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## MONITEM

# Continuous measurement of electromagnetic fields

A permanent monitoring system that allows on-going scrutiny of the emission levels of any source of electromagnetic radiation (mobile telephone antennas, WiFi, high-voltage power lines, etc.) and verification that they meet the safety standards established by the competent authorities and regulations in each country. The measurements taken can be published via the Internet to the different stakeholder communities.



#### **CONTINUOUS MONITORING (24/365)**

of electromagnetic fields in specific locations (cities, schools, hospitals, etc.).

#### **BROADBAND MEASUREMENT**

that allows economies of scale in deployment of monitoring networks to cover large areas.

#### CONTROL CENTRE

with web interface for remote management of monitoring stations and display of electromagnetic field levels on any computer with Internet connection.

#### **EASY TO INSTALL**

anywhere. Autonomy ensured by solar power supply and wireless communication.

## RESISTANT TO HARSH WEATHER CONDITIONS

thanks to IP66 protective casing, making it resistant to heavy rainfall, high temperatures, dust. etc.

### COMPLIES WITH ITU-T K.83 RECOMMENDATION

which specifies standards for implementation of networks for continuous measurement of electromagnetic emissions.









Telecommunications



Powerline





#### **HOW DOES IT WORK?**



**Emission Source** 





**MonitEM** 



Online Control Centre



#### **Technical Specifications**

Sensor type	Isotropic, RMS. Simultaneous 3-axis measurement
Probe system	Interchangeable, 10 Hz to 18 GHz
Sampling frequency	500 ms
Averaging	6-minute sliding window
Data retention period	Online: 30, 60 minutes Offline: configurable from 1 second to 60 minutes
Memory	Eeprom + MicroSD
Wireless communications	GPRS modem GPRS/3G (modem online) Modem radiation rejection
Programmable alarms	Field level, low battery, hibernation, opening, calibration, communication error, probe error, temperature
Operating log	Temperature, communications, power supply, operating modes, etc.
Power supply	AC 110-220V 12V DC, Solar Panel, Battery
Battery life	> 10 days (without sun)
Watchdog	Smart power control unit
Dimensions	253 mm x 292 mm x 385 mm
Weight	3.6 kg (including solar panel)
Environmental protection	IP66 / Installation kits
Installation kits	Wall, mast or tripod
GPS	High-sensitivity WGS84 device (built-in)

#### **Control centre**

Platform	On a server with Internet access
Administration interface	Web browser
Public interface	Web browser
Alarms	Receives and manages alarms from installed MonitEM units
Customization	Language, client's logo, general information
Reports	Automatic PDF, CSV reports sent by e-mail
Compatibility	Management of data from MonitEM units and portable SMP device

#### Additional services

#### **Hosted Control Centre:**

Eliminate infrastructure and server costs by using Wavecontrol's cloud server.

#### Warranty extension:

The 2-year standard warranty can be extended to 3, 4 or 5 years.

#### Calibration plans:

Plan future calibrations now for 24 and 48 months with further discounts.

#### **Update plans:**

Keep the system up to date with the latest firmware versions and software development.

#### **Training courses:**

EMF theory and practical sessions at Wavecontrol or the client's offices.