Vaisala Beacon™ Station

Track construction weather with the first true all-in-one weather station

In construction, everything depends on the weather. From unforeseen project stoppages and crew safety hazards to long-range resource allocation challenges, the risks of inadequate weather data can be immense.

Vaisala Beacon Station provides accurate, highly localized present-weather reporting, as well as trustworthy forecasting for project scheduling and planning. No longer do crews need to wonder how long a rainstorm will keep them off the job for example. Beacon adds clarity, efficiency, and connectivity at every turn, optimizing your entire construction operation and enabling your crews to work smarter and safer.

Built on industry-leading, reference-grade sensor technology, Beacon is easy to set up and use. In 15 minutes, you can have your mobile sensor unit up and running, and as soon as you connect to the user-friendly interface, you'll have your own secure weather observation network.

How the system works

Beacon's state-of-the-art, smart sensors are packaged into a compact, cost-efficient, all-in-one weather instrument for key atmospheric parameters: air pressure, temperature, humidity, rainfall, wind speed, and wind direction. The Beacon package includes the sensors, solar panels or other power options, and a convenient selection of mounting hardware.

Data is transferred directly from the sensors to a user-friendly platform, which integrates and visualizes weather information. Embedded security features ensure data integrity, and the system ships with an integrated SIM card and ready-to-use cellular data plan, making it possible to start using the weather station as soon as it is in place.

Key benefits

Improved decision-making with the data you need most

Beacon enables more efficient planning, improved safety and compliance, and smarter staff and resource allocation. It minimizes disruptions, prevents delays, and allows construction companies to deliver on their commitments.

Plug-and-play simplicity

Beacon is simple and fast to install, and it is built on the most reliable, proven sensor technologies available. It comes preconfigured as a rapidly deployable, low-maintenance package — so you can focus on your most crucial tasks instead of a patchwork of temperamental technology.

A future-proof, secure digital ecosystem

Beacon scales from a single, compact weather station to a system-level solution, and all your sensors, devices, and visualization tools coexist in one secure ecosystem. Open APIs allow for easy third-party integrations as needed, while Vaisala's professional monitoring services and trustworthy service ensure data integrity at every step.

The trust of the leading global partner

Vaisala's technologies are tested and proven in the most demanding and unforgiving conditions — from pole to pole, from ground to cloud, and even on Mars. Anywhere you might deploy Beacon, Vaisala is there with the uncompromising guidance and support that have made us a trusted partner for more than 80 years.

Features

Accurate, high-quality data from proven, trusted Vaisala sensors

Compact, easy-to-deploy package suitable for remote locations

A scalable platform that extends from a single, compact station to a system-level solution

Remote access and service with secure data communication

Flexible power options, including solar panels for flexible installation at remote locations

Data visualization and open API for third-party integrations

Why Vaisala?

World-class science and technology, now tailored for construction

Vaisala solutions are built on 80+ years of experience, global scientific leadership, and aggressive R&D investments. With customers in more than 170 countries (and with NASA on Mars), we are trusted to provide the best technology, dependable support, effective training, and end-to-end project management you need to succeed.

Stay in command of the weather, not at its mercy.

Start tracking weather conditions where it matters most — and keep your operations running smoothly.

VAISALA

vaisala.com/beacon