



CRYOMAGNETICS, INC.
INNOVATIVE TOOLS FOR SCIENTIFIC RESEARCH



Model GM-700 Hall Effect Gaussmeter

Cryomagnetics' Model GM-700 Hall Effect Gaussmeter is designed to provide the user with high precision magnetic field and control functions.

The bright, 2-line display indicates 5 $\frac{3}{4}$ digits (1 part out of $\pm 300,000$).

Convenient autoranging is over seven full scales ranging from 300mG to 300kG. Magnetic field can also be displayed in Tesla.

Resolution is sensor dependent. When used with Cryomagnetics' HSU-1 Hall effect sensor, resolution is 100 milligauss in the range of -10kG to $+10\text{kG}$. Resolution outside this range is one gauss. Higher resolution sensors are available for lower magnetic fields. The GM-700 is compatible with most industry-standard Hall effect sensors.

Intuitive menus and a simple keypad allow easy instrument calibration and setup. All functions can also be set via the standard RS-232 or optional IEEE-488.2 computer interface.

A convenient delta function allows small magnetic field variations to be monitored in large magnetic fields. Just set a reference field and the GM-700 will display the difference between the measured magnetic field and the reference value. For your convenience, both delta

and reference field values are displayed simultaneously.

To warn of magnetic fields outside a range you select, an alarm with high and low setpoints is included. If the magnetic field falls outside this range, a control output signal is activated (TTL or open collector) and a front panel annunciator is displayed. This feature is useful for monitoring magnetic field sweeps.

A second alarm with high and low setpoints is also included. Operation is the same as the alarm described above, except an audible alarm with front panel annunciator becomes active when the range is exceeded. The audible alarm can be silenced if desired.

LabVIEW® drivers are available at no additional charge. LabVIEW® drivers are also available for Cryomagnetics' other instrumentation the LM-510 Liquid Cryogen Monitor and the 612/614 Temperature monitors.

Cryomagnetics' family of instrumentation allows full system monitoring with full computer control.

Online ordering is available for our electronic products and cryogenic accessories such as current leads.

Standard Features:

- Bright, two line vacuum fluorescent display.
- RS-232 computer interface.
- Adjustable current source.
- Sensor calibration via front panel menu.
- Magnetic field displayed in gauss or Tesla (autoranging).
- Relative mode allows small magnetic field variations to be monitored in large magnetic fields.
- 20-bit resolution.
- Audible alarm (can be silenced).
- Control output with high and low setpoints.
- Monitors most manufacturers Hall effect sensors.
- Simple keypad with good tactile response.
- LabVIEW® drivers available at no extra charge.

Optional Features:

- Option 1: 0-1 volt Analog Output.
- Option 2: IEEE-488.2 Computer Interface.
- Option 3: 19" Rack mount

The two line display provides more information to the user

Magnetic Field
+172.350 kG A+

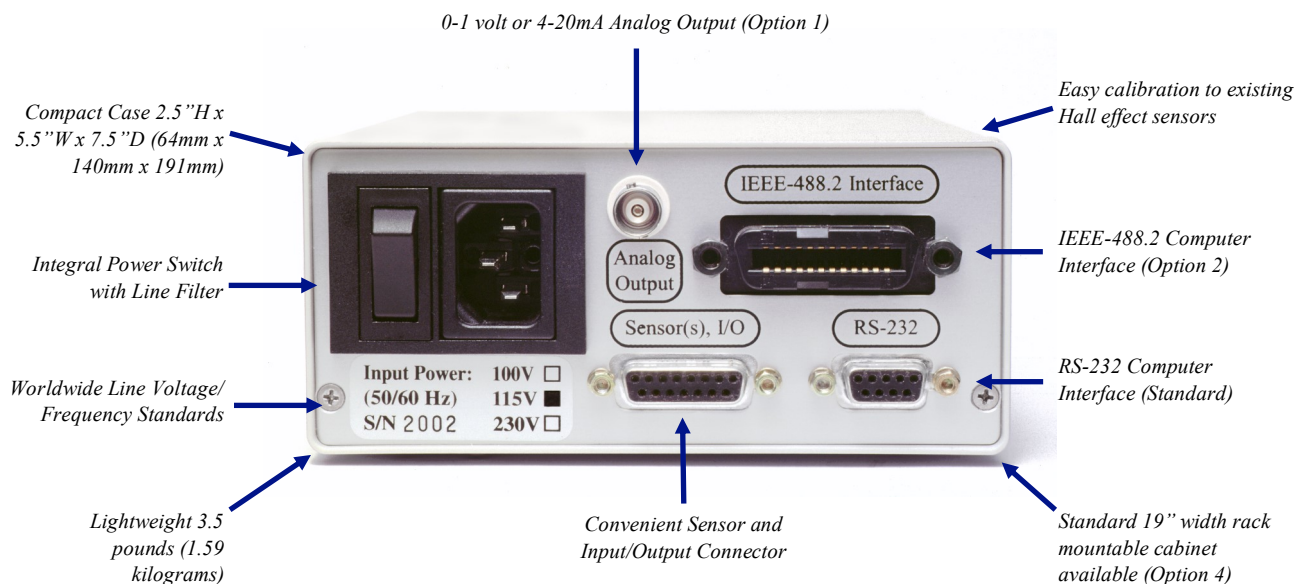
Standard display

-1.572 kG Δ +
+170.000 kG Ref

Relative Mode display

The alphanumeric display is easily viewed in most lighting conditions. The letter "A" to the right of the magnetic field indicates an active audible alarm. The diamond-shaped annunciator indicates the control output is active.

Relative mode allows one to monitor small changes in large magnetic fields. The top line indicates the magnetic field change (delta). Line two indicates the reference field value. Autoranging with field polarity indication minimizes user intervention.



GM-700 Rear Panel View

Contact us today for information on the following products!

Model LM-510 Liquid Cryogen Monitor

It is now possible to purchase a liquid cryogen monitor capable of simultaneously monitoring and displaying up to two LHe, LN₂, or other cryogenic liquid levels (requires appropriate sensors and 2-channel option). Available as the LM-510-13 option, the unit can be configured to monitor and control liquid levels in recondensing dewar systems.

Model 612 and Model 614 Temperature Monitors

It is now possible to purchase an inexpensive temperature monitor for commonly used temperature sensors. The Model 612 features a 2-channel display while the Model 614 has provision for 4-channels. 100/10 Ethernet and RS-232 ports are standard with IEEE-488.2, USB and a rack mount are available as options.



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