

Gaussmeter Model 421



- Laboratory Gaussmeter for determining the magnetic field strength of permanent magnets and systems
- User-friendly measuring instrument
- Mains supply
- Application in laboratories and in production lines

Features

- Single-axis measuring instrument
- 4 ³/₄ digits resolution
- 7 measuring ranges
- Up to 18 measurements per second
- 2-line display
- Display in Gauss or Tesla
- RS-232 interface
- Functions: Max Hold, Filter, Alarm with Relay, Zero Probe, Relative Reading, Auto Range, Memory Hold, AC/DC, Gauss/Tesla, Keylock

Operating principle

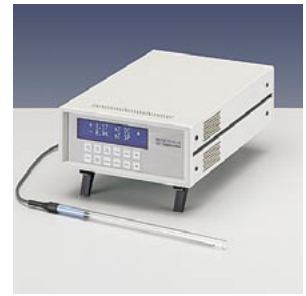
Single-channel Gaussmeter with a resolution of $3\frac{3}{4}$ digits ($4\frac{3}{4}$ digits with filter in DC-adjustment) and a measuring accuracy of $\pm 0,20\%$ of the measured value. The measuring rate is 5 measurements per second (display) and 18 measurements per second with serial interface.

Measurement of Hall voltage created in Hall sensor which is proportional to the applied magnetic field.

All the functions are displayed and controlled via the front panel of the instrument. Input via keyboard, readings on a 2-line fluorescent display with alphanumeric text.

Two analogue outputs are provided. The corrected analogue output displays the exact value, the non-corrected analogue output shows the field strength in real time. Field and temperature measurements are via the probe input.

The Gaussmeter 421 is used e.g. for testing magnetic materials in sensor technology and in automation. It can also function as an integrated component in controlling production processes and in the manufacture of DC motors.



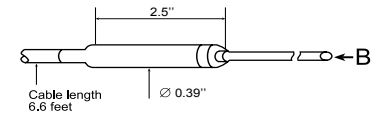
Gaussmeter 421



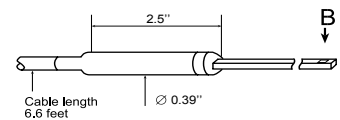
Hall probes

Technical Data

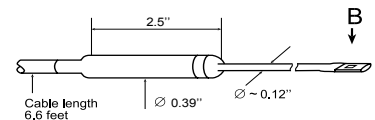
Measuring mode:	measurement of Hall voltage
Measuring range:	300 mG, 3 G, 30 G, 300 G, 3 kG, 30 kG, 300 kG
Measuring frequency:	DC, 10 Hz – 400 Hz
Measuring accuracy:	$\pm 0.2\%$ of DC value, $\pm 2\%$ of AC value 0.005% of measuring range
Repeatability:	$\pm 0.1\%$
Measuring rate:	5 measurements / sec / display 18 measurements / sec / interface
Selection of measuring range:	automatic or manual
Resolution:	$4\frac{3}{4}$ digits (1 of ± 30000)
Display:	2-line, vacuum-fluorescent
Probe type:	all single-axis laboratory probes
Temperature range:	$0^{\circ}\text{C} - 40^{\circ}\text{C}$
Analogue outputs:	corrected and non-corrected $\pm 3\text{ V}$
Interfaces:	RS-232
Power supply:	100 – 130 V AC / 210 – 250 V AC, 50 / 60 Hz
Functions:	Max Hold / Filter / Alarm with Relay / Zero Probe / Relative Reading / Auto Range / Memory Hold / AC/DC / Gauss/Tesla / Keylock



Axial probe



Transverse probe



Flexible transverse probe

Accessories

Accessories included:	zero gauss chamber, terminal block and power cable
Special accessories:	probe cable in lengths 3 / 7.6 / 15.24 / 30.49 m, 305 mm zero chamber / interface cable / 19" drawer



Hystograph AC/DC system Fluxmeter Gaussmeter

Other measuring systems:

- Hystograph
- AC/DC Hystograph
- Fluxmeter

Other products:

- Measuring Technology for Soft Magnetic Materials
- Magnetizing Technology
- Internet Marketplace for Used Instruments
- Services

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