

Gaussmeter Model 425 DSP



- Digital laboratory Gaussmeter for determining the magnetic field strength of permanent magnets and systems
- Measurement of magnetizing pulses up to 10 kHz
- User-friendly measuring instrument
- Mains supply
- Application in laboratories and in production lines
- Field and temperature measurement via the probe input

Features

- Single-axis measuring instrument
- 4 ³/₄ digits resolution
- 7 measuring ranges
- Up to 30 measurements per second
- 2-line display
- Display in G, T, Oe, A/m
- USB interface
- Functions: Max Hold, Alarm with Relay, Zero Probe, Relative Reading, Auto Range, AC/DC, Keylock

Operating principle

Single-channel Gaussmeter with a resolution of $4 \frac{3}{4}$ digits with filter in DC-adjustment and a measuring accuracy of $\pm 0,20 \%$ of the measured value. The measuring rate is 3 measurements per second (display) and 30 measurements per second with USB 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 alphanumerical 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.

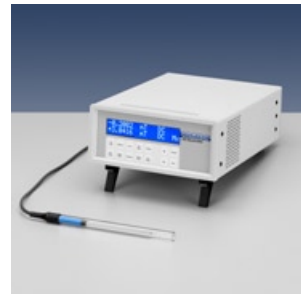
The Gaussmeter 425 DSP is used e.g. for testing magnetic materials in sensor technology and in automation. It can also function as an integrated component in controlling production processes and in the manufacture of DC motors.

Technical Data

Measuring mode:	measurement of Hall voltage
Measuring range:	350 mG, 3,5 G, 35 G, 350 G, 3,5 kG, 35 kG, 350 kG
Measuring frequency:	DC, AC up to 10 kHz
Measuring accuracy:	$\pm 0.2 \%$ of DC value, $\pm 2 \%$ of AC value $\pm 0.05 \%$ of measuring range
Repeatability:	$\pm 0.1 \%$
Measuring rate:	3 measurements / sec / display 30 measurements / sec / interface
Selection of measuring range:	automatic or manual
Resolution:	$4 \frac{3}{4}$ digits
Display:	2-line, LCD lighted
Probe type:	all DSP single-axis laboratory probes
Temperature range:	$5^{\circ}\text{C} - 40^{\circ}\text{C}$
Analogue outputs:	corrected and non-corrected $\pm 3,5 \text{ V}$
Interfaces:	USB
Power supply:	100 – 240 V AC, 50 / 60 Hz, 40 VA
Functions:	Max Hold / Alarm with Relay / Zero Probe / Relative Reading / Auto Range / AC/DC / Keylock

Accessories

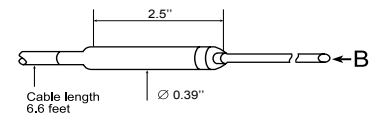
Accessories included:	zero gauss chamber, terminal block, power cable, USB driver CD
Special accessories:	probe cable in lengths 3 / 7.6 / 15.24 / 30.49 m, 305 mm zero chamber / interface cable / 19" drawer



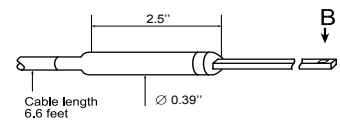
Gaussmeter 425 DSP



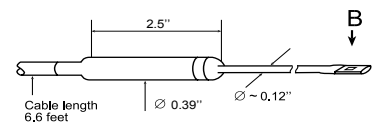
DSP Hall probes



Axial probe



Transverse probe



Flexible transverse probe



Hystograph

AC/DC system

XYZ Scanner

Fluxmeter

Gaussmeter

Other measuring systems:

- Hystograph
- AC/DC Hystograph
- XYZ Field Scanner
- Fluxmeter

Other products:

- Measuring Technology for Soft Magnetic Materials
- Magnetizing Technology
- Services