



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**

KEY FEATURES

- Self-forming wireless network; units come online automatically
- Local display with Dose Rate in $\mu\text{R}/\text{h}$, $\mu\text{Sv}/\text{h}$ or $\mu\text{Gy}/\text{h}$
- 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 ProRAE 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

APPLICATIONS

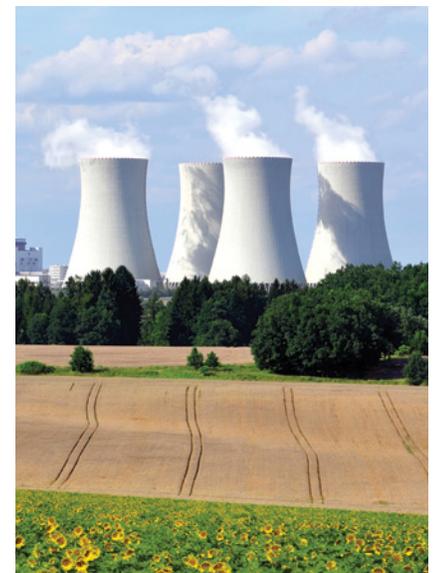
- Environmental monitoring and protection
- Nuclear industry plant monitoring
- Homeland security & venue protection
- Plant maintenance turnarounds
- Industrial safety
- Nuclear medicine



RAE PowerPak
External Battery



MeshGuard
inside protective
stainless-steel
housing



Meshguard Gamma provides real-time, continuous radiation detection for fence-line and area monitoring applications.



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SPECIFICATIONS

Detector Specifications

Dose Rate Range	1 μ R/h to 20 mR/h (0.01 μ Sv/h to 200 μ Sv/h, or 0.01 μ Gy/h to 200 μ Gy/h)
Energy Range	0.06 to 3.0 MeV (X-ray and Gamma radiation)
Accuracy	\pm 20% from 100 μ R/h to 20 mR/h (1 μ Sv/h to 200 μ Sv/h, or 1 μ Gy/h to 200 μ Gy/h) \pm 30% or 5 μ R/h from 1 μ R/h to 100 μ R/h (0.01 μ Sv/h to 1 μ Sv/h, or 0.01 μ Gy/h to 1 μ Gy/h), whichever is greater
Response Time	T90 < 5 sec (Dose Rate > 1 mR/h, 10 μ Sv/h or 10 μ Gy/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
Operating Range	990 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 30 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
Wireless Frequency	ISM license free band. IEEE 802.15.4 2.4 GHz
Wireless Approvals	FCC Part 15, CE R&TTE, Others ¹
Radio Module	Supports RM2400A

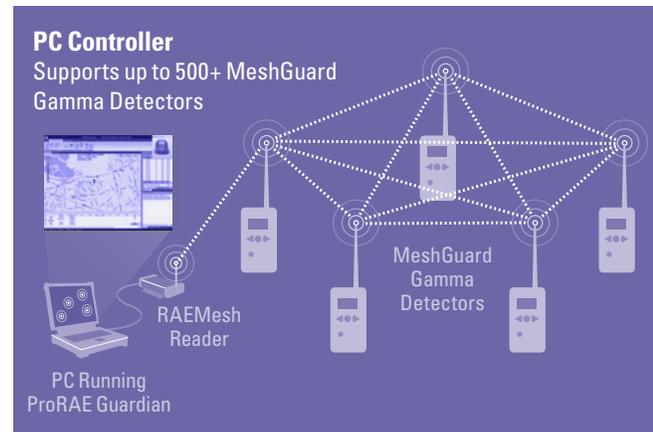
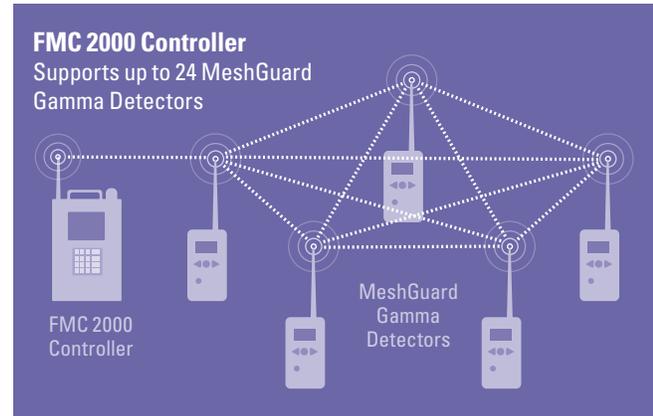
¹ Contact RAE Systems for country specific wireless approvals and certificates. Specifications are subject to change.

MESHGUARD GAMMA ORDERING INFORMATION

MeshGuard Gamma Detector Includes:

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

MESHGUARD SYSTEM CONFIGURATION OPTIONS



CORPORATE HEADQUARTERS

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