

## Hand Gaussmeter HGM0200 with Polarity Indicator



### Application:

The Hand Gaussmeter HGM0200 is used for measurements of the field strength and for determination of the poles of permanent magnets. We put special emphasis on an instrument which can easily be operated and which is handy. You switch on the instrument with a push button on the front side and it remains in the on-position as long as the buttons is pressed. This results in a long lifetime of the battery.

## Functions:

- Display:** The HGM0200 has a 3½-digit LCD display to indicate the field strength and an indication (N/S) to determine the poles. The field strength is displayed in Tesla.
- Measuring range:** The measuring range goes from 0mT to 1999mT. This is equivalent with a range in Gauss up to 19990G.
- Accuracy:** The accuracy of the display is approx. 0.5% equal to 1mT = 10 G.  
By use of high-tech sensors the linearity is better than 1%.  
Due to the additional zero adjustment, an accuracy of ± 2% can be maintained throughout the whole measuring range.
- Measuring Method:** To reach the accuracy mentioned above, you must pay attention that the field lines are always perpendicular to the sensor area. Air gaps between sensor and magnet or to the object to be measured must be avoided by placing the sensor softly upon the object.
- Pole Indication:** The south pole is indicated by a green diode, the north pole by a red diode. You measure by softly placing the instrument from above on the magnet pole. This convention must strictly be followed, or otherwise the opposite polarity will be indicated.  
  
Annotation: While switching on the instrument a diode is already on though there may not be any magnet around. The reason for this is that the sensitive comparator prefers the diode – even without a magnetic field. Just when a magnetic pole is approached, the correct polarity will be indicated.
- Battery Change:** An indication in the display shows too low battery charge. In such a case, the polarity indication remains correct, however the accuracy of the indication cannot be granted any longer. To change the battery, you must press the enclosure lid on the bottom side of the instrument and move it slowly until it opens. Attention: It is absolutely necessary to insert the new battery with the correct polarity.

**Technical Features:**

Display:	LCD 12mm
Display Range:	3½ digits
Measuring Range:	1...1999 mT being 10 G ... 19.99 kG being 10 Oe ... 19.99 kOe
Resolution:	0.5% (1mT)
Accuracy:	± 2%
Special Features:	with pole indicator
Dimensions:	140mm * 63mm * 30mm without sensor
Weight:	approx. 130g incl. battery
Temperature range:	0°C ... 50°C
Storage Temperature:	-20°C ... + 70°C
Battery:	9 V block incl.
Accessories:	Solid leather bag (optional)

Further Info? – Please Contact us:

**MAGSYS magnet systeme GmbH**  
Beratgerstr. 36  
D-44149 Dortmund  
Germany

Phone: +49 (0) 231 177 88-0  
Fax: +49 (0) 231 177 88-22  
e-mail: sales@magsys.de

**MAGSYS magnet systems, LLC**  
3103 Cascade Drive  
Valparaiso, IN 46383-9123  
USA

Phone: +1 219-548-2202  
Fax: +1 219-548-9203  
e-mail: JMurphy@magsys.org

**MAGSYS magnet systeme Singapore**  
Blk 10 Lobby B #07-22  
Ubi Techpark, 10 Ubi Crescent  
Singapore 408564  
Singapore

Phone: +65-848 4277  
Fax: +65-848 4966  
e-mail: asia@magsys.de