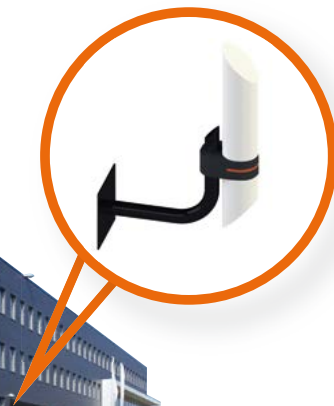


# FlashRad

A Safety Monitoring System to Detect Excessive EMF Levels



- Connected for data transfer and alarms
- Alerting users with sound, light or email
- Covering frequencies of all cellular networks including short pulsed signals
- Monitoring low EMF levels in public areas
- Various power supply possibilities



## Main features

### User profile

- Companies situated near antennas or radar transmitters who wish to protect their employees from questionable EMF levels (military bases, airports, etc.)
- Municipalities for measurements in public areas

### Measurement capabilities

- Continuous measurement of EMF levels  
Each monitor detects signals and then transmits the data to the surveillance PC to be processed
- Data is collected separately from each monitor in place

### Frequency bands

- 700 MHz – 18 GHz; higher or lower frequencies possible

### Safety recommendations

- EMF exposure limits can be defined by users and adjusted to any regulation or recommendation

## Product Configuration

### Software

- FlashRad software

### Equipment

- External connectors (mounted on cable or not)
- Ground or wall support
- PoE

### Accessories

- Case
- LED box with alarm + USB cable

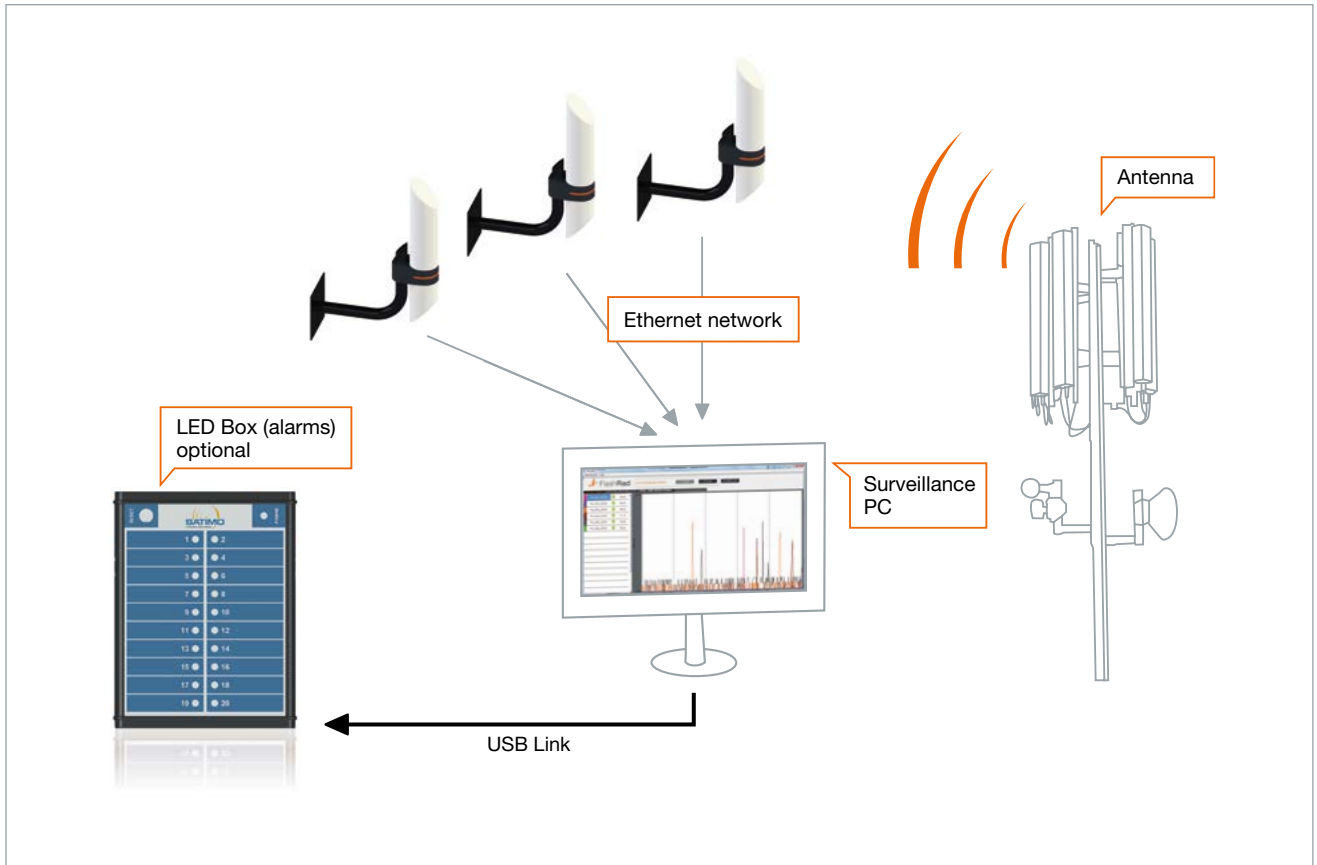
### Services

- Initial calibration
- Calibration report
- Ground or wall installation
- Training
- Additional calibration
- Extended warranty

■ Included □ Optional

FlashRad is a safety monitoring system designed to detect excessive EMF Levels. It carries out continuous measurements of electromagnetic field (EMF) levels, and is capable of detecting a variety of pulsed signals, including short pulsed radar, emitted from various sources outside a building. When predetermined EMF levels are exceeded, the FlashRad monitor sounds and flashes a warning in its immediate surroundings while sending a signal to the surveillance PC or user (email) for action.

