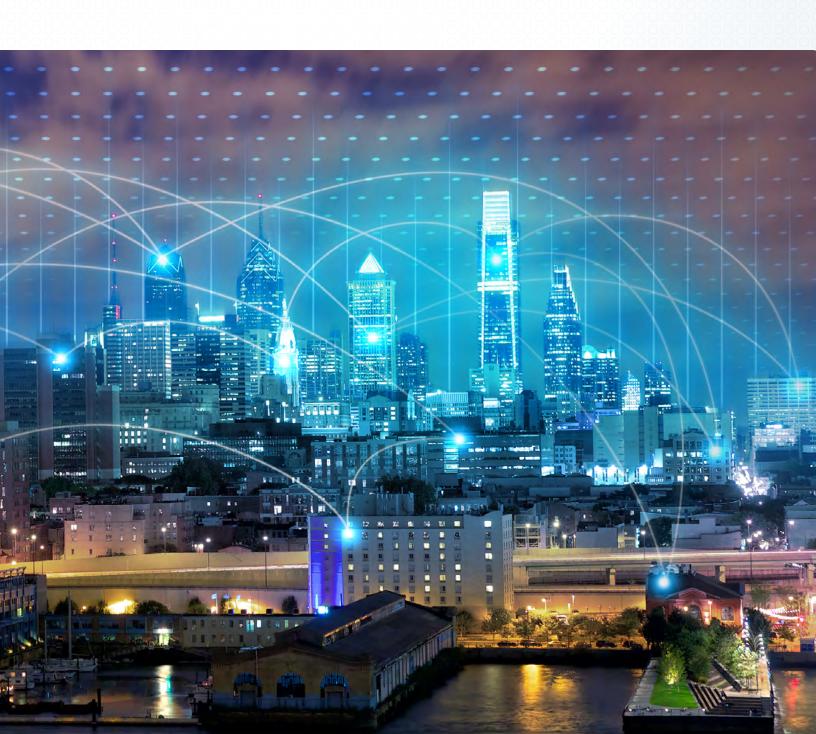


Solutions For

# Smart Cities





# **Data-Driven Smart Cities**

The defining feature of smart cities is data, and Aethair solutions excel in collecting and organizing data, simplifying integration, and enhancing data comprehension. This not only enables the utilization of data in smart city operations but also streamlines the process, making it less complex and accessible to a wider audience, fostering the growth of smart cities everywhere. The Aethair platform stands out as the most trusted environmental data platform available today, having served enterprises and government organizations for over a decade, thanks to its reliability and security. Aethair is the only platform offering global cellular connectivity combined with IoT-native cloud solutions designed for enterprise-level security, privacy, and scalability. Choose Aethair for smarter and healthier smart cities, where real-time insights optimize environments and contribute to the future of health and wellness.

# Rapid Detection & Response

Authorities can immediately respond to emerging issues, mitigating potential health and safety risks.



## Community Engagement

Foster community awareness and engagement by providing access to upto-date environmental information.



### **Data-Driven Decisions**

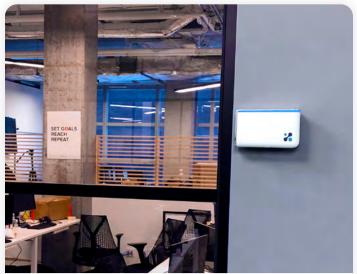
Continuous monitoring empowers smart cities to discern patterns, identify pollution sources, and evaluate policies.





# Community Environmental Monitoring

Aethair solutions are capable of being deployed throughout a community, offering data monitoring and management services for environmental monitoring and supporting the implementation of procedures to improve conditions throughout a smart city or smart neighborhood. The ease of use and setup of Aethair solutions make it easy to rapidly deploy and expedite monitoring throughout communities, providing immediate data access and instant insight into how the environment might be affecting the local community. By implementing Aethair devices across a wide area, smart cities can access aggregated air quality data for an entire community, providing insights into environmental health conditions and potential hazards from fires, refineries in the area, or even traffic patterns. The solutions work in a two-pronged approach: indoor air quality monitoring of public buildings and outdoor air quality monitoring within the community

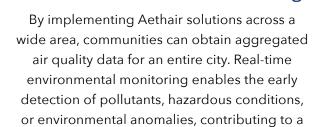




# Indoor Air Quality Monitoring

From offices, schools, hotels, restaurants, community centers, and medical clinics, Aethair provides real-time indoor air quality data to ensure comprehensive health, safety, and building optimization. Leveraging real-time data and analytics, Aethair identifies and addresses potential health hazards, offering early warnings and empowering data-driven decision-making. It serves as a critical resource for streamlining monitoring and data management processes.

