

Complete functionality for industrial application. Data storage on PC or control via standard interfaces. Digital interface.



## Application

The industrial gaussmeter IGM11 is used to measure magnetic DC and AC fields. The measurements are flux density in Tesla or Gauss and the field strength in Amps per meter.

It has a high measuring accuracy with several built-in features.

## Function Description

The IGM11 is standardly equipped with a compact axial probe. Special probes available. All probes are equipped with EEPROMs for identification, parameterization and linearization.

The measuring range is up to 4.5 (optional 10) Tesla for the flux density and 3800 (optional 8000) kA/m for the field strength respectively. The resolution is down to 1  $\mu$ T or 1 A/m.

Further features are peak hold (positive and negative), linearity adjustment, null balance and automatic limit value monitoring. The measuring values can easily be visualized and stored on the PC or a control. Service and control functions are also available with the software.

The device can be parameterized via the control keys.

## Technical Data

Display	Graphics LCD (illuminated)		
Units	Tesla (T)	Gauss (G) / Oersted (Oe)	Amps/Meter (A/m)
Measuring Ranges (Resolution)	4.5 T (1 mT)	45 kG, kOe (10 G, Oe)	3800 kA/m (1 kA/m)
(Measurements beyond 4.5 T only with special probes)	1 T (100 $\mu$ T)	10 kG, kOe (1 G, Oe)	1000 kA/m (100 A/m)
	100 mT (10 $\mu$ T)	1 kG, kOe (100 mG, mOe)	100 kA/m (10 A/m)
	10 mT (1 $\mu$ T)	100 G, Oe (10 mG, mOe)	10 kA/m (1 A/m)
Accuracy	DC $\pm 0.5$ % up to 1.5 T and $\pm 1$ % from 1.5 T; Peak $\pm 2$ %; AC $\pm 2$ %		
Frequency Range	DC / AC 0 Hz...5 kHz (r.m.s. value)		
Peak Hold	$t_{\text{signal}} > 250 \mu\text{s}$		
Power Supply	11.5...26.5 V DC, 2.4W (200 mA/100 mA)		
Temperature Range	0 °C...+55 °C (non bedewing)		
Dimensions	approximately 72 x 90 x 63 mm (W x H x D), assembly on cap rail		
Weight	approximately 150 g		
Measuring Probes (special probes available on demand)	IGM Transversal	Dimension probe tip approx. 1.3 x 3.8 x 50 mm	
	IGM Axial angular	Dimension housing approx. 16 x 16 x 40 mm	
	IGM Axial round	Dimension housing approx. $\varnothing$ M10 x 38 mm	
	All probes: Active area $\varnothing$ 0.3 mm Cable length: 3 m (special lengths available) Integrated EEPROM		
Interfaces	EIA-232  Ethernet 10 MBit / 100 MBit  Data protocol RFC 854  3 digital inputs 24V, 4 digital outputs 24 V, fully parameterizable		

The specifications are subject to change without notice.

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