Wireless Air Quality Smart Sensors

Particulates and Dust Need Monitoring

This mount-and-monitor device measures Particulate Matter that's coarse (PM10), fine (PM2.5), and ultrafine (PM1) inside mines, production facilities, commercial kitchens and facilities, as well as business buildings.

If PM levels exceed user-defined limits, an instant alert (via text, email, or call) is issued to help Facility operators ensure safety. Additionally, sensor data can support HR and healthcare professionals in maintaining regulatory worksite compliance.

What's the (particulate) matter?

Elevated levels of PM10 (2.5–10 um) particle pollution irritate the respiratory tract and eyes; smaller PM2.5 (1.0–2.5 um) particles can penetrate deep into the lungs. As the most dangerous of all, PM1 (0.3–1.0 um) can slip through the lungs and penetrate organs.

How Alegna's PM Meter works

The meter contains a small fan that collects an ambient air sample. PM content is then measured with a laser that scatters based on the number and size of particles suspended in the sample. This sensor is battery-powered (two AAs); line power is optional.

Within 15 minutes, Alegna's air quality meter can be installed to help protect occupants and workers from PM levels that irritate and sicken.

Air Quality Applications
- Building and Room Pressure
- Pollution Sensing
- Mines And Quarries
- Cement Factories
- Construction/Demolition Sites
- Energy Exploration & Production
- Agricultural Facilities
- Waste Treatments Plants

- Petrochemicals

Choose the Right Smart Sensor for You!

Enterprise AA-battery powered: Our most popular type is ideal for typical commercial & enterprise environments, such as server rooms. A 1,200+ ft. range readily covers most facilities.
CC-battery powered: Compact sensor is great for space-restricted areas such as control cabinets or cold storage.
Industrial: Sensor's weatherproof, NEMA-rated enclosure withstands demanding indoor/outdoor use, e.g., warehouses & production facilities.
PoE•X: Power over Ethernet sensors integrate with a building's PoE network; it can also be used with a standard Ethernet infrastructure & powered via an optional AC adapter.
MoWi: This discreet sensor uses your own Wi-Fi for networking and data transmission—popular for smaller businesses and facilities.

Smart Sensor Features & Benefits

Features

- 1200+ ft. Range
- Up to 12 Years of Battery Life
- Automated Data Logging

Benefits

- Unbeatable Range Eases Networking
- Dependable, Worry-free Operation
- Streamlined Compliance & Data Analysis

Note: See more Air Quality Sensors Below:

Wireless Air Velocity Smart Sensor

Run at full speed.

Alegna's Wireless Air Velocity Sensor helps facility managers and maintenance techs gauge and track HVAC performance by measuring system airflow and building/room pressure.

How Alegna's Air Velocity Sensor Helps

If air velocity (speed) deviates from user-set limits, an alert is issued instantly via text, email, or call. Early notifications allow HVAC contractors or maintenance techs to prevent failure (or predict and shorten downtime). Collected data also enables facility maintenance professionals to maintain comfort and proper ventilation, as well as track air volume filter status.

How the Sensor Works

This air velocity/speed sensor measures the pressure difference between its two ports, accounts for

ambient temperature and altitude, and determines system airflow speed in meters per second (m/s). The sensor is calibrated and temperature compensated.

Select Alegna's enterprise-ready or industrial-grade, battery-powered sensors to easily get (and stay) up to speed.

Applications

- Hospitals
- Duct Pressure
- Building / Room Pressure
- Clean Rooms
- Fume Hoods
- Variable Air Volume Filter Status

Choose the Right Sensor for You!

Enterprise AA-battery powered: Our most popular type is ideal for typical commercial and enterprise environments, such as server rooms. A 2,000+ ft. through 18+ walls wireless range when connected to an Alegna X1L Gateway readily covers most facilities.
Industrial: The weatherproof, NEMA-rated enclosure withstands demanding indoor/outdoor use, e.g., warehouses and production facilities.

Features

- 2,000+ ft. Range through 18+ Walls
- Up to 12 Years of Battery Life
- Automated Data Logging

Benefits

- Unbeatable Range Eases Networking
- Dependable, Worry-free Operation
- Streamlined Compliance & Data Analysis

Note: See more Air Quality Sensors Below:

Wireless Differential Air Pressure Sensor

Under pressure to perform?

Within 15 minutes, Alegna's Differential Air Pressure Sensor installs to remotely monitor filters, systems, and components. Be sure equipment is at peak—whether ventilating temporary medical crisis tents or an R&D cleanroom.

How an Air Pressure Sensor Works

This battery-powered pressure sensor measures the air pressure difference (with a range of -500 Pa to 500 Pa) between its dual ports. If, based on your parameters, the sensor measures a pressure differential between its ports, you're alerted via text, email, or call. A difference likely points to a dirty filter or a machine/system that needs immediate service.

Differential Air Pressure Monitoring in Action

Remotely monitoring air pressure helps facility managers keep air filters clean, HVAC systems performing optimally and extends system longevity.

But monitoring differential air pressure is about more than HVAC filter status.

Hospitals, pharma firms, and manufacturing facilities count on high-performance HVAC to manipulate air, contain infectious particles, and assist with proper filtration. This function is vital for the freestanding patient isolation structures that enable infectious patient treatment and maintain pharmaceutical purity.

Choose from the enterprise-ready AA model or an industrial-grade air pressure sensor below to keep the pressure on.

Applications

- Hospitals
- Duct Pressure
- Building / Room Pressure
- Clean Rooms
- Fume Hoods
- Variable Air Volume Filter Status

Choose the Smart Sensor Right for You!

Enterprise AA-battery powered: Our most popular type is ideal for typical commercial & enterprise environments, such as server rooms.

Industrial: Sensor's weatherproof, NEMA-rated enclosure withstands demanding indoor/outdoor use, e.g., warehouses & production facilities.

Smart Sensor

<u>Features</u>

- 1200+ ft. Range
- Up to 12 Years of Battery Life
- Automated Data Logging

<u>Benefits</u>

- Unbeatable Range Eases Networking
- Dependable, Worry-free Operation
- Streamlined Compliance & Data Analysis

Call us today at (770) 855-3328 for more information. Our Team will be at your service.