Additionally, Aethair provides invaluable support to government regulators and inspectors, aiding in regulatory compliance, facilitating efficient inspections, and informing data-driven actions for the well-being of smart cities and communities



more resilient and adaptive urban environment.

**Outdoor Environment Monitoring** 

As communities and programs expand to encompass larger areas, Aethair solutions can scale accordingly, not only achieving this but also providing the flexibility to integrate additional solutions and devices. This enhances neighborhood-wide health and environmental monitoring, empowering city planners, environmental agencies, and policymakers to implement targeted strategies.



# Redefining Indoor Air Monitoring

Aethair IAQ is precision-calibrated and certified for exceptional accuracy, all at a fraction of the cost of typical solutions. Aethair IAQ accurately monitors and continuously reports on-site air quality in real-time, enabling effective remediation, informed decision-making, and even automation.

#### **Unmatched Performance**

The only low-cost device on the market that is calibrated & certified according to institutional standards, with performance correlating to over 90% of that of reference instruments.

## Intelligent Analytics

Its powerful processor combines AI and machine learning to monitor and collect data accurately, helping to identify and classify potentially dangerous events (smoke, gases, etc).

# Secure Standalone Connectivity

An independent and self-sufficient device that utilizes 3G/4G, WiFi, Bluetooth, and mesh to connect the to our cloud, without the need for a local network, eliminating any security concerns.



# **Built-In Sensors**

Aethair IAQ is designed with pre-calibrated, accurate sensors that monitor key air quality parameters:



#### Air Quality Index

The Aethair Air Quality Index provides a quick overview of their indoor air quality, determined by real-time data and advanced algorithms.



## VOCs

Volatile organic compounds (VOCs), are chemicals with potential negative impacts on health over both short and long periods of time.



#### Pressure

Differences in pressure increase/decrease airflow, spreading airborne contaminants, as well as playing a role in joint pain and occupant discomfort.



### Particulate Matter

Particles can linger in the atmosphere and also travel deep into the body causing both short and long term negative health effects.



## ∴ Formaldehyde (CH₂O)

Formaldehyde is a dangerous, naturally occurring gas, commonly emitted by painted surfaces, fabrics, carpets, and adhesives.



#### Humidity

High/Low levels of humidity negatively impact health, supporting mold growth, building decay, occupant discomfort, and supporting virus spread.



## Carbon Dioxide (CO<sub>2</sub>)

High levels of CO<sub>2</sub> can cause sleepiness, distraction, lethargy and affect productivity, concentration, and work performance.



#### **Temperature**

Temperature can play a role in mental fatigue, discomfort, reduced physical performance, and delayed information processing.



# A New Standard for **Advanced Monitoring**

Aethair PRO stands as the ultimate solution for customizable industrialgrade monitoring-offering the accuracy and user-friendly operation that is only found with Aethair solutions. Aethair PRO utilizes a unique customizable approach, creating the most adaptable solution on the market. By utilizing the versatile Aethair platform, it provides users with a highly reliable solution that not only ensures adherence to various regulations but also minimizes liability. Aethair PRO offers numerous advantages, including:

- > Unmatched data security
- > 4G LTE communication
- > Off-site data access

- > Hot-swappable gas sensors
- > Virtually No Maintenance
- > Continuous Monitoring





# **Built-In Sensors**

Aethair IAQ is designed with pre-calibrated, accurate sensors that monitor key air quality parameters:



Pressure



Humidity



Particulate Matter



**Temperature** 

# **Custom Gas Sensor Setup**

Aethair PRO offers a diverse range of gas sensor options to tailor the solution to meet your specific needs. All sensors are designed in the form of pre-calibrated, hot-swappable cartridges, ensuring accurate measurements at all times while minimizing downtime.



