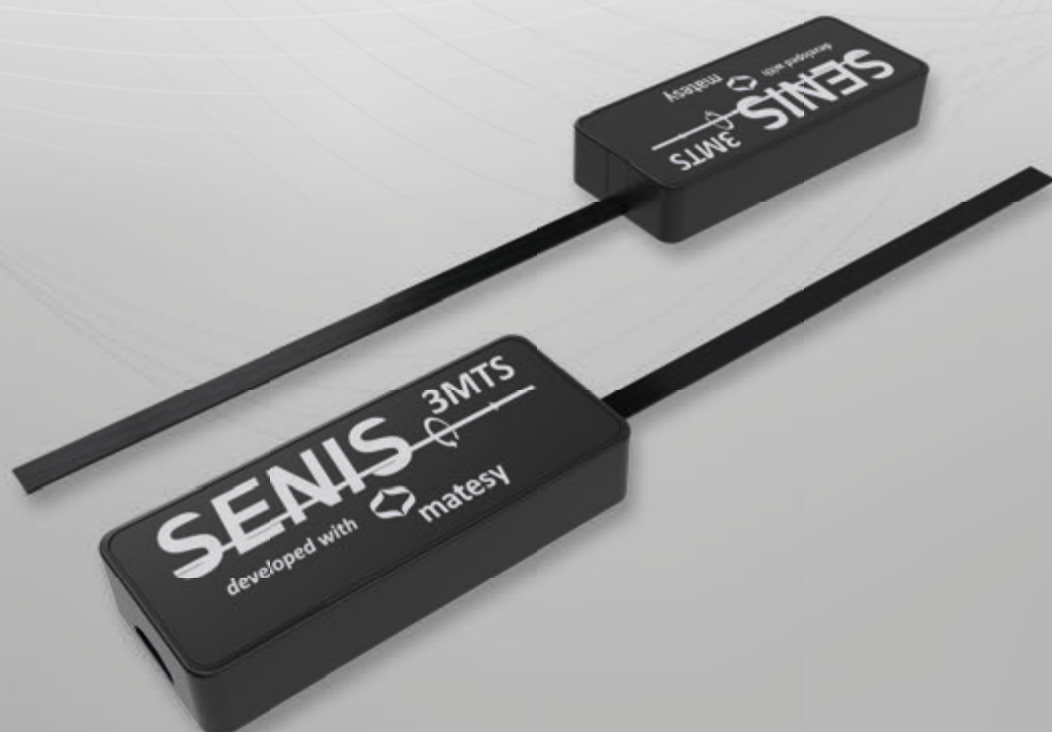


3METS

Triple Axis Handheld Teslameter

Monitoring Permanent Magnets and Magnet Systems

*Small and mobile 3D
Hall sensor element for
point measurement*



SENIS
magnetic & current measurement

 matesy

smart magnetic solutions

3MTS

Triple Axis Handheld Teslameter

Monitoring Permanent Magnets and Magnet Systems

3MTS is a handy 3-axis teslameter, which was developed in cooperation between Matesy GmbH and SENIS AG.

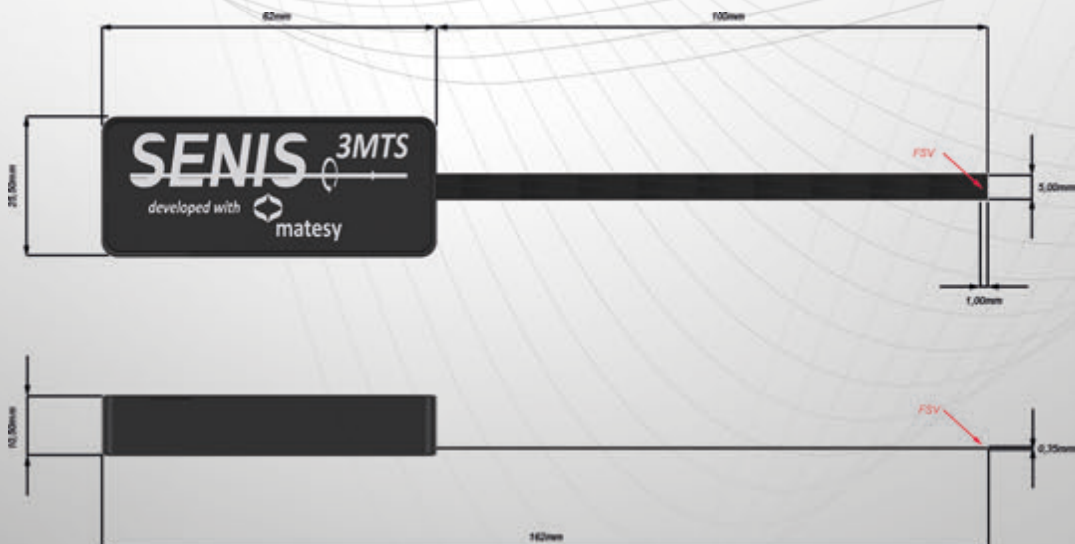


Product Description

The 3MTS is a portable 3-axis handheld Teslameter for controlling permanent magnets and magnetic systems as well as for measuring magnetic fields.

