VAISALA

Air Quality Transmitter AQT530

Connect communities to the environment for improved health and safety for all



With the right access to the right information, people gain a deeper connection to their environment and new ways of thinking about community.

A real-time, 360-degree view of air quality helps communities take action to protect public health, avoid pollution hot spots, optimize infrastructures, and plan more confidently and strategically. Vaisala Air Quality Transmitter AQT530 is the ideal monitoring and measurement sensor for these and other purposes — providing best-in-class accuracy, simple deployment, easy integrations, and reliability over a long service life.

Pairing AQT530 with Vaisala Beacon Weather Station (optional) adds valuable weather intelligence, as well as connectivity and data management through an API. The Wx Beacon UI can also provide a helpful user interface and visualizations for an even more complete solution.

Key benefits

Enable smarter, safer, more sustainable urban communities

Create shared investment in community health by giving governments, businesses, and citizens enhanced situational awareness and visibility into environmental risks. Allow stakeholders to make air quality decisions more proactively, confidently, and transparently.

Get critical insights every day

This cost-effective, professional-grade sensor continually provides powerful, real-time insights into the sources and fluctuations of pollution and particulates. Dive deeper by creating a custom network of AQT530 sensors to further improve forecasting abilities.

Have confidence in the Finnish way

Vaisala's home country has boldly demonstrated that a culture of resilience and a connection to nature can create new ways of smarter, sustainable living. Vaisala began in true Finnish character with honesty, curiosity, and determination; exploring the unknown and pushing the boundaries of innovation.

AQT530's world-class air quality monitoring capabilities honor this tradition and demonstrate Vaisala's commitment to providing trusted, unsurpassed weather and environmental solutions.

AQT530 at a glance

AQT530 is changing the way we monitor air quality and make decisions about our communities. Measure the most critical pollutants in urban environments — all in real-time — so that you can actively inform citizens, increase awareness, and decrease the effects of pollution.

Applications

- Providing Environmental Protection Agencies with air quality, weather, and high-quality air resolution monitoring.
- Supporting smart lighting pole manufacturers and integrators with new technology.
- Facilitating air quality and weather monitoring equipment for smart city traffic management.
- Helping city infrastructure and outdoor media companies with visibility into air quality and weather insights.

Measurements

- Nitrogen Dioxide (NO₂)
- Nitrogen Monoxide (NO)
- Carbon Monoxide (CO)
- Ozone (O₃)
- Fine particulate matters PM_{2.5} and PM₁₀

Key features

- Laser Particulate Counter designed by Vaisala allows for counting and categorizing of particulate matter instead of estimation.
- Intelligent humidity management to improve the lifetime of gas sensing elements.
- Robust Vaisala HUMICAP™ technology provides reliable temperature and humidity measurements.
- Air quality monitoring is offered either as an air quality sensor or as a part of Vaisala Beacon Station system. AQT530 complements other Vaisala offerings for a complete solution.
- Extensive global R&D field tests and factory calibration ensure verified performance results in various environmental conditions.
- Scalable connectivity, data management, and user interface when integrated with Vaisala Beacon Weather Station and the Wx Beacon UI.

Why Vaisala?

Exceptional products grounded in science and innovation

Vaisala understands the value of empowering communities because we have been doing it for 85 years. Our founder established a ground breaking new technology category to solve problems that nobody had ever solved and made meteorology modern.

Urban weather and environment leaders look to us for dependable support, comprehensive training and best practices, and solutions that are trusted and recognized across the globe.

Vaisala has earned the industry's trust through our work with customers in more than 170 countries, our presence at the North and South Poles, and our collaboration with NASA on Mars.



