RADIATION MONITORING SOLUTIONS

Aretas Sensor Networks

HOW IT WORKS



MONITOR

Our monitors gather and transmit data to the communication bridge



GATHER DATA

Data from the communication bridge is sent securely to your private online data center account



ANALYZE & REPORT

Your data is archived, analyzed and reported in many useful ways



24/7 ACCESS

Decision-making is easy from any computer or smart device

SENSOR OPTIONS

CO Carbon MonoxideCO2 Carbon Dioxide

O3 Ozone

dB Noise

DP Differential PressureNO2 Nitrogen Dioxide

PM Particulates **TRH-F** Freezer / Fridge

VOC Volatile Organic Compounds

More options available

Overview

The Aretas Sensor Networks Radiation Monitor is our exciting wireless radiation threat detection sensor that plugs into the existing suite of Aretas reporting software and wireless monitors.

This wireless radiation monitoring system is capable of detecting beta radiation (electrons), gamma radiation (photons) and X-rays. The unit is battery powered with customizable reporting intervals and low power modes that can enable long-term battery powered operation up to many months.

Powerful Industrial Solutions

Radiation sensor readings can be viewed immediately on the (optional) on-unit display, or be collected wirelessly up to 40 kms away from an irradiated hot zone and viewed through the online Reporting / Mapping and Analytics system. Multiple sensors can be viewed remotely and radioactive zones can be geographically highlighted on our heatmap view.

This real-time reporting can be viewed from your PC using the Aretas mapping & reporting software giving you access to critical data to make decisions 24/7 at any of your locations world-wide. The software allows you to set alerts, strategies, thresholds, view historical data and watch numerous locations and buildings at once.

Product Specifications



Wireless Radiation Monitor

- Detector sensitivity: $5.8 \text{ cpm} \pm 15\%$ for 1 μ Sv/h radiation dose
- Linear response over wide temperature range (-30°C to 50°C)
- Measurement range of radiation dose equivalent rate (Cs-137 & Co-60): 0.1 µSv/h to 100 mSv/h

Electrical Characteristics

Voltage input:

- 6xAA or 5V USB Mini-B Connectivity:
- Digimesh + P2P 900MHz/868MHz long range
- Zigbee

Sensor polling rate: 2 min

Features

- Detects beta and gamma radiation and X-rays
- Battery-powered option with customizable reporting intervals and low power modes that enable long-term batterypowered operation.
- Wireless communication between one or more monitors and the communication bridge or PC based data collection.
- 24/7 remote monitoring and threshold based alerting.
- With the optional Internet based communication bridge you can access date online world-wide.
- Data can be exported to GIS or other custom mapping systems.
- Data can also be exported from our largescale data warehouse via API and analyzed by other programs.
- · High immunity to RF and electrostatic fields

The Aretas team also offers UAV mutirotor aerial vehicles with our radiation detection platform that enables delivery of radiation and many other sensor combinations into event locations www.aretasaerial.com/