🙏 Formaldehyde



VOCs



Carbon Dioxide

Carbon Monoxide





→ SOx



Ammonia







Methane

Contact us for more >

# Revolutionizing Data Connectivity

The Thiamis has been known by industry professionals for more than a decade, as it has been the only device that enables plug-and-play integration with 3rd party sensors. It offers capabilities including system control, data logging, digital processing, global positioning, and telemetry. The Thiamis includes multiple ports, allowing users to connect virtually any 3rd party sensor. By connecting a 3rd party sensor, you eliminate the need to manually retrieve monitoring data, as all data will be sent wirelessly over a secure cellular or wifi connection to the Aethair Cloud.





# **Hardware Connectivity**

The Thiamis includes multiple ports, such as RS-485, RS-232 (3-multiplexed), SDI-12, 2 USB-C ports, and expansion ports for Analog and Digital I/Os, enabling users to connect virtually any third-party sensor or system. By connecting a third-party device, it eliminates the need to manually retrieve monitoring data, as all data will be sent wirelessly over a secure cellular or wifi connection to the Aethair Platform.

# **Extensive Device Compatibility**

Thiamis has been used alongside many industrial sensors, offering professionals seamless access to their data. A few examples are:

- TSI DustTrak
- Rae Gas Monitors
- Durridge Radon Sensor
- Alphasense
- Davis Vantage Pro
- Lufft

- Eureka
- QuestTemp
- Young ResponseOne
- Gill Maximet Sensors
- Macurco

- Thermo Scientific
- Met One
- Particles Plus
- Eureka Water Probes
- Teledyne ISCO
- And More!







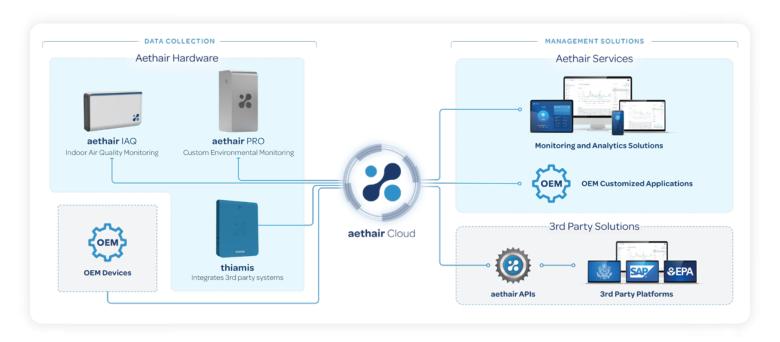






# An Integrated & Seamless Platform

Experience the efficiency of a unified solution that not only simplifies but transforms the monitoring process, setting a new standard in environmental data management. Offering unparalleled flexibility, the Aethair platform seamlessly delivers real-time data, enabling users to monitor their environment from anywhere, at anytime.



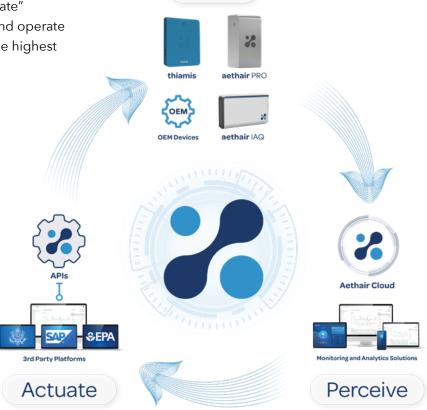
# **End-to-End Solutions**

Our platform follows the "Sense - Perceive - Actuate" closed loop approach, providing easy to install and operate environmental solutions at any scale, following the highest standards for security & privacy.

**SENSE** Aethair devices continuously sense environmental conditions, communicating real-time data to our platform through a secure 4G LTE connection. This data is then instantly made available online on Environet.

**PERCEIVE** With Environet, users have access to all their data with the ability to visualize trends, map devices, set up real-time alerts, manage devices and users, generate environmental data reports, and much more.

