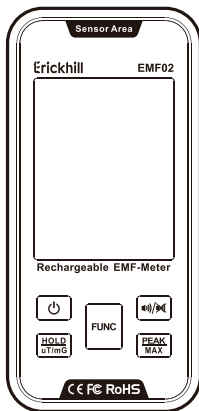


Erickhill

User Manual

Emf Detector **EMF02**



Contact us: support@erick-hill.com

OVERVIEW

EMF detector is a portable health and safety field detector, which can detect AC magnetic field, electric field and high-frequency (RF) radiation. It is mainly used to detect and evaluate the impact on human body of non-ionizing electromagnetic field, magnetic field and high-frequency radiation in living and working environment.

Features

- Detect AC magnetic field, electric field, and high frequency/microwave radiation intensity
- AC magnetic field measurement is

in 3-axis mode, which can be measured in any direction

- Quick response trend graph
- Magnetic field measurement range:
0.01~200.0 μ T/0.1~2000mG
- Electric field measurement range:
1~2000V/m
- RF measurement range:
0.001~200.0 mW/m²
- Peak measurement
- Data hold
- Max Hold
- Audible and light alarm
- The measured value, peak value, and trend graph are displayed at the same time

Applications

- Radiation detection of mobile phone and signal transmission tower
- RF radiation detection of intelligent electrical equipment
- Wi-Fi router and Bluetooth RF radiation detection
- EMF radiation detection of overhead transmission high voltage lines and transformers
- EMF radiation detection of computers, air conditioners, refrigerators, televisions, microwave ovens, copiers, monitors and other electrical

equipment

- Wireless pinhole camera, wireless wiretap detection
- EMF radiation detection in motor vehicles
- Used for detecting of electromagnetic wave radiation protection equipment, such as shielding electromagnetic radiation verification of electromagnetic protective clothing, computer radiation screen/protective materials, etc.

SPECIFICATIONS

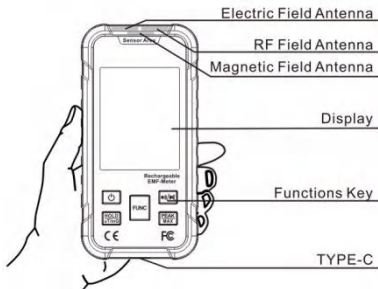
Function	Specifications	
Magnetic		3-axis

	Measuring range:	0.01~200.0uT/ 0.1~2000mG
	Range:	20uT/200uT; 200mG/2000mG
	Resolution:	0.01/0.1uT; 0.1/1mG
	Frequency range:	30~1000Hz
Electric		1-axis
	Measuring range:	1~2000V/m
	Range:	2000V/m
	Resolution:	1V/m


	Frequency range:	30~1000Hz
RF		1-axis
	Measuring range:	0.001~200.0 mW/m ²
	Range:	2/20/200mW/m ²
	Resolution:	0.001/0.01/0.1 mW/m ²
	Frequency range:	50MHz ~3.5GHz
Alarm	Sound and light (green/orange/red) alarm exceeding the built-in threshold	

Auto power off	Approx. 15 minutes
Use Environment	0~40°C/40~80%RH
Power	3.7V lithium battery; Charge TYPE-C/5V/1A


USE THE METER







Power On/Off

Press " " key and hold for about 1 second to turn on or off the power

Auto power off


After shutting down, When the power is turned on, the display shows " " symbol. Without any key operation, the meter will auto power off after about 15 minutes.

Cancel auto power off




Press and hold the " " key, then press the " " key to turn on the power, then release the " " key, and the " " symbol on the display disappears. The auto power off function is canceled. Turn on the power

again, the auto power off function will resume.

Alarm tone on or off

Press " " key to turn on or off the alarm tone

PEAK/MAX measurement


Press the " " key to enable peak measurement, Press the " " key again to enable MAX measurement, Press the " " key again to return to normal measurement.

The peak value is the maximum peak value measured and maintained for about 3 seconds or until a larger peak value is measured.

Data Hold

Press the "" key to turn on or off the display lock

Magnetic field unit selection

In the magnetic field measurement function, press the "" key and hold it for about 2 seconds to switch between magnetic field units uT and mG


Measurement function selection

Press the "FUNC" key to select the magnetic field (MAG), electric field (ELEC) and RF functions

Charge

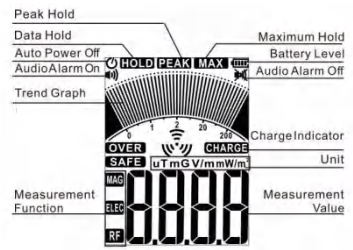
When the display the "

symbol and flashes, please charge it in a timely manner

When the display the symbol , it indicates that the battery is fully charged

Note: The electric field measurement function is invalid during charging

LCD



The measured value is the


average of the field measurements to obtain the most stable and accurate reading possible. The trend graph is a rapid response to the change trend of field measurement.

The peak value is the maximum peak value measured and maintained for about 3 seconds or until a larger peak value is measured.

Measurement operation

Note: Do not cover the sensor on the top of the meter with hands or other objects during measurement.

