

## H3 Field Strength Meter

with Interface RS 232, double comparator and  
Maximum value storage

for measuring permanent magnetic fields from 0 ... 2 Tesla (0... 20 kA/cm).



**Applications: - Research - Development - Production – Laboratory - Training**

The H3 Field Strength Meter is an electronically measuring bench unit with digital displaying used as desk- or installation instrument.

A variety of coils can be connected (see Technical data).

Special sensor dimensions and the installation of sensors in other devices to customers' specifications are possible.

Installed in the tip of the sensors is a Hall generator that outputs a voltage proportional to the magnetic field strength; this voltage is amplified in an instrument amplifier and output to the digital display.

The reading is displayed in the unit 'Millitesla' (mT), but can also be switched over to A/m, whereby the position of the decimal point is set automatically. Setting of the Field Strength Meter H2 zero point and calibration of the instrument are performed via the knobs on the front panel.

Field Strength Meter calibration is effected using an internal calibration voltage. Even greater measuring accuracy is achieved by using reference magnets that are available in different field strengths. These are unaffected by external fields and highly stable against artificial ageing.

The H3 Field Strength Meter has an analog output port for connection of a chart recorder or A/D converter for digital further processing of the output voltage.

### **Analog display AZ3**

For series measurements is this display suitable. It can be read in a distance of about 3 meters.

### **Interface RS 232**

The H3 Field Strength Meter has a serial interface RS 232

**Technical Data:**

<b>Display</b>	LED- Display, 14 mm high, 3 1/2 Digits, 3 Measuring/Second automatically Polarity Display
<b>Measuring Ranges</b>	$2 \cdot 10^{+0} / 2 \cdot 10^{+1} / 2 \cdot 10^{+2} / 2 \cdot 10^{+3}$
<b>Constants of Measuring</b>	$10^{-3}$ mT/Digit, $10^{-2}$ mT/Digit, $10^{-1}$ mT/Digit und $10^0$ mT/Digit
<b>Precision of Measuring</b>	≥ 1 % with internal Tension, ≥ 0,5 % with Calibrating Magnet
<b>Repeat Precision</b>	≥ 0,2 %
<b>Outputs</b>	Analog output ± 1,999 V equivalent 1999 Digit, connection for X-Y-Recorder or A/D-Cards
<b>Power Supply</b>	230 Volts, 50 Hz, about 20 Watts
<b>Interfaces</b>	RS 232, double comparator und maximum value storage
<b>Transversal coil HS-T 103</b>	Dimension: 2,0 x 4 x 70 mm (without handle)
<b>Transversal coil HS-T 303</b>	Dimension: 1,6 x 5,0 x 75 mm (without handle)
<b>Transversal coil HS-T 403</b>	Dimension: 0,3 x 2,0 x 20 mm (without handle)
<b>Axial coil HS-A 203</b>	Dimension: 2,5 $\phi$ x 60 mm (without handle)
<b>Axial coil HS-A 503</b>	Dimension: 5,0 $\phi$ x 75 mm (without handle)
<b>Axial coil HS-A 303</b>	Dimension: 6,0 $\phi$ x 75 mm (without handle)
<b>Dimension</b>	520 mm x 165 mm x 335 mm (B x H x T)
<b>Weight</b>	ca. 7 kg

Technical changes reserved!

Exclusively the specifications in the offer are binding!