensitive volume</b>	6 x 3.4 x 3 mm
<b>Angular error</b>	0.2° ( $\sigma$ 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.