

m-axis

Characterization of the Magnetic Specifications of Permanent Magnets

Determine the magnetic moment and magnetization direction of permanent magnets in seconds!



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m-axis instruments allow you to determine the magnetic moment and magnetization direction of permanent magnets in seconds.

Product Description

m-axis is a measurement system that can be used to characterize permanent magnets in terms of their magnetic specifications (magnetic moment and magnetization angle) with high precision. In addition to the four standard measuring ranges, the modular design allows the system to be adapted to customer-specific requirements.

The measurement systems can be used for 100% in-line quality control via our m-axis I/O module.

Design & Function

Analysis and documentation of the measurement data is carried out with the aid of comprehensive user software. The m-axis instruments can be quickly and easily integrated into a production process by storing measurement processes and magnet types. All relevant settings and measurement results can be output in a measurement report!

A further advantage of the m-axis instruments is the internal quality monitoring provided by the localization algorithm, which can detect and display magnetic disturbances during measurement.

m-axis Variants & Measuring Ranges

Variant	Measuring Range
m-axis S	0.01– 1.00 Am ²
m-axis M	0.10– 3.00 Am ²
m-axis L	1.00– 10.00 Am ²
m-axis XL	4.00– 50.00 Am ²

Product Highlights

- Rapid determination of the magnetic moment
- Accurate determination of magnetization orientation
- Tabular and graphical representation of the magnitude and orientation of the error angle
- Statistical evaluation of the parameters possible
- Easy integration into automated processes via m-axis I/O module

Advantages

- Built-in measurement quality check and warning in case of interference during measurement
- Automated storage of the characteristic values determined in a CSV file can be implemented into an existing manufacturing process
- Determination of characteristic data independent of geometry

Application Areas:

- Automotive applications
- Aerospace applications
- Drive technology
- Medical technology
- Industrial automation



I/O module



Temperature module



Table module



Foot switch



m-axis with software

Optional Modules:

- **I/O Module:** The I/O module facilitates integration into automated environments.
- **Temperature Module:** The temperature module allows the magnetic moment to be corrected by measuring the room temperature.
- **Table Module:** To counteract magnetic interference caused by laboratory tables.
- **Rotary Axis Module:** If required, the magnets can be rotated 360° during measurement

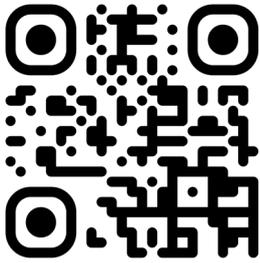
Technical Specifications

- PC control with USB interface
- Mains connection: 85– 264 VAC/47– 63 Hz
- Dimensions: 450 x 450 x 230 mm
- Automatable
- Moment and Br accuracy: $\pm 1\%^*$
- Moment and Br repeatability: $\pm 0.1\%$
- Magnetization angle accuracy: $\pm 0.1^\circ*$
- Quick classification

* Depending on the device configuration used



m-axis XL



Contact & information

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