# MESHGUARD GAMMA

## Battery-Powered Wireless Radiation Detector

**The RAE Systems MeshGuard Gamma radiation detection monitor is a key building block of the MeshGuard intelligent network of connected sensors for gamma radiation detection in industrial and environmental monitoring applications.**

The MeshGuard system is designed for quick deployment in areas where low cost/high ROI solutions are required.
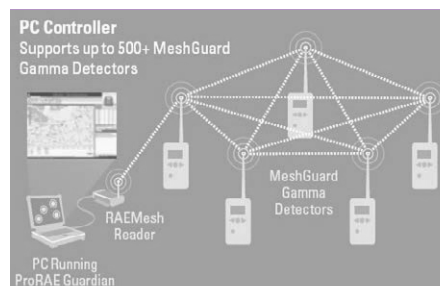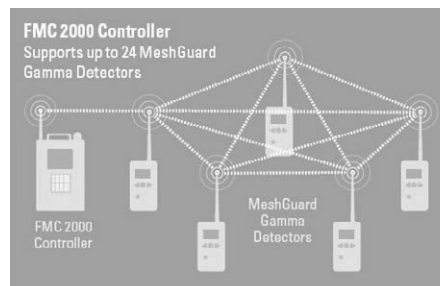
MeshGuard Gamma is available with field-replaceable pre-calibrated sensors specifically designed to sense gamma radiation.

- Fastest deployment and decommissioning time
- Simple to install and operate
- Rugged and reliable
- Versatile to accommodate many applications

**MESHGUARD GAMMA DETECTOR INCLUDES:**

- MeshGuard Gamma detector
- Operation and maintenance manual
- High-capacity Lithium battery installed
- Maintenance tool
- Radiation check source

## MESHGUARD GAMMA CONFIGURATION OPTIONS





## APPLICATIONS

Environmental monitoring and protection

Nuclear industry plant monitoring

Homeland security & venue protection

Plant maintenance turnarounds

Industrial safety

Nuclear medicine

## KEY FEATURES

- **Self-forming wireless network; units come online automatically**
- **Local display with Dose Rate in μR/h, μSv/h or μGy/h**
- **High sensitivity scintillator detector**
- **Compact and lightweight**
- **IP-54 rated weather resistant**
- **Multiple controller options for real-time wireless data collection and viewing**
- **Directly compatible with Pro-RAE Guardian mobile command center software**
- **Self-healing network automatically routes data back to controller through best wireless path available**
- **Battery powered operation for up to 2 months**
- **SolarPak provides 24/7 uptime**
- **Magnetic mounting option for quick and easy MeshGuard installation**

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## SPECIFICATIONS
Specifications subject to change without notice

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|---|---|
| **Dose Rate Range** | 1 µR/h to 20 mR/h (0.01 µSv/h to 200 µSv/h, or 0.01 µGy/h to 200 µGy/h) |
| **Energy Range** | 0.06 to 3.0 MeV (X-ray and Gamma radiation) |
| **Accuracy** | ±20% from 100 µR/h to 20 mR/h (1 µSv/h to 200 µSv/h, or 1 µGy/h to 200 µGy/h)<br><br>±30% or 5µR/h from 1 µR/h to 100 µR/h (0.01 µSv/h to 1 µSv/h, or 0.01 µGy/h to 1 µGy/h), whichever is greater |
| **Response Time** | T90 < 5 sec (Dose Rate > 1 mR/h, 10 µSv/h or 10 µGy/h) |
| **Size** | 10.5" L x 3.7" W x 2.1" H (26.5cm x 9.5cm x 5.5cm) |
| **Weight** | 1.3 lbs (0.6kg) |
| **Visual Alarm** | 2 super-bright red LEDs |
| **Audible Alarm** | 90dB @ 30cm |

| | |
|---|---|
| **RF Frequency** | 2.4GHz ISM Band, IEEE 802.15.4 standard compliant |
| **Operating Range** | 985 feet/300 meters (line of sight) |
| **Keypad** | Three operation and programming keys |
| **Display** | Customized LCD (1" x 1.5"/72mm x 108mm) with backlight |
| **Power Supply** | Disposable Lithium Battery, +3.6V (optional rechargeable external battery for extended run time) |
| **Operating Time** | Up to 60 days on internal battery |
| **Operating Temperature** | -20° to 50° C (-4° to 122° F) |
| **Humidity** | 5% to 95% relative humidity, non-condensing |
| **IP Rating** | IP-54 |
| **RF Certifications** | FCC Part 15, CE, SRRC |