

# EME Spy Evolution

A PPM to continuously measure human exposure to EMF for up to 20 user-defined frequency bands



- Measurement choice among a list of 84 standard bands between 80 MHz and 6 GHz
- Covering broadcast, cellular (2G, 3G, 4G, 5G), Wi-Fi, & ISM frequency bands
- New battery designed for longer measurement cycle

Watch a success story of EME Spy 140



## Main features

### User profile

- Municipalities, governmental agencies, regulatory bodies, research laboratories, universities, broadcasters, PMR, and mobile phone operators

### Measurement capabilities

- Continuous monitoring of personal exposure to electromagnetic fields and identification of the contributors.

### Frequency bands

- Monitoring of up to 20 bands from 80 MHz – 6000 MHz

### Safety recommendations

- Measurements can be compared with the reference levels advised by ICNIRP, FCC or SC6

### Real time visualization kit (optional)

- The field level for each frequency band is displayed as it is measured
- Exports data to the EME Spy Evolution Analysis software for post processing and backup

## Product Configuration

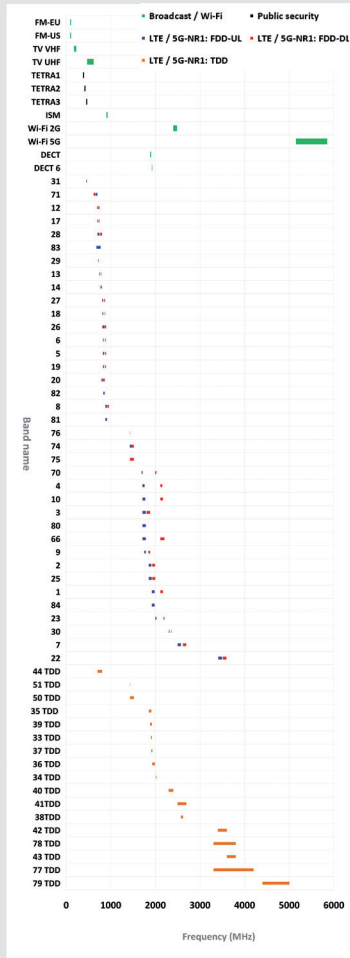
### Equipment

- EME Spy Evolution Analysis software
- User manual
- USB cable
- USB power adapter
- Case
- Real time visualisation kit

### Services

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

■ Included □ Optional

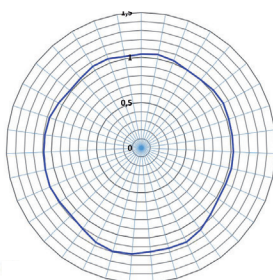


Frequency table with 84 possible frequency bands for different applications

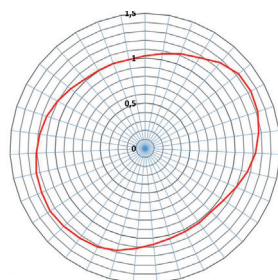


Differentiating uplink<sup>(1)</sup> and downlink<sup>(2)</sup> is not only useful to assess the contribution of each transmitter, but also to avoid discrepancy in the results by phones emitting close to the dosimeter.

- (1) Uplink: Sending of information from mobile station to the BTS
- (2) Downlink: Sending of information from the BTS to the mobile station



