
Gaussmeter/Teslameter

Model 2010 Serial Port Gaussmeter

Description

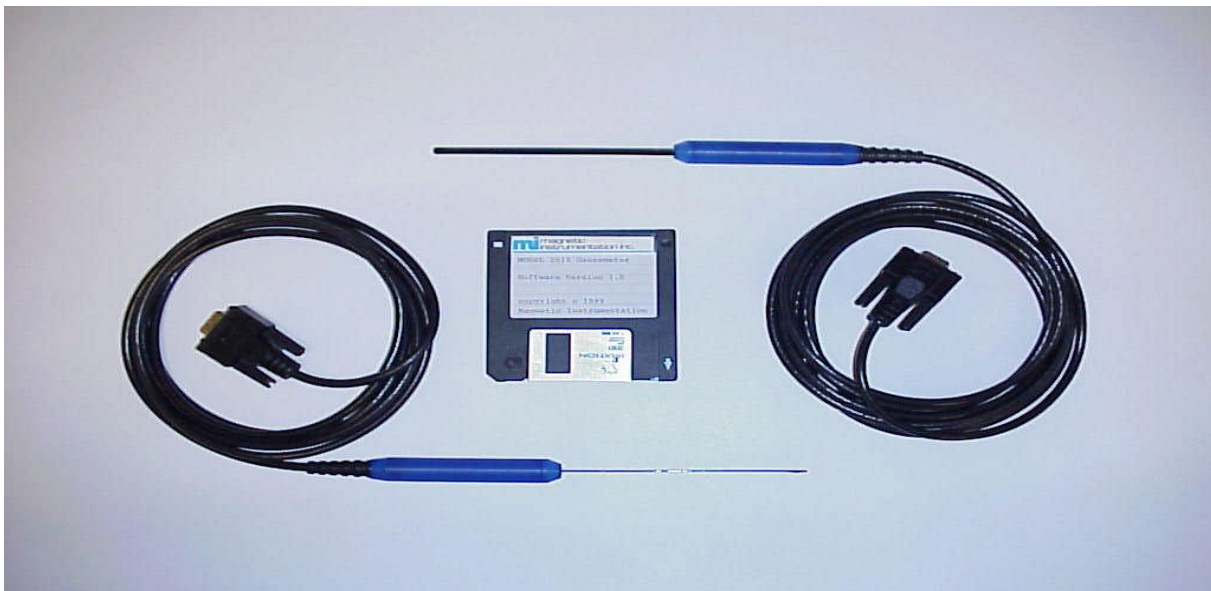
The Model 2010 Serial Port Gaussmeter with integral Hall Effect Probe represents a breakthrough in Gaussmeter manufacturing technology. It provides quick and easy magnetic field measurements at your desk, on the production line, or anywhere that a PC is available.

All Gaussmeter electronics, Hall element linearization, and temperature compensation functions are incorporated in the rugged handle of this measurement system. Transverse (Model 2010T) and Axial (Model 2010A) versions are available. The supplied stand-alone software package provides a virtual instrument display with on-screen controls for meter configuration and data logging. With the provided ActiveX™ component, data from the 2010 can be directly imported into user-developed software applications.

The Model 2010 is designed to measure permanent magnet and DC magnetic fields up to ± 10 kiloGauss (± 1 T) at a resolution of 0.1 Gauss ($10\mu\text{T}$). The software supplied with this innovative Gaussmeter allows customization of the display size, background and foreground colors, and display units to suit individual requirements. The software can be set up to display any combination of magnetic field intensity, temperature, min field, max field, field deviation, and field limits.

