Gaussmeters
4100 series

Lightweight and completely self-contained, the easy to use 4100 series ELF meters are ideal for commercial or home use. The 4100 series accurately measures extremely low frequency magnetic fields generated by electrical equipment. Applications include detecting magnetic field emissions from a wide variety of sources, including video display terminals, AC power lines, office equipment, household appliances, and all types of electronic equipment.

This new meter represents the most recent design from the world leader in magnetic measuring equipment. Key features include min/max/peak, Hold, auto range, and relative mode. Both models allow the user to select Gauss or Tesla readings.

The 4100 series hand held gauss meter's built in software eliminates the need for complex calibration procedures. User prompts on the custom formatted LCD allow fast, simple push button operation. All models come with instruction manual, soft carrying case and four AAA batteries.

The 4190 analog output feature provides a buffered output for viewing analog waveform on an oscilloscope, spectrum analyser, or similar test equipment. This is useful for determining harmonic content and other waveform properties. Output scaling is 1V FS (200 mG or 2000 mG). The DC output feature provides a voltage level proportional to the displayed level of the magnetic field. It is useful for driving chart recorders, data loggers, and other data acquisition equipment.

The switchable single axis mode feature allows users to display the vector components of the magnetic field. This option should be specified in applications that require the direction of the magnetic field be known as well as the level. The extended bandwidth feature extends the -3 dB frequency response of the instrument from 20 to 20,000 Hz and is included with all 4180 and 4190 Elf meters. This is useful if the measurements are required for sources with high harmonic content. Standard calibration frequency of 55 Hz covers both 50 Hz and 60 Hz with a .2% variation.

Key features

- Low cost, lightweight, portable
- High accuracy
- Gauss or Tesla display units
- .1 mG/ .01µT resolution
- Low battery detection
- Waveform and RMS output
- Selectable axis
- Min/max hold
- True RMS reading
- Relative mode
- Universal serial bus interface

Applications

- AC power lines
- Office equipment
- Plant surveys
- Power line surveys
- VDT- video display terminal
- Household appliances
- Electrical and electronic equipment
- Home and building inspection

Contact

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Meggitt Sensing Systems

MEGGITT
smart engineering for extreme environments

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Specifications

Model:	4180	4190
Basic accuracy	±(2% + 1 digit) typical	±(1% + 1 digit) typical
Frequency response	25 to 1200 Hz, ±5% 20 to 2000 Hz, ±15%	30 to 2000 Hz
Update rate	1000 msec single axis, 1200 msec 3-axis mode	
Sample rate	None	5K samples/sec
Measuring range	0.1 to 599 mG 0.01 to 59.9 µT	0.1 to 1999 mG 0.01 to 199.9 µT
Minimum resolution	0.1 mG / .01 µT	0.1 mG / .01 µT
Display	LCD	LCD
Digits	3.5	3.5
Readings	Gauss, Tesla	Gauss, Tesla
Analog output	None	2V FS DC or 1V FS AC RMS
Communication port	USB	USB
Data logging	No	Yes- software data logging
Battery life	30 hours	
Battery type	4 AAA alkaline	
Operating temperature	-10°C to 50°C	
External power supply	Yes	
Weight (batteries installed)	177 g	
Size	4.7" x 3.0" x 1.75" (120 x 76 x 37 mm)	

Note: Due to continuous process improvement, specifications are subject to change without notice