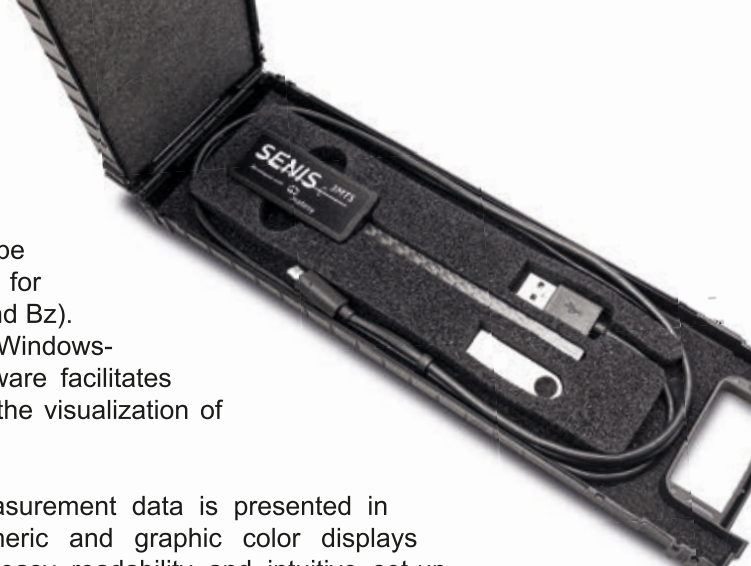
Design & Function

The 3MTS features a fully-integrated triple axis Hall probe mounted in a specially designed carbon fiber holder to ensure mechanical protection of the probe. The smart design of the 3MTS makes it possible to measure magnetic fields even in small air gaps.



The Hall probe is connected to a compact and lightweight electronic module. This module provides the measurement signal conditioning, 12-bit AD conversion, instrument calibration, and USB connection to the end device.

The on-chip temperature sensor on the Hall probe enables a temperature compensated output signal for each of the three magnetic field components (Bx, By and Bz). The 3MTS software is user-friendly and runs on MS Windows-based computers, tablets, or smartphones. The software facilitates data acquisition and control of the 3MTS, as well as the visualization of measurement data.



3MTS Software

Measurement data is presented in numeric and graphic color displays for easy readability and intuitive set-up of control parameters, hold function, and measurement data storage. The probe temperature is displayed in addition to the magnitude of the magnetic field and all three magnetic field components. The min/max values of the magnetic field components can also be displayed.

Application Areas:

- Mobile use with easy handling
- Small 3D Hall sensor element for point measurement
- Easily integrated into test set-ups

Product Highlights

- Powered directly by USB
- Extremely robust and flexible carbon fiber probe holder
- Calibrated for temperature and magnetic field

Advantages

- Mobile use with easy handling
- Small 3D Hall sensor element for point measurement
- Easily integrated into test set-ups

Technical Specifications

- Teslameter/gaussmeter with triple axis Hall probe
- Light and robust plastic housing
- User-friendly software for PCs, tablets, and smartphones
- Alarm, hold and zero functionality
- Numerical and graphical visualization of the magnetic field components (Bx, By and Bz) as well as Btotal, Bmax, Bmin, and probe temperature
- Hall probe thickness (with holder): 1 mm
- Hall probe width: 4 mm
- Uncalibrated measurement range: 20 T
- Calibrated measuring range: 0.1T, 0.5T, 2T
- Magnetic resolution: $\pm 20 \mu\text{T}$
- Frequency bandwidth: DC-500Hz
- AD conversion: 12-bit
- Interface: USB2 & USB3-compatible
- Accuracy: $\pm 1\%$



Contact & information

Matesy GmbH
Loebstedter-Str. 101-103
D-07749 Jena
Germany

Tel.: +49 (0) 03641 79799 00
Fax: +49 (0) 03641 79799 01
E-mail: info@matesy.de
Web: www.matesy.de

