

Sensing-as-a-ServiceSM Air Quality Monitoring

10+ Years

Providing Best-In-Class Air Quality Measurement

500M+

Air Quality Measurements Recorded

10,000+

Unique Deployments Worldwide

250+

Cities with Clarity Air Quality Sensors

85+

Countries with Air Quality Data Recorded



What's included in Sensing-as-a-Service?

Sensing-as-a-ServiceSM is an all-in-one air quality monitoring solution that provides everything you need — hardware, software, and expert project management — so you can focus on making data-driven decisions. No complex setup, no hidden costs, just accurate air quality measurement when and where you need it.






Air Quality Measurement



Cloud Software and Data



Air Quality Expert Team

		Sensing-as-a-Service	Other air monitoring
 <p>Air Quality Measurement</p>	Easily deployed and installed in minutes with modular pole/wall mounts	✓	✓
	Natively solar-powered for seamless operation in remote locations	✓	✗
	Cellular connectivity & global data plan included free of charge	✓	✗
	Rugged, weatherproof and low-maintenance to minimize field interventions	✓	✓
	Free replacement under warranty and hot-swaps as needed to minimize downtime	✓	✗
	Add-On Modules for best-in-class measurement of additional air pollutants	✓	✗
 <p>Cloud Software and Data</p>	Clarity Dashboard: Intuitive network management & data visualization	✓	✓
	Custom alarms and notifications for air quality thresholds and device health	✓	✓
	Option to share your data with third parties via Opendata API or OpenMap	✓	✓
	Programmatically access real-time and historical data with the Clarity API	✓	✗
	Full ownership of your air quality data, securely stored in the Clarity Cloud	✓	✗
 <p>Air Quality Expert Team</p>	Dedicated Environmental Project Manager for the duration of your subscription	✓	✗
	Evaluation and implementation of best calibration strategy to maximize measurement accuracy	✓	✗
	Global Calibration for improved accuracy out of the box when collocation not available	✓	✗
	Custom data analysis and reporting	Add-On	✗

Air Quality Measurement

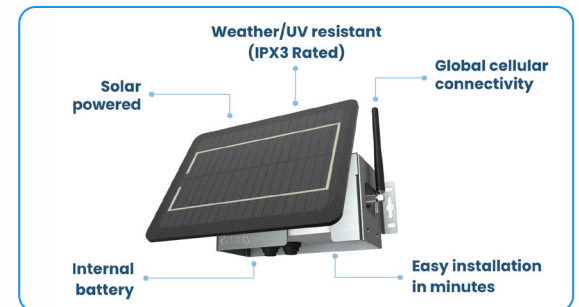
Cloud Software and Data

Air Quality Expert Team



Flexible, cost-effective, and reliable air quality measurement

Our MCERTS-certified Node-S air quality sensor for particulate matter (PM_{2.5}) and nitrogen dioxide (NO₂) is designed for reliability in the toughest conditions. Solar-powered, FCC/CE certified, UV-resistant, and weatherproof, it delivers over 99% uptime even in low-light environments. Equipped with an internal battery and global cellular connectivity, the Node-S ensures seamless performance wherever you deploy it. We're so confident in its durability that we offer free hardware replacements for the entire duration of your service.



Node-S Air Sensor

Add-On Modules seamlessly integrate with the Node-S to provide additional measurement capabilities for Dust (PM₁₀), Black Carbon, Ozone, Wind, and more.



Black Carbon Module*



Wind Module



FEM Ozone Module*



Multi-Gas Module (CO, NO_x, O₃)



Dust Module

Dependable air quality monitoring, wherever you need it



Accurate Measurements: The Node-S uses calibrated sensors to measure particulate matter (PM_{2.5}) and nitrogen dioxide (NO₂), while Add-On Modules integrate best-in-class instruments from selected manufacturers that pass our screening for accuracy and data performance.



Warranty & Continuous Uptime: Our warranty includes free hardware replacements for the duration of your contract, and our air quality expert team is always available for guidance to ensure seamless operation and continuous data collection uptime.



Deploy Anywhere: Self-powered, weatherproof, UV-resistant, and cellular-connected, our devices can operate in remote areas without infrastructure like an electric plug or a WiFi network outdoors.



Fast & Easy Setup: Typical installation takes less than 10 minutes — no electrical outlets or WiFi required. Just mount, power on, and start receiving your air quality measurements to the Clarity Cloud.



Solar-Powered & Cellular-Connected: All devices can be configured for solar-powered operation* to ensure continuous operation, while built-in global cellular connectivity securely transmits data to the Clarity Cloud with 3G/4G LTE for real-time access and storage.



Durable & Weatherproof: UV-resistant and IPX3-rated, our hardware operates reliably in temperatures from -10° to 55°C.

* Devices with asterisk require more power than the Node-S solar panel provides, and require an external Clarity solar power system for off-grid use.

