

Vaisala Elements Lite

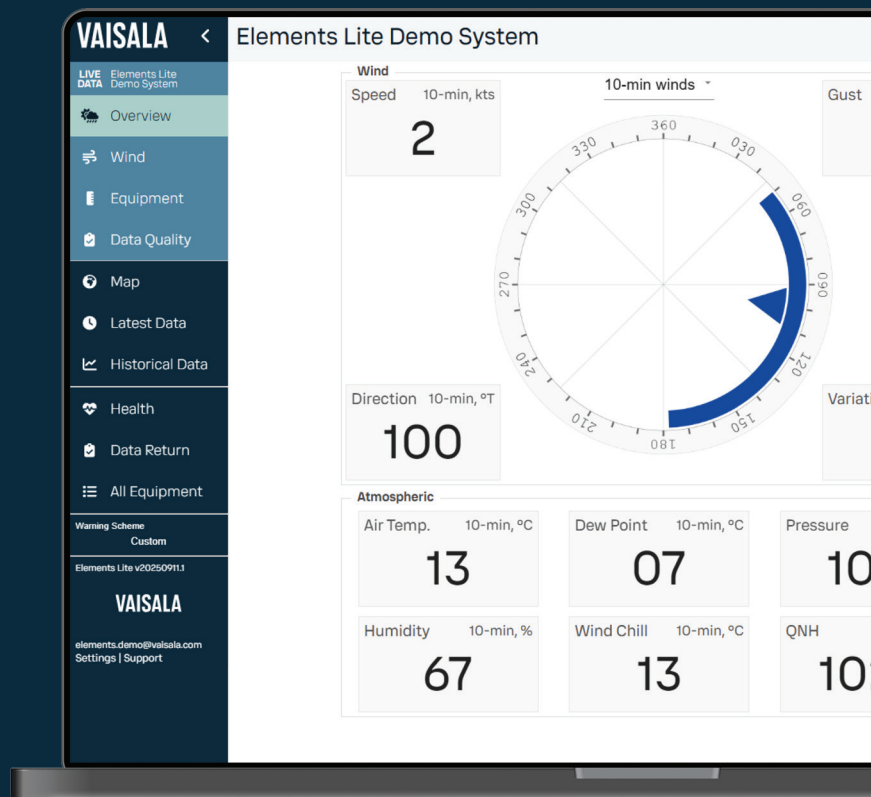
VAISALA

Product Spotlight

Real-time, user-friendly weather intelligence for critical operations

Weather conditions can shift unexpectedly, and critical operations need more than forecasts to maintain peak performance.

Vaisala Elements Lite is the industry's most comprehensive, flexible, and secure software for the collection and visualization of weather observations and forecasts. Integrated with automatic weather stations and sensors, it provides teams with real-time, accurate data to improve operational safety, protect infrastructure and optimize efficiency.



Key benefits

Reduce operational downtime through reliable 24/7 weather monitoring and forecast visualization, including operation-specific warnings.

Enhance decision-making speed with real-time data presented in custom dashboards on desktop and mobile devices.

Ensure regulatory compliance with WMO-certified sensors, validated measurement accuracy and long-term data archival features.

Protect your investment through enterprise-grade cybersecurity and future-ready expandable architecture.

Deploy quickly with standard configuration options and streamlined installation processes.

Why Vaisala?

As the global leader in weather and environmental measurements, Vaisala provides trusted weather observations for a sustainable future. With nearly 90 years of innovation and expertise plus customers in 170+ countries from the North and South Poles to Mars, we help provide the most reliable and accurate weather and climate information for better and safer daily lives.

Our instruments and intelligence are known as the gold standard for precision and reliability. As a sustainability leader we enable meteorology professionals to better understand, forecast and explain climate change. We continue to channel our curiosity into climate action and new ways of enabling a better planet for all.

Streamlined weather intelligence that delivers when it matters

Elements Lite integrates securely and seamlessly with automatic weather stations and sensors. Tailored for industries with weather-critical ground operations, Elements Lite delivers real-time data from one or more sites.

Elements Lite ensures accurate, actionable insights to enhance safety and operational efficiency. It supports a wide range of Vaisala sensors and offers real-time output to other systems through Modbus and OPC-UA protocols, making it ideal for environments where weather impacts safety, logistics and mission critical decisions.

Teams can connect from desktop and mobile devices to get key parameters such as air temperature, visibility, precipitation and lightning. Configurable dashboards and warning thresholds support diverse operational needs with the best user experience.

The software also integrates with Vaisala's Xweather global lightning detection network, forecast data, and forecast map layers for dependable local weather information.

Built on a secure architecture with precise user permissions, Elements Lite supports up to 50 sites per server. It also offers global data distribution and long-term archiving through Vaisala's Elements Online cloud platform.

Backed by our decades of expertise and trusted in over 170 deployments worldwide, Elements Lite empowers organizations to make informed decisions with confidence and ease.

Applications

- Disaster response (flood, wildfires)
- Continuous, traceable climatological data for research purposes
- Ports, harbors and coastal monitoring
- Mining & construction (flood risk, crane operations)
- Transport (rail, road bridges, ski lifts)
- Agriculture
- Defense
- Space launches

