

Indoor Air Quality Monitoring, Analytics, and Optimization For Healthy Schools



Empowering school leaders to improve indoor air quality.

Kaiterra provides a complete air quality analytics and optimization solution leveraging hardware, software and a team of IAQ experts to help schools measure, understand, and improve their indoor air quality.

chool District Overview	v	New Project Add Device +	
orth Campus 6 devices 3 mem	nbers 🔅		
9 Classroom A	B Library	4 Classroom C	
120 Main Floor Hall	6 Classroom B	(49) Cafetoria	
uun Campus 9 devices 2 men	mpers :		
(83) Classroom D	54 Common Room	(74)	
83 Classroom D 29 Oymnasium	54 Common Room	(x)	
Classroom D Oymnaskum Principal's Office	(64) Common Room (9) Classroom E (120) Auditorium	 • • • • 	
Ottimularitypus 3 devices 2 men 33 Classroom D 33 Oymnasium 24 Principal's Office	Ss Common Room Ss Common Room S Classroom E Classroom E Classroom E Classroom Auditorium	•	

Good Air Quality = Better Schools

Optimal indoor air quality (IAQ) is essential in educational settings for promoting students' growth, well-being, and academic performance. Creating an environment with enhanced IAQ fosters an atmosphere where students, teachers, and staff can thrive and reach their full potential.

Reduced Viral Transmission

Adequate ventilation lowers the risk of airborne transmission by diluting and removing viral particles from the air [CDC].

Improved Student Attendance

On average, improved ventilation rates can result in up to 35% fewer sick days [LBNL].



Happier Faculty & Staff

Improve retention and reduce substitute teacher costs and absenteeism.

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Greater Health & Wellbeing

Improved IAQ can reduce respiratory symptoms and illnesses in students [EPA].

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Higher Test Scores

Better IAQ can lead to a 5-10% improvement in academic performance [LBNL].

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Understanding your indoor air quality can reduce HVAC costs by up to 32%.

Proactively Measure and Manage Your Air Quality in Real-Time

In continuous monitoring, schools use air quality monitors that are installed throughout the building in order to collect data on an ongoing basis, and gain real-time visibility into the current state of air quality. Unlike spot tests, continuous monitoring happens consistently in the background, allowing school and facility leaders to track data and identify risks or optimization opportunities.





What This Means for Schools:

Detect air quality issues faster

Real-time data and alerts allow for faster issue detection so you can manage problems effectively, whether it's day-to-day indoor pollution or seasonal events like wildfires.

Identify and mitigate risks

Detect potential risks such as mold growth or viral transmission at an early stage, enabling timely intervention before they escalate.

Guide effective strategies for IAQ improvements

Make informed decisions such as investing in air purifiers or HVAC upgrades, and monitor before and after to assess effectiveness.

Streamline maintenance and operations

Leverage BMS integrations, alerts and weekly reports to optimize maintenance schedules and streamline building operations.

Build trust with community

Utilize flexible, public dashboard options to share data and progress over time, and boost confidence among students, staff, and parents.

Uncover energy-saving opportunities

> Identify over-ventilation and improve filtration performance with real-time IAQ data so that your systems are operating at maximum efficiency.



Kaiterra: Trusted Partner for School Districts

Best-In-Class Air Quality Monitors

Sleek, accurate, and reliable, our IAQ monitors measure and track key air pollutants and environmental parameters including particulate matter, TVOC, CO₂, ozone, temperature, relative humidity, and more. Our innovative modular design means our list of parameters continues to grow, ensuring comprehensive and future-proof air quality monitoring.





Advanced Software Analytics & Actionable Insights

The Kaiterra Web App is more than a data visualization platform but packed with powerful reporting and analytics features. Whether you manage one school or one thousand, the Kaiterra Web App provides you with the right tools to benchmark, analyze, and optimize your IAQ across your district.

Unmatched Air Expertise With A Personal Touch

Not all school districts have research teams to help them make sense of complex IAQ data. Monitoring IAQ with Kaiterra means you gain access to our collective expertise and team of experienced professionals to help you turn your IAQ data into action and improvements. From setup and onboarding, to discovery and evaluation, and finally ongoing review and support, our team will assist you in positively impacting your air quality.



Sensedge (SE-100)

Premium IAQ monitor with a stunning display.

