Complete functionality with only 4 push buttons. Data storage on a PC via keystroke. The HGM09s stands out due to simplest operation and a good price/performance ratio.

Hand Gaussmeter HGM09s

Application

The handheld Gaussmeter HGM09s is used to measure magnetic DC and AC fields. The measurands are flux density in Tesla or Gauss and the field strength in Amps per meter.

The HGM09s is supplied with rechargeable batteries and it is very handy to use as a portable device.

For stationary use it is equipped with a power supply unit and a USB cable (included in delivery) acting as additional battery charger.

However, it has a high measuring accuracy with several built-in features.

Function Description

The HGM09s is standardly equipped with a transversal probe. An axial probe and a thin transversal probe for the measurement inside small gaps are also available. All probes are equipped with EEPROMs for identification, parametrization and linearization.

The measuring range is up to 4.5 Tesla for the flux density and 3800 kA/m for the field strength respectively. The resolution is down to 1 μT or 1 A/m.

Further features are peak hold (positive and negative), linearity adjustment, null balance and battery condition indicator with energy-saving mode. The measuring values can easily be visualized and stored on the PC by pressing a key via the USB interface. With a software provided by the customer, the device can also be controlled automatically.

Technical Data

Display		Graphics LCD					
Units		Tesla [T]		Gauss [G] o. Oersted [Oe]		Amps/Meter [A/m]	
Measuring Ranges	Resolution	4.5T	1mT	45kG 45kOe	10G 10Oe	3800kA/m	1kA/m
		1T	100µT	10kG 10kOe	1G 1Oe	1000kA/m	100A/m
		100mT	10µT	1kG 1kOe	100mG 100mOe	100kA/m	10A/m
		10mT	1µT	100G	10mG	10kA/m	1A/m
Accuracy		DC ±0.5 % to 1.5T or ±1 % from 1.5T; Peak ±2 %; AC ±2 %					
Frequency Range		DC / AC 0Hz..5 kHz (r.m.s. value)					
Peak Hold		t_{signal} > 250µs					
Interface		USB; incl. driver for a virtual serial interface					
Power Supply (included in delivery)		Power supply unit 100..240 VAC, 50/60Hz, 0.3A_{max} USB interface Rechargeable battery 2 x AA 1.2V NiMH (exchangeable)					
Temperature Range		-10°C .. +40°C (not bedewing)					
Dimensions		approx. 145 x 80 x 40mm^3					
Weight (incl. batteries, without probe)		approx. 250g					
Probes (special probes on request)		Standard-Transversal Probe N (included in delivery)		Dimensions approx. 3.5 x 1.35 x 46mm^3			
		Axial Probe		Dimensions approx. 4mm ∅ x 60mm			
		Transversal Probe S		Dimensions approx. 3.5 x 0.75 x 46mm			
		All Probes: Active area ∅ 0.15mm Holder approx. 11mm ∅ x 100mm Cable length approx. 1.3m (special lengths available) Integrated EEPROM					

The specifications are subject to change without notice.

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