# DIGITAL MULTIMETERS

# ELECTROMAGNETIC RADIATION TESTER

ELEKTROMÁGNESES SUGÁRZÁSMÉRŐ MŰSZER

PŘÍSTROJ PRO MĚŘENÍ ELEKTROMAGNETICKÉHO ZÁŘENÍ

PRÍSTROJ NA MERANIE ELEKTROMAGNETICKÉHO ŽIARENIA

# APARAT PENTRU MĂSURAREA RADIAȚIILOR ELECTROMAGNETICE

Product code / Termékkód / Kód produktu Kód produktu / Cod:

# 25 800

- EN USER MANUAL
- HU HASZNÁLATI UTASÍTÁS
- CZ NÁVOD NA POUŽITÍ
- SK NÁVOD NA POUŽITIE
- **RO** GHID DE UTILIZARE







# I. INTRODUCTION

The radiation meter measures electric radiation and magnetic field radiation. It is suitable for testing electromagnetic radiation both indoors and outdoors. The product has a built in electromagnetic radiation measuring sensor, after processing, the result of the measurement is displayed on the LCD screent. The effects and possible damages of electromagnetic radiation on the human body:

- 1. Can be one of the causes of leukemia among children.
- 2. It can cause cancer and speed up the spread of cancer cells.
- 3. It is direct threat to the genitals, nervous system and immune system.
- It can cause intellectual disability and visual problems in children, and can affect the tissue and bone development of children.
- 5. It can cause a decrease int he hemopoietic function of the liver.
- 6. It is a major cause of cardiovascular disease and diabetes
- 7. It has a bad effect on the human visual system.

In addition, strong electromagnetic radiation can affect and destroy the original bioelectric current and biomagnetic field int he human body, and cause abnormalities of the original electromagnetic field in the human body.

The elderly, children and pregnant women are sensitive to electromagnetic radiation.

Artificial sources of electromagnetic radiation include all kinds of electrical appliances and devices.

By using household appliances sensibly and taking reasonable precautions, electromagnetic radiation can be effectively prevented and reduced.

# **II.** FUNCTIONS

The electromagnetic radiation meter has the following functions:

- One device can be use for two purposes, simultaneous detection of electric and magnetic field radiation.
- Color display
- Sound and light signal, automatic signal if the measurement value exceeds the limit value.
- Locking the measurement value on the display (data hold), the measured value is locked by briefly pressing the power button.
- LDC screen that displays the radiation trend.
- A radiation rating that indicates whether the current radiation value is at a safe level
- Stylish appearance, easy to operate with one hand.

# **III.** FIELD OF APPLICATION

- Monitoring electromagnetic radiation: Houses, apartments, offices, outside and industrial sites.
- Electromagnetic radiation test: Radiation test of mobile phones, computers, TVs, refrigerators and high voltage cables.
- Radiation protection product's testing: Test effects of radiation-resistant clothes, radiation-resistant film and other prevention articles.

# IV. RADIATION INDEX

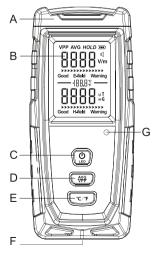
X-ray: >>>> Hair dryer: >>>> Electric blanket: >>>> Microwave oven: >>>> Computer monitor: >>> Mobile phone: >> Television: >> Keyboard and mouse: > Printer and scanner: > Security screening: >

# V. LCD DISPLAY AND NAME OF

## PARTS OF THE ITEM 1. Full screen LCD display:



- A: Front sensing area
- B: LCD display
- C: On/OFF / LED button
- D: Button to select between average and peak values mode
- E: Measuring unit selection button
- F: Charging port
- G: Indicator light



# VI. USER GUIDE 1. Switching on / off

Turn on the device by briefly pressing the on/ off button, the measured value of the electric and magnetic field will appear on the display after about 1 second, you can turn off the device by pressing the on/off button for a long time. The device switches off automatically within 5 minutes from the last button press.

Note: Due to possible electromagnetic interference in the environment, the instrument may display measurement values when switched on, which has nothing to do with the instrument's fault.

## 2. Measuring

Hold the instrument by hand so that the front sensing area slowly approaches the electromagnetic radiation source to be tested.

If the actual radiation value is within the specification range, the value is displayed; if the instrument does not have a reading, the electromagnetic radiation value of the radiation source is lower than the minimum measurement value of the device, i.e. 1 V/m or 0.01 µT.

Note: Please measure high-pressure equipment from a distance for safety.

## 3. Locking the measured value

After switching on the device, press the on/off button briefly, and the measured value will be locked and "HOLD" icon appears on the display; press the button again for returning to the normal measuring mode and the "HOLD" icon does not appear anymore.

### 4. Average / peak value mode

After switching on the device, press the AVG/ VPP button briefly to switch between average and peak value mode; average value mode is displayed with "AVG", peak value mode is displayed with "VPP" icon.

## 5. Sound signal button

on the device long press the AVG/VPP button to turn on/off the sound signal. If the sound signal is on, icon will appear on the screen.

#### 6. Setting measuring unit.

After switching ont he device, press the °C/°F button briefly to switch between °C and °F; long press the °C/°F button to switch between magnetic field units uT and mG.

#### 7. Zeroing the electric field / magnetic field

After switching ont he device, long press the AVG/VPP and °C/°F buttons simultaneously and after 2 seconds zeroing interface will appear. This time the electric field or magnetic field value will flashes;

short press the AVG/VPP button or the °C/°F button for switching between electric and magnetic field; if the electric field's value is flashing, and the value is less than 10 V/m, press the on/off button, the electric field value will be set to zero; if the magnetic field value is flashing and the value is less than 0,1uT, press the on/off button and the value of the magnetic field will be set to zero; if you are done with the zeroing process, long press the AVG/VPP or °C/°F button to exit the zeroing menu, or long press the on/off button to switch off the device.

#### 8. Battery charge

If the battery level indicator shows the following icon: \_\_\_\_\_ please charge the device. After connecting to the carging cable, the device charges quickly, during charge, the item stops the measuring process. When the battery is fully charged, the battery level indicater will appear full too.

	Electric field	Magnetic field
Measuring units	V/m	μΤ
Accuracy	1 V/m	0.01 µT
Measuring range	1 - 1999 V/m	0.01 - 99.99 μT
Alarm value	40 V/m	0.4 μT
Display	3½ digit display	

Measurement bandwidth	5 Hz – 3500 MHz	
Sampling time	~ 0.4 seconds	
Measurement method	Dual measurement mode at the same time	
Overload indicator	The maximum value of the measuring range on the LCD	
Operating temperature	0 °C - 50 °C	
Humidity	Relative humidity below 80%	
Operating voltage	3.7 V	
Energy source	3.7 V Li-ION battery	
Size	60*25*133 mm	
Weight	121 g	

#### **Reference standards:**

GB8702-1988 Regulations for Electromagnetic Radiation Protection HJ/T 10.3-1996 Environmental Impact Assessment Methods and standards on Electromagnetic Radiation GB9175-88 Hygienic Standard for Environmental Electromagnetic Waves

### **Specific Declarations:**

Our company shall hold no any responsibility resulting from using output from this product as a direct or indirect evidence.

We reserve the right to modify product design and specification without notice.