Parameters:

$\overset{\circ}{\sim}$	PM _{2.5}
69	PM ₁₀
0°	CO ₂
ð	TVOC
\bigcirc	Temperature
\bigcirc	Humidity



WELL

RESE

Features:

KM-100 (Sensedge): Particulate Matter

Modules:

KM-103 (Sensedge): TVOC Temperature Relative Humidity

- C Modular Design
- \bigcirc Cloud Storage
- BGB On-Board Memory
- 7" Full Color Touchscreen
- 口 5200mAh Battery Up to 8 Hours of Battery Life
- 💮 Wi-Fi
- 🖾 Ethernet
- 🛆 Local & Cloud MQTT
- ir 🔆 Modbus
- BACnet*

* The Sensedge is BTL certified under the BACnet Smart Sensor (B-SS) device profile.

Sensedge Mini (SE-200 & SE-200P)

Minimal design with advanced cloud analytics and BMS integration in one solution. Works with WELL and BTL certified.



Parameters:

$\overset{\circ}{\sim}$	PM _{2.5}
69	PM ₁₀
ဝိဝ	CO ₂
ð	TVOC
δ	O ₃ *
\bigcirc	Temperature
<u>)</u>	Humidity

Features:

 	Modular Design
	Cloud Storage
	Minimal, Unobtrusive Design
(((°	Wi-Fi
	Ethernet
Â	Local & Cloud MQTT
÷	Modbus
BIL	BACnet**



Modules:

KM-200 (Sensedge Mini):

Particulate Matter

KM-203 (Sensedge Mini):

TVOC

KM-207 (Sensedge Mini):

TVOC

Ozone



* Ozone measurement available with KM-207 module.

** The Sensedge is BTL certified under the BACnet Smart Sensor (B-SS) device profile.

Sensedge Go (SE-300)

Made for retrofit, wireless design with up to 8 years of battery life. Works with WELL.

Default Parameters

	Particulate Matter (PM_{1} , $PM_{2.5}$, PM_{10})
$\stackrel{\circ}{\bigcirc}\circ$	CO ₂
ð	TVOC
\bigcirc	Temperature
S	Humidity
$\textcircled{\label{eq:linear}}$	Light (Lux & Spectrum)
°%)	Occupancy
$\widehat{\Box_{\downarrow\downarrow\downarrow}}$	Atmospheric Pressure

Modules:





ESE

Features:

	Designed for WELL Certification
[4]	Battery Life Up to 8 years*
	100% Wireless
O	Modular Design
F,	Peel-And-Stick Design for All Surfaces
	Cloud Storage
((- [-]	Sub-Ghz wireless communication via gateway
	Gateway supports cellular & Ethernet
BL	BACnet

Additional Parameters (Coming soon)

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* Using Kaiterra's patent-pending Adaptive Sampling[™] technology.

Sensedge Mini for Outdoors (SE-201 & SE-201P)

An all-weather solution for outdoor air quality monitoring.

Parameters:





Features:

 	Modular Design
$\widehat{\mathbf{x}}$	Cloud Storage
(24)	Durable, All-Weather Performance
(((°	Wi-Fi
	Ethernet
Â	Local & Cloud MQTT
Å	Modbus
BL	BACnet

Modules:

KM-200 (Sensedge Mini):

Particulate Matter



Kaiterra Web App

Manage, compare, analyze, report, and automate all in one place.

Creating a healthy, optimized indoor environment goes beyond collecting data, it requires clear insights and actionable strategies. The Kaiterra Web App helps you turn IAQ data into impactful improvements across all of the spaces you manage.

Built on years of experience helping school leaders, the Kaiterra Web App goes beyond simple data visualization. This robust platform combines real-time IAQ data with advanced analytics and out-of-the-box reporting to help you stay informed and take action—whether you're managing a single school or overseeing an entire district.



The most powerful air quality analytics dashboard, built by IAQ experts.

Strategic

Track & Benchmark

Assess at a high level and track progress via KPIs

- Portfolio Report
- ☑ Time within Target
- ☑ WELL Compliance

Operational

Monitor & Report

View live data and trends to report compliance and issues

- 🖂 Live data
- ✓ Alerts
- Kiosk View
- ☑ Trend report

Analytical

Troubleshoot & Discover

Dive deep into problematic areas and explore optimization

- Space vs. Time
- Under-ventilated
- ☑ Space utilization

People

A team that truly knows IAQ inside and out to help you create real impact.

At Kaiterra, we consider ourselves 'certified air nerds'. We use our collective expertise and team of experienced professionals to help our clients drive change. We continuously invest in building our knowledge base and maintain strong relationships with several key organizations in the field, including WELL, RESET, USGBC, and AIA. By staying up-to-date with the latest research and best practices, we are able to provide our clients with cuttingedge solutions and recommendations that positively impact their air quality.