## Overview of FlashRad systems network



FlashRads are connected to a surveillance PC via Ethernet. Continuous EMF level measurements are sent to the PC where the FlashRad monitoring system software collects and displays the incoming data. If the FlashRads detect excessive RF levels, a signal is sent to the surveillance PC or user indicating which monitor is detecting the over-exposed area. The technician can then take action. Note that each monitor can be stopped or started as necessary.

With the Ethernet direct connection, the PC can send a signal to trigger the alarms in the FlashRads when the EMF levels exceed the predetermined levels.

A LED light box is available as an option to allow monitoring in multiple areas. It is connected to the PC by a USB cable of up to 10 meters.

## TECHNICAL CHARACTERISTICS

|                                 | HIGH LEVEL PULSED SIGNALS (RADAR...) | WORKER AREA (BTS, TEST...) | PUBLIC AREA            |
|---------------------------------|--------------------------------------|----------------------------|------------------------|
| Probe reference                 | FR100                                | FR200                      | FR400                  |
| Probe                           | Isotropic 3-axes probe               | Isotropic 3-axes probe     | Isotropic 3-axes probe |
| Frequency range                 | 700 MHz – 18 GHz                     | 700 MHz – 6 GHz            | 700 MHz – 3 GHz        |
| Lower detection limit           | 50 V/m                               | 10 V/m                     | 0.05 V/m               |
| Upper detection limit           | 1000 V/m                             | 200 V/m                    | 100 V/m                |
| Minimum pulse width measurement | ≥ 1 μs                               | ≥ 20 μs                    | ≥ 10 μs                |

## MEASUREMENT UNCERTAINTY

|                    |   |   |  |
|--------------------|---|---|--|
| Axial isotropy     | <ul style="list-style-type: none"> <li>• 700 MHz – 8 GHz (@150 V/m): +/-1.5 dB</li> <li>• 8 GHz – 12 GHz (@150 V/m): +/-2.5 dB</li> </ul>   | <ul style="list-style-type: none"> <li>• 700 MHz - 6 GHz (@100 V/m): +/-1.5 dB</li> </ul> | <ul style="list-style-type: none"> <li>• 700 MHz – 3 GHz (@10 V/m): +/-2 dB</li> </ul>   |
| Frequency response | <ul style="list-style-type: none"> <li>• 700 MHz – 1 GHz (@150 V/m): +4/-1.5 dB</li> <li>• 1 GHz – 12 GHz (@150 V/m): +/-3 dB</li> <li>• 12 GHz – 18 GHz (@150 V/m): +10/+4 dB</li> </ul> | <ul style="list-style-type: none"> <li>• 700 MHz - 6 GHz (@100 V/m): +/-3 dB</li> </ul>   | <ul style="list-style-type: none"> <li>• 700 MHz – 3 GHz (@10 V/m): +/-2.5 dB</li> </ul> |
| Linearity          | +/-1 dB (200 – 1000 V/m)  | +/-1 dB (20 – 200 V/m)  | +/-1 dB (1 – 100 V/m)  |

## MEASUREMENT CONFIGURATION

|                        |                           |
|------------------------|---------------------------|
| Measurement interval   | From 1 to 60 seconds      |
| Measurement records    | Yes if user configuration |
| Data transfer interval | From 1 to 60 seconds      |

## CONDITIONS FOR USE

|                            |   |
|----------------------------|---|
| Temperature, humidity      | -20 to +60°C, 90% max. humidity   |
| Power supply               | <ul style="list-style-type: none"> <li>• 90 - 264 VAC, 47 – 440 Hz</li> <li>• 24 V passive PoE</li> </ul> |
| Type of network connection | • Ethernet  |

## ALARM CONFIGURATION

|                           |  |
|---------------------------|--|
| Programmable alarms       | Field level  |
| Trigger mode              | Instantaneous or on 6 minutes mean                             |
| Transmission of alarms    | By Ethernet or by email  |
| Audio and/or visual alarm | Audio and/or visual alarm if exceeding a field level threshold |

## MECHANICAL CHARACTERISTICS

|              |                                      |
|--------------|--------------------------------------|
| Dimensions   | Height = 570 mm<br>Diameter = 100 mm |
| Weight       | 3.6 kg                               |
| Protection   | IP 55                                |
| Installation | Ground or wall installation          |

## SOFTWARE REQUIREMENTS

|                                |                  |
|--------------------------------|------------------|
| Operating system compatibility | Windows 7, 8, 10 |
|--------------------------------|------------------|

## Mechanical installation



Ground Installation



Wall installation



FlashRad

# MVG - Testing Connectivity for a Wireless World

The Microwave Vision Group offers cutting-edge technologies for the visualisation of electromagnetic waves. Enhancing the speed and accuracy of wireless connectivity testing, as well as the performance and reliability of anechoic and EMC technologies, our systems are integral to meeting the testing challenges of a fully connected world.

## WORLDWIDE GROUP, LOCAL SUPPORT

Our teams, in offices around the world, guide and support you from purchase, through design, to delivery and installation. Because we are local, we can assure speed and attention in project follow through. This includes customer support and maintenance once the system is in place. For the exact addresses and up-to-date contact information: [www.mvg-world.com/contact](http://www.mvg-world.com/contact)



Contact your local sales representative  
for more information



[www.mvg-world.com/rfsafety](http://www.mvg-world.com/rfsafety)  
[salesteam@mvg-world.com](mailto:salesteam@mvg-world.com)