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

Accessories

- ■ Case
- □ LED box with alarm + USB cable

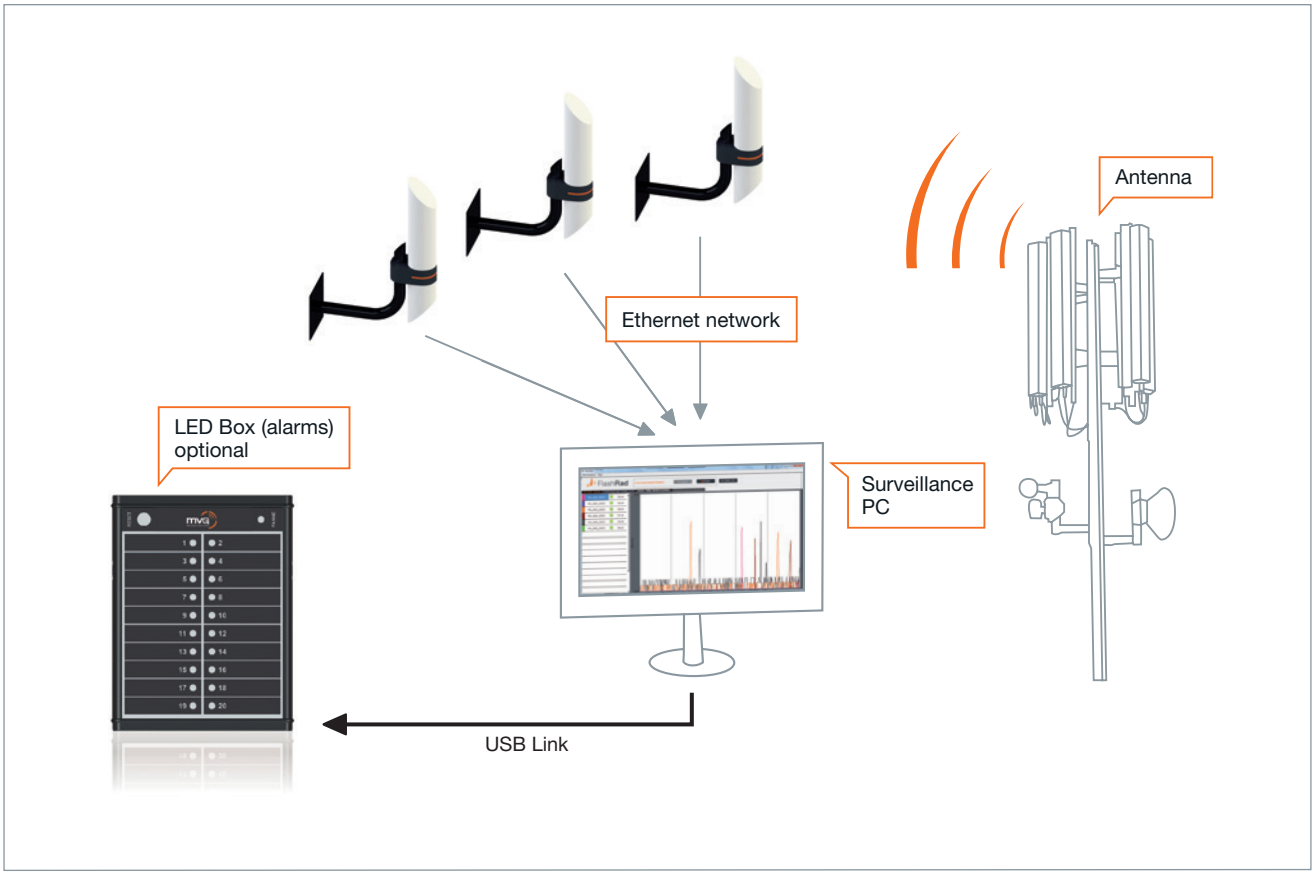
Services

- ■ 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	• 700 MHz – 8 GHz (@150 V/m): +/-1.5 dB • 8 GHz – 12 GHz (@150 V/m): +/-2.5 dB	• 700 MHz - 6 GHz (@100 V/m): +/-1.5 dB	• 700 MHz – 3 GHz (@10 V/m): +/-2 dB
Frequency response	• 700 MHz – 1 GHz (@150 V/m): +4/-1.5 dB • 1 GHz – 12 GHz (@150 V/m): +/-3 dB • 12 GHz – 18 GHz (@150 V/m): +10/+4 dB	• 700 MHz - 6 GHz (@100 V/m): +/-3 dB	• 700 MHz – 3 GHz (@10 V/m): +/-2.5 dB
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	• 90 - 264 VAC, 47 – 440 Hz
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 Diameter = 100 mm
Weight	3.6 kg
Protection	IP 55
Installation	Ground or wall installation

SOFTWARE REQUIREMENTS

Operating system compatibility	Windows 7, 8, 10, 11

Mechanical installation

Ground Installation

Wall installation

FlashRad

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