Kaiterra provides support throughout your entire IAQ project, helping you make the most out of your air quality data and drive tangible outcomes.

- Dedicated Customer Success Manager (WELL Accredited Professionals)
- $\hfill \square$ Initial onboarding and regular training support
- Sensor mapping and floor plan review
- ☑ Remote installation and deployment support
- ☑ Data validation and calibration support
- Quarterly Air Quality Performance Reviews
- Air quality and healthy building certification consulting



TECHNICAL SPECIFICATIONS



Sensedge Specifications



Sensedge Mini Specifications





Sensedge Go Specifications





Sensedge Mini for Outdoors Specifications



Say goodbye to data silos. Say hello to fully integrated automated solutions.



Placement Guidelines

When deciding where to position air quality monitors, it is important to prioritize representativeness. This means that the readings from the devices should accurately reflect the air quality that people are exposed to. Achieving this goal requires careful consideration of factors such as the height, relative placement, and density of the monitors.

- ✓ Wall-mounted and centrally located within monitored spaces
- ✓ Mounted within the breathing zone: between 3 to 6 feet (900-1800 mm) from the ground
- ✓ Located at least 5 meters (16 feet) away from operable windows, as well as air filters and fresh-air diffusers
- ☑ Hard-wired to a permanent power source (recommended)



OUTDOORS

When positioning outdoor monitors, it's crucial to consider locations that accurately represent the overall air quality in a given area. Install monitors in open locations and away from obstructions that can influence airflow patterns and pollutant diffusion. Ensure monitors are positioned at a sufficient height and avoid locations that are prone to flooding.

- In a covered area away from direct sunlight
- ✓ Vertically upright with the opening facing downward
- ☑ Located at least 3ft (900mm) above ground level
- Close to a power source and power supply that will not be submerged in water
- ☑ To ensure optimal performance, keep the installation site and opening free from debris, insects, or spider webs that may accumulate and obstruct airflow



Why Choose Kaiterra for IAQ Monitoring?

	Kaitarra	Other IAO Vendors	
	Kalterra	Other IAG vendors	
Vendor Relationship	You're partnering directly with the device manufacturer and software developer, which guarantees consistent, high-quality products.	Often intermediaries who resell 3rd party hardware and software, which may lead to variable stock and quality.	
Supply Chain Management	Kaiterra has complete visibility and control over the supply chain, allowing rapid issue response and timely delivery.	Limited control, potentially resulting in delays and issues beyond their control.	
Cost Efficiency	Working with Kaiterra directly reduces costs and avoids mark-ups, providing cost-effective solutions.	Inevitable mark-ups on both hardware and software, which result in higher costs.	
Post-Sale Support	Kaiterra's product knowledge and IAQ expertise ensures efficient and effective post-sale support for customers.	May lack deep product expertise or need to liaise with manufacturers for complex issues.	
Feedback Loop	Kaiterra's direct engagement allows rapid product improvements based on customer feedback.	May face challenges in effectively relaying customer feedback to manufacturers.	
Exclusive Offers	Kaiterra offers potential for exclusive deals, bundles, and volume discounts to benefit customers.	Offers may be limited to their agreements with manufacturers, potentially offering fewer benefits to customers.	
Resell Agreement Terminations	Kaiterra's direct relationship with customers ensures continuity without the risk of reseller agreements being terminated.	Subject to the risk of reseller agreements being terminated, potentially leaving customers without a provider.	
Trusted and Secure	Kaiterra is trusted by the world's most security conscious organizations including Google, and is the only device whitelisted and approved for use in US Federal buildings by the US General Services Administration (GSA).	No device is currently approved for use in Federal buildings by the US General Services Administration (GSA).	

About Kaiterra

Kaiterra provides continuous air quality monitoring for some of the world's most innovative companies, government agencies, and we're rapidly growing our K-12 school portfolio. Our real-time data and insights help leaders proactively improve indoor air quality and create healthier, safer, and more productive environments.

At a Glance

148M+ square feet of operating data

430M+ data points collected daily

149 countries and regions

Recent K-12 Highlights

2 Statewide programs

1000+ School buildings

5000+ Monitors installed

Used By All

GSA	Kansas Department of Health and Environment	VERMONT	Microsoft	Linked in.
J.P.Morgan	salesforce	Google	facebook	ú
Sterling Bay	CBRE	Johnson Controls	SIEMENS	ARUP
SOM	Hines	Carrier	Honeywell	()) JLL
Schneider GElectric	DLR Group	accenture	Stantec	FJS
TRANE	PERKINS — EASTMAN	\\ \$p	JBB	



Get in touch!

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