

# cMonitEM



## Continuous monitoring of WiFi and Mobile telephone networks

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.



Compliance with ITU K.83



### CONTINUOUS MONITORING (24/365)

of electromagnetic fields in specific or sensitive locations.

### SINGLE DEVICE

that is compact, lightweight and durable for outdoor or indoor measurement.

### EFFICIENT COMMUNICATION

of measurement data via the Internet to the system's web platform.

### ALARM SYSTEM

to provide warnings in real time if radiation levels exceed limits.



## cMonitEM

### mobile

Monitoring of EMF radiation from mobile telephone antennas.



## cMonitEM

### WiFi

Monitoring of radiation generated by WiFi communications.

## cMONITEM Applications. Measurement of EMF radiation in:



Industry



Telecommunications



Powerline



Defense



Medical

## HOW DOES IT WORK?



Emission Source



cMonitEM



Online Control Centre

## Technical specifications

|  |  |                               |
|--|--|-------------------------------|
| <b>Sensor type</b>                       | Isotropic, true RMS  | Isotropic, true RMS           |
| <b>cMonitEM - Mobile</b>                 | Frequency band:<br>GSM, UMTS, LTE  | 2.4 GHz                       |
| <b>Measurement range</b>                 | 0.04 - 65 V/m (RMS)  | 0.04 - 65 V/m (RMS)           |
| <b>Dynamic range</b>                     | > 64 dB  | > 64 dB                       |
| <b>Sensitivity</b>                       | 0.04 V/m   | 0.04 V/m                      |
| <b>Resolution</b>                        | 0.07 dB  | 0.07 dB                       |
| <b>Interband attenuation</b>             | > 30 dB (1100 MHz)<br>> 5 dB (2300 MHz)  | >28 dB GSM900<br>GSM1800 - 3G |
| <b>Linearity</b>                         | < ± 0.4 dB (0.2 - 50 V/m)  | < ± 0.4 dB (0.2 - 50 V/m)     |
| <b>Isotropic deviation</b>               | < ± 1.7 dB   | < ± 1.7 dB                    |
| <b>Temperature response</b>              | ± 0.6 dB (- 20 °C to 60 °C)  |                               |
| <b>Operational mode</b>                  | Online/Offline (Data download via USB)   |                               |
| <b>Communication with Control Centre</b> | GPRS (online mode)   |                               |
| <b>Memory</b>                            | Micro SD + Eeprom (1 Gbyte > 1 year)   |                               |
| <b>Sampling frequency</b>                | Every 500 ms   |                               |
| <b>Power supply</b>                      | 12 Volt DC – AC/DC transformer included  |                               |
| <b>Operating temperature</b>             | - 30 °C to + 80 °C with temperature recording                                    |                               |
| <b>Environmental protection</b>          | IP 66  |                               |
| <b>Installation</b>                      | Wall, mast or flat surface. Can be installed on other equipment (traffic lights) |                               |
| <b>Dimensions</b>                        | 157 mm x 178 mm x 133 mm   |                               |

Product specifications and descriptions in this document subject to change without notice

## Control centre

**Allows automatic creation of reports** on EMF levels.

**Administration web page** for remote system management.

**Public web page to display** measurements on any computer with Internet connection.

**Multilingual** interface.

**Programmable** system alarms.

## 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.



**ISI sa-nv Instrumentation for Science and Industry**

Rue du Doyenné 3 Dekenijstraat 1180 Brussels – Belgium - Tel 02/ 343 30 81

(INTERCONTINENTAL SERVICES INC)

Fax 343 12 05 mail : [sales@isi-be.eu](mailto:sales@isi-be.eu) web : [www.isi-be.eu](http://www.isi-be.eu)