

DC Gaussmeter Model GM1-ST (GM1-HS)

(AlphaLab, USA)



The Gaussmeter **Model GM1-ST** measures the field of even the strongest magnet (to 20kG) down to fine resolution (0.1G). Features rapid turn-on and fast update. This model supersedes the MD1-ST, which had no auto-zero.

The Gaussmeter **Model GM1-HS** reads moderate-strength static magnetic fields up to 800 G with a resolution of .01G. It measures magnetization of ferrous metals, solenoids and the far field of strong magnets. This model supersedes the MD1-HS, which had no auto-zero.

Product Description:

The **Model 1-ST** measures strength and polarity of magnetic fields up to 19,999.9 gauss. The sensor can easily fit in a .060 inch (1.5 mm) gap and is at the end of a 100 cm flexible cable. The sensor end can be bent if required for a variety of situations. Place the sensor on a magnet face to measure the field. With a resolution of 0.1 gauss, it can measure any tiny variation from magnet to magnet or it can detect if a given magnet has lost even a little strength. Bend the sensor in to a "L" to measure inside a DC solenoid tube. The 5 ½ digit display requires neither auto nor manual range change, making it easier to use than older style 3 ½ or 4 ½ digit meters. Turn on the meter and immediately begin reading fields (updates 4 times per second). There is no setup required, making this the fastest, easiest gaussmeter available.

The Model **GM1-HS** measures the strength and polarity of magnetic fields up to 799.99 gauss. The thin sensor is at the end of a 100 cm flexible cable. The sensor tip is also flexible and can be bent for a variety of situations. The sensor can be held against the surface of a steel part to check for residual magnetism, or it can be bent into an "L" shape to measure inside a DC Solenoid. This meter has a resolution of .01 gauss (1/50 of the Earth's typical field) which is finer resolution than the Model GM1-ST. It is also used to map fields from large magnets (If fields are over 800 gauss, use the Model GM1-ST). The meter has immediate turn-on and updates 4 times a second. There is no setup required, making this the fastest gaussmeter available. This is a 1-axis meter.

Features

- High dynamic range 5 ½ digit display reads even the strongest magnets with .1 gauss resolution, including polarity.
- Turns on instantly, updates four times a second, no setup or initial calibration required.
- Auto-Zero (subtracts the present field from subsequent readings); also a fine offset control.
- Offset range is the full +/- 19,999.99 gauss.
- 1% accuracy at room temperature, including probe.
- Probe and battery included.
- Optional rubber boot and hard carrying case are available.
- CE Compliant.

Applications

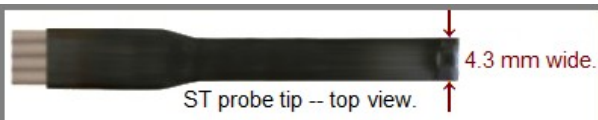
- Measures all permanent magnets. (Maximum field of magnets is about 15,000, which occurs only with rare-earth magnets in a gap configuration.)
- High resolution of 0.1 gauss over the entire range of +19,999.9 to -19,999.9 gauss allows detection of any variation in field from a magnet.
- Measures inside DC Solenoids (probe is bent into "L" shape to measure this).
- Sufficient resolution to map fields far from magnets.

SPECIFICATIONS: 1-axis DC Gaussmeter GM1-ST	
Range/Resolution:	19,999.9 G/0.1 G; with polarity indicator
Accuracy:	+/- 1% of reading (16° to 29°C); +/- 2% (-4° to 65°C)
Offset:	Auto-Zero. Also fine offset (0.1 gauss resolution)
Probe (non-detachable):	1.5 (thick) x 4.3 x 24 mm
Meter Size:	5.2 x 3.6 x 1.6 inches; 132 x 91 x 41 mm
Weight:	8 oz
Battery:	9 volt alkaline (~ 40 hour life) / "Low Battery" indicator

SPECIFICATIONS: 1-axis DC Gaussmeter GM1-HS	
Range/Resolution:	799.99 G/0.01 G; with polarity indicator
Accuracy:	+/- 1% of reading (16° to 29°C); +/- 2% (-4° to 65°C)
Offset:	Auto Zero. Also fine offset (0.01 gauss resolution)
Probe (non-detachable):	2.1 (thick) x 4.3 x 24 mm
Size:	5.2 x 3.6 x 1.6 inches; 132 x 91 x 41 mm
Weight:	8 oz
Battery:	9 volt alkaline (~ 20 hour life) / "Low Battery" indicator



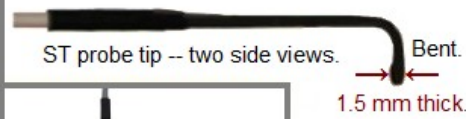
Model 1-ST measuring a strong field in a gap.



ST probe tip -- top view.



Straight.



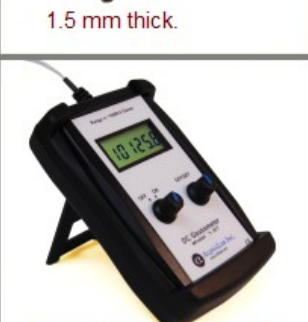
ST probe tip -- two side views.

Bent.

1.5 mm thick.



Model 1-HS testing a tool.



Shown with optional boot.



Optional hard case.