# 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 74 standard bands between 80 MHz and 6 GHz
- Covering broadcast, cellular, 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

## 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

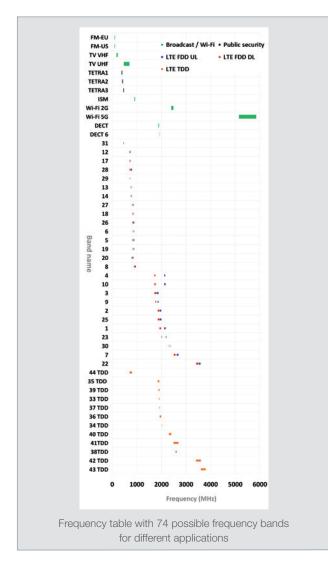
# Product Configuration

### Equipment

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

#### **Services**

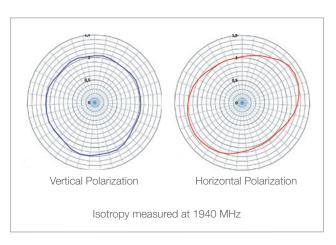
- Initial calibration
- Calibration report
- Installation
- □ Training
- Additional calibration
- Extended warranty





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

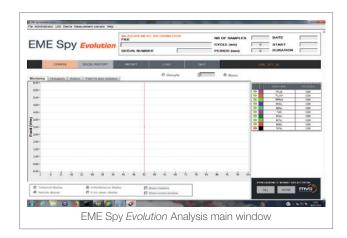


#### PROBE CHARACTERISTICS

Probe	Tri-axial E-field probe 80 MHz – 6 GHz
Sensitivity	<ul> <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>
Dynamic	56 dB (up to 6V/m)
Isotropy	$\pm$ 1.5 dB (80 MHz $-$ 4 GHz) $\pm$ 2.5 dB (4 GHz $-$ 6 GHz)

#### **MEASUREMENT CONFIGURATION**

Number of data points	Up to 116 k points (20 band scenario) Up to 692 k points (1 band only)
Logging intervals	From 2 to 255 s (according to desired scenario)



#### **OPERATING CONDITIONS**

Temperature	-20°C to +60°C
Humidity	Up to 85% Max
Battery life*	Up to 20 days     Measurement scenario: 6 LTE DL frequency bands with 1 minute period.     Up to 23 hours     Measurement scenario: 11 LTE, 2 Wi-Fi, 1 DECT, 3 broadcast, and 3 TETRA frequency bands with 6 second period.

<sup>\*</sup> Internal battery

### **MECHANICAL CHARACTERISTICS**

Dimensions	168.5 x 72 x 34.3 mm	
Weight	520 g	
Protection	IP55	

#### PC SOFTWARE

Operating system	Windows 7, 8, 10
Connectivity	Micro USB

#### INTERFACE

USB	Micro USB slot (charging, communication, external battery)	
Power On/Off	Via Push button	
Measurement On/Off	Via Push button	
Reset device	Via reset button	
Visual indicators	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	Χ	Χ
Backup + post-processing of measurements for compatibility with the EME Spy <i>Evolution</i> Analysis softwar		Х
Geo-location of the measurements with GPS position		Х
Generation of *.kmz files for compatibility with Google Earth		Х

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



<sup>\*</sup> Google Earth installation required. Visit our website for more information.



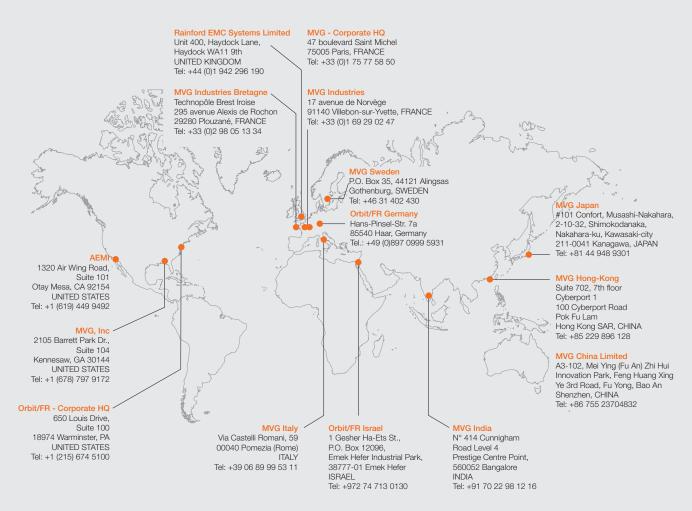


# About Microwave Vision Group (MVG)

Since its creation in 1986, The Microwave Vision Group (MVG) has developed a unique expertise in the visualization of electromagnetic waves. These waves are at the heart of our daily lives: Smartphones, computers, tablets, cars, trains, planes - none of these devices and vehicles would work without them. Year after year, the Group develops and markets systems that allow for the visualization of these waves, while evaluating the characteristics of antennas, and helping speed up the development of products using microwave frequencies.

The Group's mission is to extend this unique technology to all sectors where it will bring strong added value. Since 2012, MVG is structured around 3 departments: AMS (Antenna Measurement Systems), EMC (Electro-Magnetic Compatibility), EIC (Environmental & Industrial Control).

MVG is present in 10 countries, and generates 90% of sales from exports. The Group has over 350 employees and a loyal customer base of international companies.





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