AC Magnetic Field Detection

1. Press "  " key to turn on the meter power

2. Press the "FUNC" key to select the "MAG" magnetic field measurement function
3. Hold the meter (as shown above) and keep the top of the meter at the position to be measured
4. When the measured value is $<0.12\mu\text{T}$ (1.2mG), the display will light green
5. When the measured value is $<0.40\mu\text{T}$ (4.0mG), the display will light orange
6. When the measured value is $\geq 0.40\mu\text{T}$ (4.0mG), the display will light red
7. Read the measurement results


from the display

In the magnetic field mode, it can be measured in any direction, because the magnetic field is measured in the 3-axis mode, pointing to the X, Y and Z directions, and is located near the top of the instrument. The X, Y and Z signals are combined into an actual field strength.

Most homes or offices have several areas with high magnetic field readings. These magnetic fields mainly come from unmatched internal wiring, display, fluorescent lamp, dimmer, transformer, electric

blanket, heater or other equipment with motor in electrical equipment.

AC Electric Field Detection

1. Press " " key to turn on the meter power
2. Press the "FUNC" key to select the "**ELEC**" electric field measurement function
3. Hold the meter (as shown above) and keep the top of the meter at the position to be measured
4. When the measured value is $<40\text{V/m}$, the display will light green
5. When the measured value is $<400\text{V/m}$, the display will light

orange

6. When the measured value is $\geq 400\text{V/m}$, the display will light red
7. Read the measurement results from the display

Note: Do not cover the sensor on the top of the meter with hands or other objects during measurement.



Your body is easy to shield the electric field; If you cover the surface of the meter with your hand, the measured value will be lower.

The presence of your hand at the bottom of the meter will compress the electric field, making its reading slightly higher than when

the meter is hanging away from you.
In either case, the real electric field near the meter will be displayed

Most households or offices have several areas with high electric field readings. These electric fields mainly come from the area of incorrectly grounded equipment, the front of video display and fluorescent lamps, etc

RF and Microwave Field Detection

1. Press " " key to turn on the meter power
2. Press the "FUNC" key to select the " " RF field measurement

function

3. Hold the meter (as shown above) and keep the top of the meter at the position to be measured
4. When the measured value is $< 10 \text{ mW/m}^2$, the display will light green
5. When the measured value is $< 50 \text{ mW/m}^2$, the display will light orange
6. When the measured value is $\geq 50 \text{ mW/m}^2$, the display will light red
7. Read the measurement results from the display

Note: Do not cover the sensor on

the top of the meter with hands or other objects during measurement.

Your body can easily block RF signals; If you cover the surface of the meter with your hand, the reading will be lower.

RF and microwave are made up of a special combination of electric and magnetic fields. For frequencies below about 100MHz, the main impact on the conductor is only from the magnetic field. This is because the electric field component of the radio wave generates much weaker current in the body than the magnetic field,

unless the wavelength of the radio wave is less than the height of the body

When reading the RF emitted by digital devices (such as mobile phones and smart meters), PEAK measurement is more concerned. Because signals from digital RF equipment are sent in irregular short packets. Peak measurement PEAK detects these signals and displays the strongest signal for about 3 seconds

Typical home and office EMF level

Generally, when measuring the

home or office, only the actual area where people spend their time (or the area where EMF sensitive equipment is located) is important. In a typical home or office, the magnetic field is usually less than $0.50\mu\text{T}$ (5.0 mG), the electric field is usually less than 20 V/m, and the radio frequency is usually less than 5.000 mW/m^2 .

Disclaimers

The use of the meter is entirely up to the user to decide whether to be exposed to non-ionizing electromagnetism. The user needs to use it to measure the known reference value to determine whether the meter

works normally. The test data of this meter is for reference only, and the manufacturer or dealer will not bear the damage caused by inaccurate existing knowledge of the meter or electromagnetic potential health hazards. Meter should be used in order to take simple steps (such as moving furniture or radiation source equipment) to reduce relative exposure in the home or office. If more accurate testing is required, it is recommended to consult experts or use another type of meter for accurate testing.

Three Years Warranty

Hersteller: Shenzhen Wanhe Innovation Technology Co., Ltd.

Adresse: 2nd Floor, Building D, No. 2, Tengfeng 1st Road,
Fenghuang Community, Fuyong Street, Baoan District, Shenzhen

Email: logistics@moreriver.com



EVATOST CONSULTING LTD
Office 101 32 Threadneedle Street, London,
United Kingdom, EC2R 8AY
contact@evatost.com

Manufacturer: Shenzhen Wanhe Innovation Technology Co., Ltd.

Address: 2nd Floor, Building D, No. 2, Tengfeng 1st Road,
Fenghuang Community, Fuyong Street, Baoan District, Shenzhen

Email: support@erick-hill.com



FCC WARNING

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note: The Grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. such modifications could void the user's authority to operate the equipment.

The device has been evaluated to meet general RF exposure requirement. This equipment complies with FCC's RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna (s) must not be co-located or conjunction with any other antenna or transmitter.