Model 410 Gaussmeter

Model 410 features

- Ranges (Autoranging): ±200 G, ±2 kG, and ±20 kG ranges
- Frequency response: DC and 20 Hz to 10 kHz
- Resolution to 3½ digits (1 part out of ±2000)
- Custom liquid crystal display
- Accuracy: ±2% of reading
- Handheld

Introduction

This handheld gaussmeter is designed for accurate magnetic field measurements from 0.1 G to 20 kG (0.01 mT to 2 T). Most operating functions can be selected via the front-panel keypad with one or two keystrokes. The Model 410 displays in gauss or tesla, AC or DC values with resolution to 100 mG.

Operating functions include:

Max hold—The largest field magnitude measured (since the last reset) is displayed with the Max Hold function.

Filter—When the field being measured is noisy, using the Filter function will average readings to produce a more stable display.

Alarm—An audible alarm is sounded and the display indicator flashes when the measured field is higher than keypad-entered alarm point.

Zero probe—Used to eliminate probe offsets and small external fields.

Relative reading—Used to show small variations in large background fields. When activated, Relative function displays deviation from a specific setpoint.

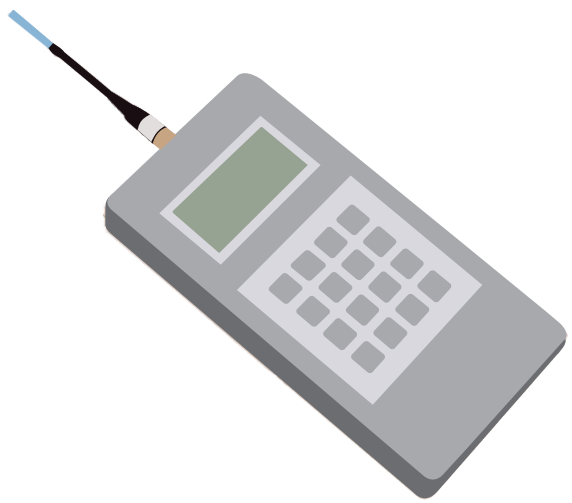
Autoranging—Automatically selects the appropriate range.

Memory hold—On power down, the Model 410 stores the complete instrument configuration in nonvolatile memory, including the calibration number and probe offset, making it unnecessary in most cases to go through a setup procedure on power up.

Stock probes

The most commonly ordered probes for this gaussmeter.

Orientation	Frequency range	Full-scale field ranges	Stem material	Stem length (in)	Probe part number
Axial	DC	200 G, 2 kG, 20 kG	Brass	2	MSA-2202-410
		200 G, 2 kG, 20 kG	Brass	4	MSA-2204-410
	DC to 10 kHz	200 G, 2 kG, 20 kG	Flexible plastic tubing	2.6	MSA-410
Transverse	DC	200 G, 2 kG, 20 kG	Brass	2	MST-9P02-410
		200 G, 2 kG, 20 kG	Brass	4	MST-9P04-410
	DC to 10 kHz	200 G, 2 kG, 20 kG	Flexible plastic tubing	2.6	MST-410



Model 410 specifications

Display: Digital liquid crystal display (LCD), 3½ digits
Resolution: 0.1 G on the 200 G range
DC accuracy: 2% reading ±0.1% full scale (at 25 °C) includes instrument, probe, and a calibration transfer
AC accuracy: ±5% of reading
Frequency response: DC and 20 Hz to 10 kHz
Ranges: ±200.0 G (±20.00 mT); ±2.000 kG (±200.0 mT); ±20.00 kG (±2.000 T)
Temperature range: 0 °C to 50 °C (operating)
Instrument temperature coefficient: 0.05% rdg/°C
Instrument and probe temperature coefficient: 0.1% rdg/°C
Weight: 0.45 kg (1 lb)
Size: 193 mm H × 99 mm W × 43.2 mm D (7.6 in × 3.9 in × 1.7 in)
Power: 4 AA battery operated (battery life > 160 h)

410 probe examples

Axial probe

Transverse probe

Ordering information

Part number	Description
410-SCT	410 in soft case with transverse probe
410-SCA	410 in soft case with axial probe
410-SCAT	410 in soft case with transverse & axial probe
410-HCAT	410 in a hard case with transverse & axial probe

Accessories included

MST-410/ MSA-410	Transverse and/or axial probe
MPEC-410-3	Extension cable
4106	Set of 4 AA batteries
119-002	Model 410 user manual

Accessories available

4060	Zero gauss chamber
4106	Set of 4 AA batteries
4107	Model 410 bench support
4141	Soft case
4142	Hard case
CAL-410-CERT	Instrument recalibration with certificate
CAL-410-DATA	Instrument recalibration with certificate & data
CAL-N1-DATA	Calibration data for a new Model 410
MSA-410	Axial probe for Model 410
MST-410	Transverse probe for Model 410
MSA-2202-410	51 mm (2 in) brass axial probe for Model 410
MSA-2204-410	102 mm (4 in) brass axial probe for Model 410
MST-9P02-410	51 mm (2 in) brass transverse probe for Model 410
MST-9P04-410	102 mm (4 in) brass transverse probe for Model 410
MPEC-410-3	Probe extension cable, 1 m (3 ft)
MPEC-410-10	Probe extension cable, 3 m (10 ft)

All specifications are subject to change without notice