Vertical Polarization



Horizontal Polarization

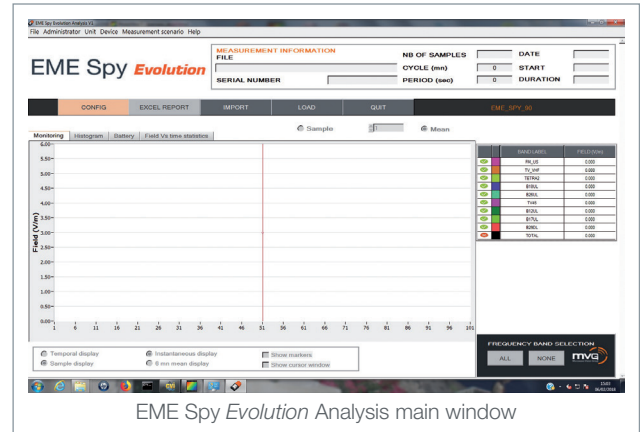
Isotropy measured at 1940 MHz

## PROBE CHARACTERISTICS

<b>Probe</b>	Tri-axial E-field probe 80 MHz – 6 GHz
<b>Sensitivity</b>	<ul style="list-style-type: none"> <li>• 0.05 V/m (80 MHz – 0.7 GHz, 3 GHz – 6 GHz)</li> <li>• 0.02 V/m (0.7 GHz – 3 GHz)</li> </ul>
<b>Dynamic</b>	56 dB (up to 6V/m)
<b>Isotropy</b>	<ul style="list-style-type: none"> <li>± 1.5 dB (80 MHz – 4 GHz)</li> <li>± 2.5 dB (4 GHz – 6 GHz)</li> </ul>

## MEASUREMENT CONFIGURATION

<b>Number of data points</b>	<ul style="list-style-type: none"> <li>Up to 116 k points (20 band scenario)</li> <li>Up to 692 k points (1 band only)</li> </ul>
<b>Logging intervals</b>	From 2 to 255 s (according to desired scenario)



## OPERATING CONDITIONS

<b>Temperature</b>	<ul style="list-style-type: none"> <li>• -20°C to +60°C in operating mode</li> <li>• 0°C to + 40°C in charging mode</li> </ul>
<b>Humidity</b>	Up to 85% Max
<b>Battery life*</b>	<ul style="list-style-type: none"> <li>• More than 7 days</li> <li>Measurement scenario: 6 LTE DL frequency bands with 1 minute period.</li> <li>• Up to 23 hours</li> <li>Measurement scenario: 11 LTE, 2 Wi-Fi, 1 DECT, 3 broadcast, and 3 TETRA frequency bands with 6 second period.</li> </ul>

\* Internal battery

## MECHANICAL CHARACTERISTICS

<b>Dimensions</b>	176 x 73.4 x 48.8 mm
<b>Weight</b>	520 g

## PC SOFTWARE

<b>Operating system</b>	Windows 7, 8, 10
<b>Connectivity</b>	Micro USB

## INTERFACE

<b>USB</b>	Micro USB slot (charging, communication, external battery)
<b>Power On/Off</b>	Via Push button
<b>Measurement On/Off</b>	Via Push button
<b>Reset device</b>	Via reset button
<b>Visual indicators</b>	LEDs (Measurement action, power ON, default, battery charging)

# EME Spy Evolution Real Time Kit

A streamlined and ergonomic screen allows the visualization of only the most useful information in real time on a small laptop PC, tablet or smartphone via a ferrite USB cable (for Windows) or BlueTooth (for Android).



## EME Spy Evolution Android Application



<http://tinyurl.com/k268zrh>

### Real-time view of electromagnetic field.

Measurements are transmitted by a Bluetooth link to an Android smartphone to display the exposure levels generated by the main radio services (FM, TV, Cellular Networks, Wi-Fi, etc. ...).

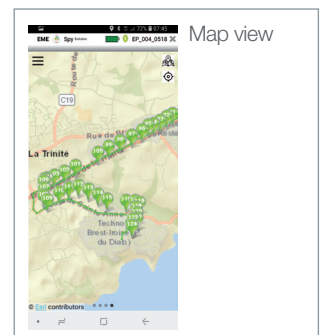
	BASIC MODE	PRO MODE
Real-time display	X	X
Backup + post-processing of measurements for compatibility with the EME Spy Evolution Analysis software		X
Geo-location of the measurements with GPS position		X
Generation of *.kmz files for compatibility with Google Earth		X

The EME Spy Android APP is compatible to Android v4.0 and above.



Geolocalized measurements in Paris

\* Google Earth installation required. Visit our website for more information.



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