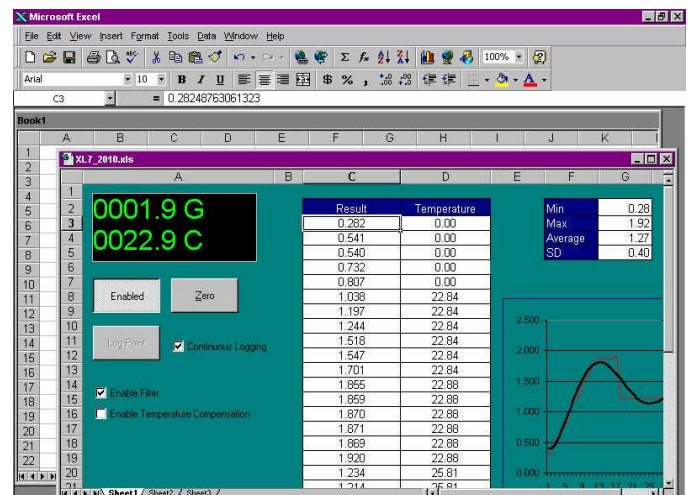
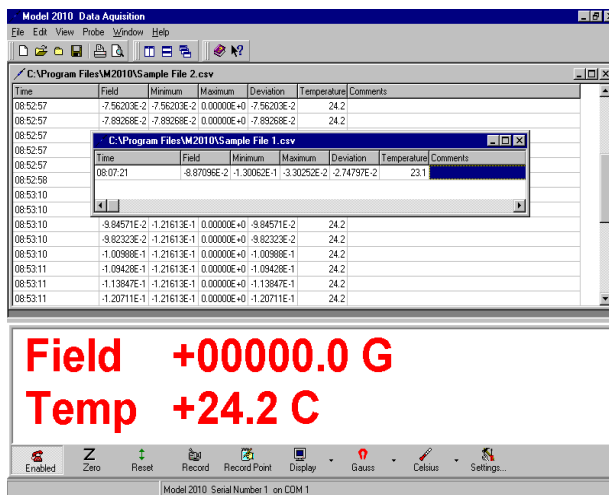
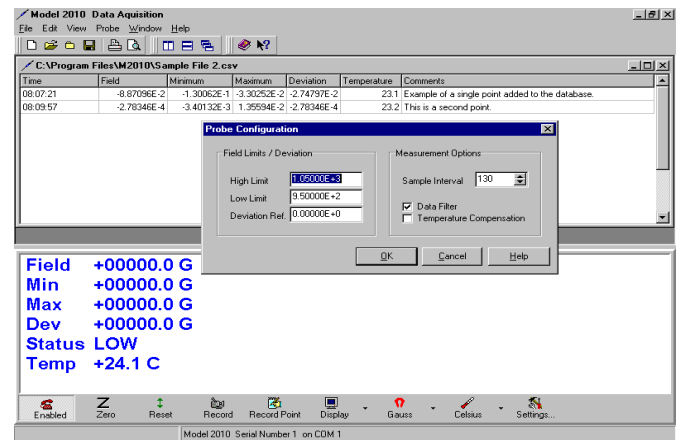
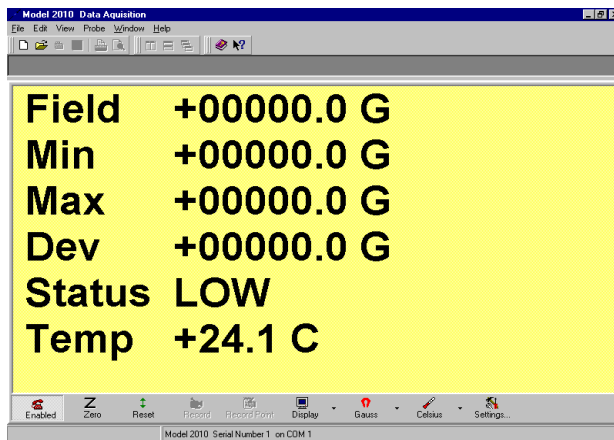
Features

- Transverse and Axial Versions Available
- $\pm 10\text{kG}$ ($\pm 1\text{T}$) in One Range with 0.1G ($10\mu\text{T}$) Resolution
- $\pm 1\%$ Accuracy
- Measures DC (Static and Slowly Changing) Fields
- Compact Size
- User Selected Sampling Period
- Digital Hall Probe Linearity Correction
- Temperature Compensation
- Connects Directly to Any PC Serial Port
- User Can Operate as Many Units as Available Serial Ports
- Cable Can be Extended to 25 feet (7.6m)
- Stand-Alone Software Included:
 - Runs Under Windows 95/98™ and NT™
 - Modes: Normal, Limits, Deviation and Temperature
 - Measurement Unit Selection: Oersted, Amp/Meter, Gauss, Tesla, and Others
 - Easy to Read Variable-Size Display
 - Display Color & Size User Selectable
 - Real-Time Adaptive Response Filter Can be Enabled/Disabled in Software
- ActiveX™ Component Included



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Model 2010 Serial Port Gaussmeter Screens



Specifications

Hardware

Range	± 10kG (± 1T)
Accuracy	Better than 1.0% of reading ± 1.0 Gauss
Resolution	0.1 Gauss (10μT)
Temperature Compensation	Temperature sensor in handle updates at 1 second intervals Resolution 0.1 Degree C
Size	9/16" Diameter Handle 4.5" Stem Length Transverse: Approx. 0.060" Stem Thickness Axial: Approx. 0.125" Square Stem Cable Length 10 Feet (3 m) Active Area of Hall Element Approx. 0.2 mm (0.008") Square DB-9 Female Connector with Thumb Screws
Operating Temp. Range	-20° to +65°C

Software

Display	Field, Min/Max Field, Field Deviation, Temperature, High/Low Field Limits
Units	Oe, kOe, A/m, A/cm, G, kG, T and mT Temperature in: Celsius, Fahrenheit or Kelvin
Sample Period	130 milliseconds (min) Approx. 7 Readings Per Second (max).
Data Logging	Data Logging by Comma Separated Variables (CSV) in ASCII Format. ActiveX™ control. Working examples/templates are included for use in Microsoft Visual Basic™ (Excel™, Access™, and Word™), National Instruments Lab View™ (and Lab Windows™), and Borland C++ Builder™ and Delphi™. (see Note 1).
System Requirements	Windows 95/98™, Windows NT™ (> Version 4.0) 486 or Higher Computer > 3 MB Free Disk Space 1 or More Free Serial Ports Mouse or Equivalent Pointing Device 3.5" Floppy Drive

Note 1: Older versions of these products may not support ActiveX™ components. Contact the publisher of the software package in question to determine if your version supports ActiveX™.

Specifications subject to change without notice.