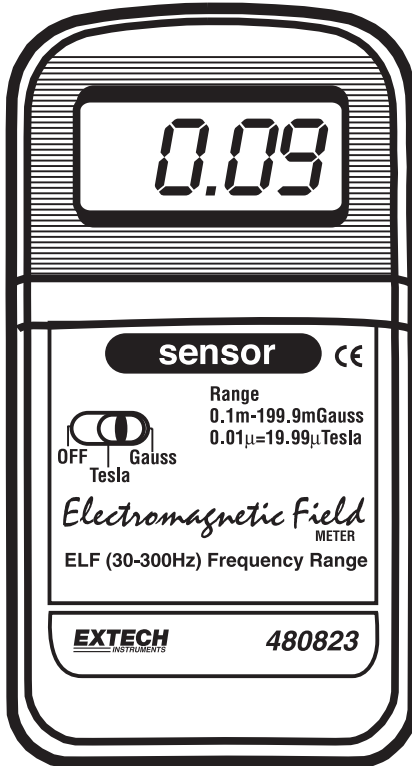


# User's Guide



## Electromagnetic Field Meter

### Model 480823



## Introduction

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Congratulations on your purchase of Extech's Electromagnetic Field Meter, model 480823. This battery powered meter measures and displays EMF in Gauss and Tesla units with a frequency bandwidth of 30 to 300Hz. This professional meter, with proper care, will provide years of safe reliable service.

## Warranty

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**EXTECH INSTRUMENTS CORPORATION** warrants this instrument to be free of defects in parts and workmanship for **one year** from date of shipment (a six month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization or visit our website [www.extech.com](http://www.extech.com) for contact information. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

## Specifications

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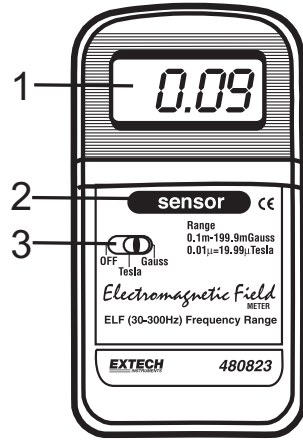
<b>Display</b>	0.5" (13mm) 3-1/2 digit (1999 count) LCD with low battery and overload indication
<b>Measurement rate</b>	Approx. 0.4 seconds
<b>Maximum ranges and resolution</b>	20 $\mu$ Tesla (0.01) and 200mGauss (0.1) NOTE: 1 $\mu$ Tesla = 10 milli-Gauss
<b>Accuracy</b>	$\pm$ (4% + 3 digits) @ 50/60Hz
<b>Frequency bandwidth</b>	30 to 300Hz (single axis measurements only)
<b>Over-range indication</b>	"1___" is displayed
<b>Operating Temperature/Humidity</b>	Temperature: 32 to 122°F (0 to 50°C) RH: 90% max. (0 to 35°C); 80% max. (35 to 50°C)
<b>Power source</b>	9V Battery
<b>Power consumption</b>	Approx. 3mA DC
<b>Dimensions</b>	5.2 x 2.8 x 1" (131 x 70 x 25mm)
<b>Weight</b>	0.36 lbs. (165g)

## Meter Description

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1. LCD display
2. EMF Sensor
3. Power/Units switch

Note that the tilt stand and battery compartment are located on the rear of the meter



## Meter Operation

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1. Place the "OFF/Tesla/Gauss" Switch to the Gauss or Tesla position.
2. Move the meter's sensor slowly toward the device under test and read the LCD indication. If the LCD display is completely blank or if "LO BAT" appears on the left corner of the LCD, check the 9V battery (replace if necessary).
3. Notice that the field intensity reading increases as you move closer to a field.
4. Position the meter at different angles to the device under test and observe how this positioning affects the EMF readings.
5. Record the highest reading obtained from the various reading positions.
6. If the device under test is off, the EMF tester reading should go to zero unless another source of radiation is present.
7. If the meter's display indicates a "1" on the left side of the LCD, an overload condition exists. This indicates that the measured radiation is higher than the capability of the meter.

## EMF Exposure

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The effect of EMF exposure on humans and animals is a modern day concern. At the time of this writing, to the best of our knowledge, no standards or recommendations exist regarding limits of EMF exposure. Until evidence suggests that there is not a health risk associated with EMF exposure, common sense would dictate that a practice of minimal exposure be exercised.

## ***Battery Replacement***

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When the low battery message “LO BAT” appears on the left corner of the LCD, the 9V battery has fallen to a critically low voltage level and should be replaced as soon as possible. The battery compartment cover is located at the bottom rear of the meter. Slide off the battery compartment cover, change the battery, and replace the compartment cover.

## ***Calibration and Repair Services***

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**Extech offers repair and calibration services** for the products we sell. Extech also provides NIST certification for most products. Call the Customer Service Department for information on calibration services available for this product. Extech recommends that annual calibrations be performed to verify meter performance and accuracy.



### **Support line (781) 890-7440**

Technical support: Extension 200; E-mail: [support@extech.com](mailto:support@extech.com)

Repair & Returns: Extension 210; E-mail: [repair@extech.com](mailto:repair@extech.com)

### **Product specifications subject to change without notice**

For the latest version of this User's Guide, Software updates, and other up-to-the-minute product information, visit our website: [www.extech.com](http://www.extech.com)  
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