Overview

The Aretas Particulate Matter Monitoring System is able to detect many particle sizes ranging from 0.3, 0.5, 1, 2.5, 5, 10 μm. This easy to install, wireless system displays data online and sends customizable alerts via text message or email. The PM monitoring equipment can include other sensors such as CO, CO2, NO2, O3 and VOC to provide you with accurate information about your indoor environments. Secure cloud based data allows decision-makers and maintenance staff to monitor PM levels from anywhere at anytime.

The industrial PM detector comes standard with Temperature and Relative Humidity sensors offering more in depth data as well potential energy-saving and money-saving opportunities.

What is Particulate Matter?

The term “particulate matter” (PM) refers to the microscopic pieces of material (solid or liquid) that are present in the air we breathe. These airborne particles can be things like soot, pollen, animal dander, dust mites, mold, aerosol, cigarette smoke, radon, formaldehyde, or asbestos.

Features

- Battery-powered option with customizable reporting intervals and low power modes that enable long-term battery-powered 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 data online from anywhere in the world.
- Data can be exported to geographic information systems or other custom mapping systems.
- Data can also be exported from our large scale data warehouse, via API, to be analyzed by other programs.
- High resistance to radio frequency and electrostatic field noise.

Product Specifications

Wireless PM Monitor Specifications
- Range: 0 to 28,000 pcs/L
- Resolution: 1 μm
- Response time: 20s diffusion time
- Operating temperature: 0 to 45 °C
- Operating humidity: 0 to 95% RH
- Accuracy: 50% @ 0.3um, 98% @ >0.5um

Electrical Characteristics

Voltage input:
- 6xAA or 5V USB Mini-B

Connectivity:
- Digimesh + P2P 900MHz/868MHz long range
- Zigbee

Sensor polling rate: 2 min