

# MATERIAL TESTER

## LM-FL250-HM2



- » **Helmholtz torque coil**
- » **Graphical integral of the pulse curve**
- » **Real flux, magnetic torque, flux density**
- » **Memory and interface**
- » **No drift**
- » **LCD touch panel**
- » **Wireless interface**

The compact List-Magnetik FLUX-CHECK 250 material tester is a new handheld measuring device for determining the magnetic flux  $\Phi$  of a magnet system or individual magnet. This innovative device offers a precise method for testing ferromagnetic materials and is ideal for material analysis and testing in various applications.

When testing a permanent magnet or a magnetic system, the decisive factors are the quality of the magnet and the strength of its magnetization. Measuring the magnetic field strength with a magnetic field measuring device is only possible at specific points and does not take into account the volume of the magnet. This task is performed by a fluxmeter with a Helmholtz coil, which enables precise and volumetric measurement of the entire magnetic field.

In combination with the List-Magnetik Helmholtz moment coil HM-1, the magnetic flux of permanent magnets can be determined very accurately, as the entire volume of the magnet is measured independently of its position. The effect of the magnet on the coil is determined in the form of an electrical voltage and converted into the flux value. In addition to the Helmholtz moment coil HM-1, all types of coils or coil probes can be connected to the device, which allows for a high degree of flexibility in ferromagnetic material testing and material analysis.

The recorded pulse curve of the flux measurement is used to determine an area which, as an integral, determines the flux value.

## Specification

### Magnetic flux

Measurement range up to 0 ... 10 mVs

Resolution 0,001 mVs

Accuracy 2%

### Magnetic flux

Measurement range up to 0 ... 250 mVs

Resolution 0,001 mVs

Accuracy 2%

### General technical data

Repeat accuracy 1 %

Measuring functions Quantity, MAX, MIN, Average value, Standard deviation

Display type LCD touchscreen

Display size 3,5 Inch

Display resolution 320x480 pixels

Storage medium Internal memory

Storage capacity 10000 Measurements

Interface USB

Operating time 25 h

Operating time additional information with battery, unlimited with external power source

Menu language German, English (GB), English, Italian, French, Spanish

Protection class (device) IP64

Power supply 3 x 1,5 V AA Batterie

(Rechargeable) battery 3 x 1,5 V AA battery , Mignon

Capacity 3000 mAh

Operating conditions 0 ... 50 °C , 10 ... 90 % RH

Storage conditions 0 ... 50 °C , 10 ... 90 % RH

Dimensions ( L x W x H ) 150 x 85 x 35 mm

Weight 320 g