Data Sheet
QDM-02-000235

View Sense PM

View Sense PM is an environmental sensor which enables continuous monitoring of one of the most serious air pollutants posing significant health risks—particulate matter (PM). The World Health Organization estimates that around 7 million people die every year from exposure to PM that leads to diseases such as stroke, heart disease, lung cancer and respiratory infections. Given that people spend 90% of their time indoors, monitoring indoor PM levels is critical in protecting occupant health.

Sense PM's wired connection to View Net, View's smart building network, allows robust and reliable communication with BMS and IoT devices. Building owners, employers, facilities managers, and other key stakeholders can better address air quality concerns, diagnose building issues and quickly realize the benefits of a clean, healthy, and more delightful environment.

Key Features

- Accurate assessment of occupant exposure to air pollutants impacting their health: Sense PM accurately and precisely measures particulate matter (PM10, PM2.5, PM1) in real-time
- Ability to improve efficiency with API integration: Connect real-time, spatially resolved environment data to building controls or to the decision-making process
- Translates data and trends into actionable insights: Simple interactive features and advanced visualization tools can help derive next steps
- Available in a variety of mounting options: The View Sense PM module can be mounted on window frames, walls, and ceilings

Benefits

- Enables continuous monitoring of particulate matter to protect occupant health
- Supports smart building approaches, operational efficiency, building HVAC performance and air purifying
- Leads to optimization and improvement in environmental and financial sustainability

Use Cases

- Commercial Offices
- Healthcare Facilities
- Educational Campuses
- Airports
- Hotels and Residential
- Laboratories

Particulate Matter Categories

Particle size is directly linked to each category's potential for causing health problems.

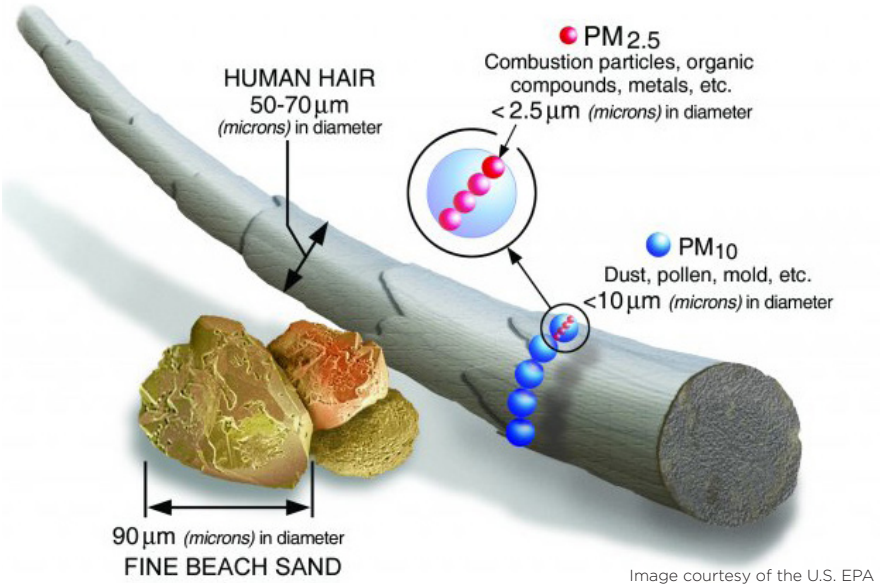


Image courtesy of the U.S. EPA

- **PM_{10}**: Coarse particles composed of dust, pollen, and mold which may cause allergic responses and nasal irritation
- **$PM_{2.5}$**: Fine particles containing secondary aerosols and combustion particles that can reach the pulmonary alveoli and enter the bloodstream
- **PM_{1}**: Smaller particles have a higher surface area and thus can cause a greater inflammatory response, elevating the risk of pulmonary and cardiovascular diseases

Why is clear air important?

Decades of scientific research have linked particulate matter exposure to a variety of problems, including:

- Premature death in people with heart and lung disease
- Increased hospital visits for respiratory diseases
- Reduced lung function
- Increased respiratory symptoms (coughing, wheezing, or difficulty breathing)
- Aggravation of chronic lung diseases

Know the air you breathe

PM_{10}
$PM_{2.5}$
PM_{1}

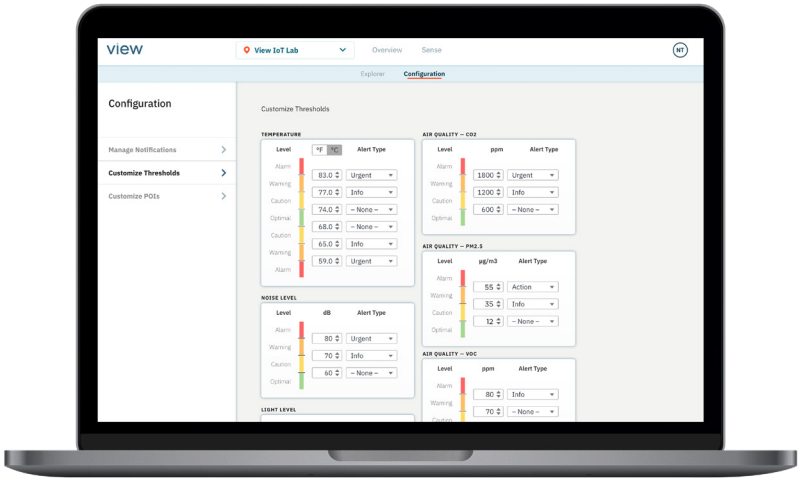
- Real-time, location-based environment data available to integrate with your product
- Raw sensor values with filtered data noise
- Sensor health stats
- Secure https endpoints to View Cloud
- Accessible via Open APIs

Sense Dashboard with Advanced Insights Engine

- Multiple space monitoring
- Comparison to outdoor levels to optimize ventilation and filtration
- Configurable threshold and trend notifications
- Actionable insights & recommendations

Sense Dashboard

- Web portal for time series-based data visualization
- Multiple space monitoring
- Historical data views
- Data comparison between sensors
- Color-coded optimal data range specification
- Secure https access hosted on View Cloud
- Export data (pdf/csv) for diagnostic analysis
- Reporting for WELL/Fitwel/RESET compliance



Dimensions

Mechanical Specifications	**Faceplate Color Options**	Black, White
	Dimensions	2.0"W x 8.0"H x 1.0"D (51 x 203 x 25mm)
	Weight	20 oz. (570g)
	Power Consumption	2 Watts (max.)

Sense PM Specifications

Sensor Specifications	**Particle Detection Size Range**	Mass concentration: $PM_{1.0}$, $PM_{2.5}$ and PM_{10}
	Lower Limit of Detection	0.3 µm
Connectivity	**Wired and Power**	Gigabit Ethernet, PoE 802.3af; industrial IX connector
	Wireless	Bluetooth 5.0, UWB
Installation	**Coverage**	Open areas: 8,000 – 10,000 square feet per sensor
	Mounting Configuration	Mullion cap, wall, ceiling