Air Quality Measurement

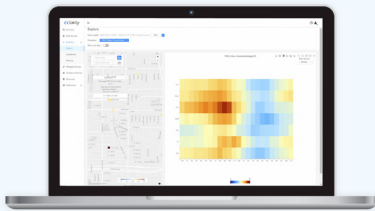
Cloud Software and Data

Air Quality Expert Team



Easily manage your devices and data with cloud software

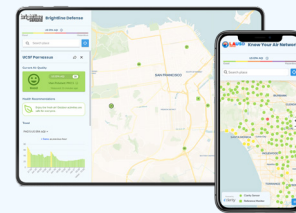
There are no extra costs associated with the Clarity Cloud — all cellular costs, data storage, and web app access are included in Sensing-as-a-Service. Once your air quality sensors record their first measurements, the data are uploaded via 3G/4G LTE to the Clarity Cloud, where your measurements and device telemetry are processed and stored. Manage your sensor network and analyze your air quality measurements on Dashboard, share data with your community with OpenMap, and build automations and integrations with API.



Clarity Dashboard: Your air monitoring network command center

The Dashboard makes your air quality data easy to access, analyze, and act on. Easily visualize your data and manage your sensor network — all in one intuitive interface.

- ✓ **Network Management:** Easily deploy, configure, and maintain Clarity Nodes and Add-On Modules from a centralized interface. Easily track device status to monitor your network's health and minimize downtime for uninterrupted data collection.
- ✓ **Data Analysis:** Visualize and analyze real-time and historical air quality measurements from your sensor network. Compare data from sensors and government reference stations, conduct exploratory analysis, and easily download datasets.
- ✓ **Automated QC:** Our algorithms scan measurements in real time and flag invalid and uncalibrated data so you can easily filter them out of analyses and public data sharing to ensure data integrity.



Clarity OpenMap: Share air quality data with your community

OpenMap makes it easy to share real-time, accurate air quality data, while giving you complete control. With both free and premium options, you control how your data is shared.

- ✓ **Easily Share Your Data:** Opt-in to publicly share your air quality data on Clarity's global OpenMap, embed live widgets on your website and contribute to open data partners like OpenAQ and the EPA.
- ✓ **Build Community for Your Network:** Engage your audience with real-time AQI visualizations, health recommendations, and email notifications—empowering communities with the information they need.
- ✓ **Customize Your Map:** With OpenMap Plus, tailor your public air quality map with custom branding, pollutant selection, and advanced data tools to align with your organization's goals.

Clarity Cloud: Built for scalability, security, and integration

Our secure cloud infrastructure handles real-time air quality data processing, storage, and integration — providing the data management you need, without the complexity. With an API-first architecture, enterprise-grade encryption, and full data ownership, the Clarity Cloud ensures seamless access, reliability, and control.



Secure & API-Driven: Access real-time and historical data via Clarity's Air Monitoring API, with enterprise-grade encryption ensuring secure data transmission and storage.



Data Ownership: You own 100% of your data — Clarity does not co-own or share it without your consent. Choose whether to keep it private or share it publicly.



Remote Calibration: The Clarity Cloud calibrates raw measurements for enhanced accuracy, ensuring reliable data with minimal manual intervention. Raw measurements are always retained for traceability.

Air Quality Measurement

Cloud Software and Data

Air Quality Expert Team



We're with you every step of the way

Whether you are an experienced air quality scientist or setting up your first sensor, Clarity's expert team provides continuous support to ensure your air quality monitoring project's success. With Sensing-as-a-Service, you're not just purchasing hardware—you're gaining a dedicated partner in air quality monitoring.



Kickoff:

Meet your Environmental Project Manager to align on goals, deployment plans, and calibration strategy.



Onboarding:

Receive expert guidance on sensor placement, calibration, and network setup in two onboarding sessions.



Deployment:

Deploy your devices and access real-time data, status alerts, and reports via the Clarity Dashboard.



Collocation & Calibration:

Our patented Remote Calibration ensures accurate, scientifically validated measurements.

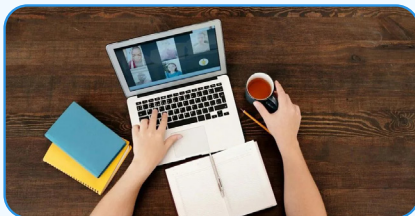


Ongoing Support:

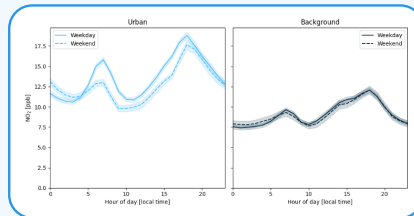
A dedicated project manager and customer success team help troubleshoot issues and optimize your network.

Add-On Services: Turn your air quality data into action

Our comprehensive, customizable Add-On Services go beyond measuring air quality – we help you interpret your air pollution data and develop strategic air quality interventions. Unlock the full potential of your air quality monitoring program with offerings designed to provide custom-tailored support that helps you overcome resource constraints and achieve your air quality goals efficiently and effectively.



Additional EPM Time



Data Analysis



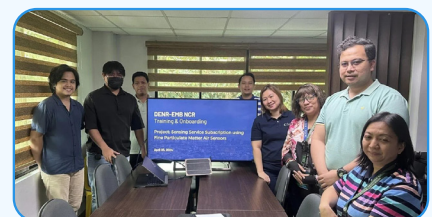
Network Design Workshops



Program Design



Deployment Support



Air Quality Trainings

Contact us for a quote! | clarity.io | sales@clarity.io



V-031325