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) / Oersted (Oe)	Amps/Meter (A/m)
Measuring Ranges (Resolution)	4.5 T (1 mT)	45 kG (10 G) 45 kOe (10 Oe)	3800 kA/m (1 kA/m)
	1 T (100 µT)	10 kG (1 G) 10 kOe (1 Oe)	1000 kA/m (100 A/m)
	100 mT (10 µT)	1 kG (100 mG) 1 kOe (100 mOe)	100 kA/m (10 A/m)
	10 mT (1 µT)	100 G (10 mG) 100 Oe (10 mOe)	10 kA/m (1 A/m)
Accuracy	DC ±0.5 % to 1.5 T or ±1 % from 1.5 T; Peak ±2 %; AC ±2 %		
Frequency Range	DC / AC 0Hz..5 kHz (RMS value)		
Peak Hold	t_{signal} > 250 µs		
Interface	USB; incl. driver for a virtual serial interface		
Power Supply (included in delivery)	Power supply unit 100..240 VAC, 50/60 Hz, 0.3 A_{max} USB interface Rechargeable battery 2 x AA 1.2 V NiMH (exchangeable)		
Temperature Range	-10 °C .. +40 °C (not bedewing)		
Dimensions	approx. 145 x 80 x 40 mm		
Weight (incl. batteries, without probe)	approx. 250g		
Probes (special probes on demand)	HGM Transversal Standard (included in delivery)	Dimensions probe tip approx. 1.3 x 3.8 x 50 mm	
	HGM Transversal S	Dimensions probe tip approx. 0.6 x 3.8 x 50 mm	
	HGM Axial	Dimensions probe tip approx. ∅ 4.6 x 65 mm	
	All Probes: Active area ∅ 0.3 mm Holder approx. ∅11 x 100 mm Cable length approx. 1.3 m (special lengths available) Integrated EEPROM		

The specifications are subject to change without notice.

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