Model 6010 **Hall Effect Gaussmeter**

Hall Effect Gaussmeters



Description

The Model 6010 Hall-effect gaussmeter represents the latest innovations and state-of-the-art designs from the world leader in magnetic measuring equipment. F.W. Bell's exclusive *Dynamic Probe Correction* feature, along with temperature compensation, allows measurements up to 300 kG with a basic accuracy of 0.25%.

Key features include Peak Hold, Max/Min Hold, Auto Zero, Auto Range, Relative Mode and Temperature measurement. The Model 6010 allows the user to select Gauss, Tesla or Ampere/Meter readings. The Model 6010 also features a corrected analog output (± 3 V Full Scale for each range), an RS-232 communications port, a rechargeable battery and probe temperature compensation. The Temperature measurement feature, used with the new 6000 Series *5th Generation* Hall-effect gaussmeter probes, allow the user to take temperature readings (-40 ^{0}C to +85 ^{0}C) while monitoring the magnetic field. The easy-to-read large format alpha-numeric LCD, with dual 3 3/4 digit read outs, gives the user magnetic field flux density readings while also displaying temperature (or Peak Hold, or Max/Min Hold)

User prompts on the custom formatted LCD allow fast, simple push button operation. All models come equipped with a zero gauss chamber, accessory hard case, built-in rechargeable battery, quick reference card and instruction manual. A wide range of axial and transverse probes are available as options.

Applications for the Model 6010 range from the most sensitive laboratory environments to rugged industrial settings. All instruments are fully CE compliant.

Features

- **Large Format LCD**
- **Dual 3$^{3/4}$ digit readouts**
- **Temperature measurement**
- **Displays in Gauss, Tesla or Ampere/Meters**
- **Peak Hold**
- **Max/Min Hold**
- **Corrected Analog Output**
- **Auto Range**
- **Temperature Compensated Probes**
- **Auto zero/Auto calibration**
- **RS-232 Interface**
- **Rechargeable Battery**
- **Compatitble with Model 9200 probes**
- **CE Compliant**

Model 6010 **Specifications**

Specification		
Measuring Range*	1 mG (0.1 μT) to 300 kG (30T)	
Ranges	300 mG (300 μT) 30 G (3 mT) 300 G (30 mT)	3 kG (300 mT) 30 kG (3 T) 300 kG (30 T)
Resolution	1 mG (0.1 μT)	
Accuracy (displayed reading)		
dc:	±% of Reading 0.25	±Number of Counts 3
ac:	1.0	3
Frequency Response	dc – 20 kHz	
Display	Large alpha-numeric LCD with Dual 3 ¾ digit read out	
Measuring Units	Gauss, Tesla, Ampere/Meters	
Analog Output (Corrected)		
Output Voltage	±3.0 V FS (for each range)	
Accuracy		
dc	1% of reading	
ac	2% of reading	
Noise	4 mVrms	
Temperature Measurement	-40 °C to +85 °C	

Note: * =available ranges depend on probe type.

General Information

Specification	
Temperature Range	
Operating	0°C to +50°C
Storage	-20°C to +70°C
Front Panel Display	Dual 3 ¾ - digit, alphanumeric LCD
Viewing area	4.1" (10.4 cm) x 2.5" (6.35 cm)
Communication Ports	
RS-232	RS-232, Full Duplex
Power	
Input Voltage	90 Vac to 240 Vac
Frequency	50/60 Hz
Internal Battery	Rechargeable, Sealed Lead Acid
Life (time between charges)	8 Hours (typical)
Connectors	
Probe	Circular (Front Panel)
Analog Output	BNC (Rear Panel)
RS-232	DB-9 (Rear Panel)
Probes	
Types	Standard and temperature compensated
Compatibility	Adapters to be available for Model 9200 gaussmeter probes
Size	10" (25.4 cm) W, 4.5" (11.43 cm) H (w feet), 12.5" (31.75 cm) D
Weight (maximum)	
Net	8.8 lb. (4.0 kg)
Shipping	13.7 lb. (6.2 kg)
Software	LabView Driver

Due to continuous process improvement, specifications subject to change without notice.