**ACTUATE** By harnessing the capabilities of Al and ML and integrating them with real-time data, users can automate responses and leverage their data in a manner only achievable through the Aethair platform.



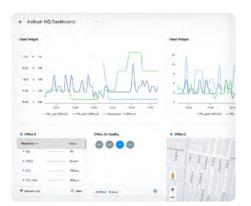
Sense

# Data Monitoring & Management

Environet is the most advanced web-based environmental monitoring platform available on the market, trusted by large enterprises in mission-critical projects around the world. The platform enables device management, user management, analytics, alerts, real-time device mapping, reports, automations, and much more, all in a user-friendly environment. Users can access these tools, along with real-time environmental data, at any time and from any place in the world, in a secure and encrypted professional environment.

#### Customizable Dashboard

Create customized dashboards with various widgets for an instant view of real-time environmental data & analytics.



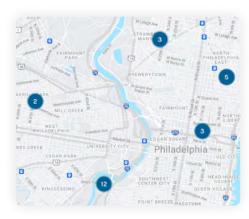
### Real-Time Status Alerts

Customizable alerts provide immediate feedback on environmental changes, notifying those who need to know most.



# Device & Data Mapping

Map connected devices for improved environmental analysis and informed decision-making utilizing real-time data.



# Transforming Environmental Data

Aethair offers the most advanced web-based environmental data platform available on the market. Users can monitor specific parameters, visualize data trends, and access all data recorded over the history of the device's operating time. The platform also enables device & user management, alerts, mapping, reports, and much more. These tools are accessible at any time, anywhere in the world, all in a secure and encrypted professional environment.

- 24/7 Access to real-time data
- Numerous tools for data analysis
- Individual parameter monitoring
- Advanced alert system





# The Trusted Environmental Data Platform

Aethair is trusted by large enterprises in mission-critical projects all over the world, thanks to our ability to offer real-time monitoring using Aethair devices as well as 3rd party sensors connected via the Aethair Thiamis. With a strong foundation built on high-security standards, robust encryption, data integrity, and scalable capabilities, we've become the preferred choice for businesses that demand the utmost in data security and reliability. Join us and explore what is possible with secure, on-demand data.





## **Environmental**

Harvest data seamlessly from a variety of sensors and monitors, guaranteeing data integrity, while enhancing operations with cuttingedge tools and intelligence.



## Industrial

Experience unparalleled precision, security, and scalability for continuous monitoring, catering to the needs of any industry for compliance and safety.



### Commercial

Elevate tenant satisfaction and streamline building ESG operations with powerful data-driven insights for unparalleled efficiency and excellent service.

# When Data Matters The Most

With 24/7 access to air quality data from anywhere in the world, the Aethair platform offers users the most flexible monitoring solution available. The benefits and flexibility of using Aethair to view real-time data make it the easy choice for anyone who needs a reliable and secure solution for environmental data. The Aethair platform provides a way for users to:

- > Adhere to Standards
- > Comply with Regulations
- > Improve Safety
- > Reduce Liability
- > Improve Quality Assurance
- > Control Connected Systems





# **Aethair**

Our mission is to leverage cutting-edge AI and IoT technologies to improve our environment and promote the health and well-being of people worldwide.

Over the years, we have garnered numerous awards, deployed devices in over 44 countries, and helped pioneer the future of indoor air quality monitoring. We are dedicated to fostering safer environments everywhere. Whether it's detecting smoke during wildfires or alerting individuals to biological and chemical hazards in any setting, including homes, hospitals, restaurants, shared transportation, and office buildings. We provide comprehensive environment monitoring for both indoor and outdoor settings, alongside third-party device integration, system management, and data integration.





# A Global Data Platform

We are the most trusted global environmental and air quality data platform, serving the industry for over a decade. We provide minute-by-minute mission-critical data to professionals in enterprise, government, and military sectors worldwide. Our platform is recognized for its exceptional security, scalability, and data integrity.







# How can we help you?

If you would like to find out more about how we can help you, please give us a call or send us an email.

+1 (267) 225-8487 sales@aethair.io

