EME Wide

A Wideband Field Meter to Monitor and Record EMF Exposure



Main features

User profile

- Workers near antennas, including installers, maintenance workers, broadcasters, and cellular carrier employees: for the control of the compliance of the exposure level with the standards and safety perimeter definition
- Certification laboratory, regulatory body: for control and monitoring of the exposure in public or private locations and site certification

Measurement capabilities

• Continuous EM field level measurements

Frequency bands

• 100 KHz to 6.5 GHz

Related recommendations

- 2013/35/EU Directive Exposure thresholds are
- ICNIRP
- user-definable and can be adapted
- FCC 96-326 • Safety Code 6
- to any recommendation

System Configuration

Software

EME Wide Analysis Software

Equipment

- Case
- Optical cable
- USB adapter
- USB cable
- Battery charger
- USB key for software installation
- User manual
- Wood tripod

Services

- Calibration report
- Initial calibration
- Additional calibration
- □ Training
- Extended warranty

KEY FEATURES

EME Wide Applications in:



Telecommunications



Industry



Laboratory







Radar equipment





Public safety

> Measurements and results

- Isotropic or single axis (X, Y, Z) instantaneous field value
- Maximum, RMS or Time/Spatial average of isotropic field value
 Selectable unit (V/m, A/m, W/m²)
 - Alarm function (buzzer) with programmable field threshold
 - Measurements stored in a non-volatile memory (up to 20000 points)

> Equipment interfaces

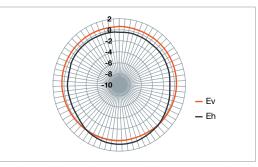
- Easy use from the 5 keys membrane keypad
 - 7 cm (2.8") LCD display with led backlight
 - Optical link for communication with PC and remote control
 - Other information: date & time, temperature, battery charge status

> Battery and charge

- AA rechargeable NiMH battery
 - External wall charger with set of plugs
 - Automatic shutdown for very low battery or during recharge

High performance probe for accurate measurements

The EME Wide is equipped with a triaxial probe which guarantees measurement isotropy. Each device comes with a calibration report. The performance of this sensor has been optimized to ensure excellent isotropy.



A user friendly and flexible software

The EME Wide Analysis software enables two usages:

- **Importation mode** enables download and visualization of measurements recorded in the embedded memory of the device.
- Real time mode enables measurement start from the PC, visualization in real time of measurements, and exporting data to a file.

STEP 1: start the device (ON/OFF button) and plug it to the PC.

STEP 2: configure the internal alarm threshold, define measurement unit, clear memory, set window length time for RMS mean calculation, update date and time.

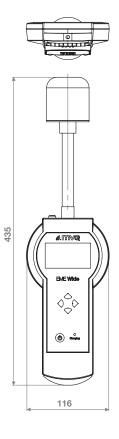
STEP 3: perform measurements. 3 types of measurements exist:

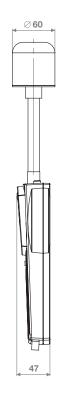
- Screenshot: recording from the probe at any time of each information indicated on the main screen of the probe (X, Y, Z, & total E-field, RMS, mean, spatial averaging, maximum value, temperature) into 200 memory cases max.
- **Recording:** start from the probe. Enables to perform 5 time measurements with 5 second period, containing 20 000 points max where X, Y, Z, total E-field, and temperature are saved.
- Real time: start from the PC. Enables to perform real time measurements with 1 second period, where X, Y, Z, total E-field, and temperature are saved.

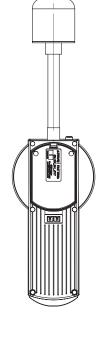
STEP 4: import screenshot and recording measurements in the form of secure files using optical link and display the results.











Specification

TECHNICAL CHARACTERISTICS

Frequency range	100 KHz - 6.5 GHz
Upper detection limit	350 V/m
Lower detection limit	0.35 V/m
Damage level (CW)	> 600 V/m

MEASUREMENT UNCERTAINTY

Frequency response @ 10 V/m	± 1 dB (100 MHz – 2.7 GHz) ± 1,5 dB (2.7 GHz – 6.5 GHz)
Axial isotropy @ 60 V/m	± 0.5 dB @ 100 MHz
Linearity [2 V/m – 250 V/m]	± 0.5 dB @ 100 MHz
Temperature sensor	± 2°C

MEASUREMENT CONFIGURATION

Unit	V/m, A/m, W/m ²
Measurement mode	Isotropic or single axis (X, Y, Z)
Measurement type	RMS, Maximum, Time/Spatial Average
RMS average	From 1 to 10 minutes
Spatial average	Discrete
Screenshot capacity	200 measurements MAX
Recording capacity	20 000 measurements MAX
Min. measurement period	5 sec for RECORDING mode 1 sec for REAL TIME mode
Alarm function	Single tone buzzer
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DISPLAY

Display type	Transflective LCD
Display size	7 cm (2.8"), 128 x 64 dots
Backlight	White leds (Off or permanent)
Refresh rate	200 ms

INTERFACES

Optical interface	Serial, full duplex Optical/USB adapter for PC connection
Probe interface	Plug and play auto detection

CONDITIONS FOR USE

Battery	4 x AA rechargeable NiMH	
Battery charger	External wall charger	
Operation time	> 48 hours (backlight off)	
Charging time	6 hours	
Battery level (on display)	5 voltage levels (bar graph)	
Operating temperature/humidity	-10°C/+50°C, 5%/95% non condensing	
Storage temperature	-20°C/+70°C	

MECHANICAL CHARACTERISTICS

Dimensions	435 x 116 x 60 mm (H, L, W)	
Weight	600 g	
Protection	IP44	

PC SOFTWARE

Operating systems compatibility Windows XP, 7, 8, 10

A global presence

Microwave Vision exports more than 90% of its production outside of France. The Group spans Europe, Asia and America through 20 locations in 10 countries.

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