

Vaisala Automatic Weather Station AWS810 Airport Edition

VAISALA

Product Spotlight

Trusted airport weather solutions from cloud to ground

Before every takeoff and landing, weather determines what happens next. Yet many airports struggle to maintain continuous, reliable observations as infrastructure ages and operational demands increase.

AWS810 Airport Edition combines Vaisala's world-leading sensors, data processing, and communications on one secure, scalable platform. It delivers consistent, real-time measurements across the airfield, supporting safer operations, optimized capacity, and compliance with evolving aviation standards.



Key benefits

Unified airport weather platform

A single, harmonized view of weather across runway, apron, and perimeter.

Aviation-grade design and compliance

ICAO- and WMO-compliant sensors with robust, field-proven design for continuous operation in demanding airfield environments.

Scalable system architecture

From single runway to airport-wide systems, with modular expansion as needs evolve.

Modern connectivity and integration

Seamless integration into wider airport weather systems, like Vaisala AviMet systems via various flexible interface options.

Efficient remote management

Advanced diagnostics, remote updates, and long calibration intervals reduce downtime, site visits, and total cost of ownership.

Why Vaisala?

For over 50 years, Vaisala has been a pioneer in aviation weather technology, ensuring that every measure is taken for unparalleled safety, efficiency, and sustainability.

Our gold standard suite of solutions is trusted in more than 170 countries and over 2000 airports globally. In fact, every commercial flight around the world will use weather observations produced by Vaisala equipment or forecasts driven by our sensor measurements at some point in their journey.

With over 90 years of scientific leadership and a commitment to evolving our portfolio, Vaisala remains at the forefront of the industry, continuously exploring new horizons.

Reliable weather intelligence for airport operations

AWS810 Airport Edition simplifies the creation and management of modern airport weather system. Delivered as an industrially manufactured, fully tested solution, it reduces engineering effort, commissioning time, and deployment risk.

Built on proven Vaisala sensor technology, it delivers accurate, continuous measurements in demanding airfield environments. By harmonizing data across the system, it supports consistent decision-making for runway safety, traffic flow, and contingency planning.

Flexible, cybersecure, and future-ready

The system supports a wide range of Vaisala and third-party sensors on a single platform. Its modular design and open interfaces allow integration with current and future technologies.

Built-in cybersecurity features, including secure boot and hardened hardware, protect data integrity and support compliance with increasing regulatory requirements for critical infrastructure.

Powered by Vaisala DMU801

At the core is the Vaisala Data Management Unit DMU801, a proven platform used across Vaisala weather stations. It enables secure data acquisition, processing, and integration, supporting scalable, future-ready airport weather systems.

Part of a complete, lifecycle-supported solution

Seamlessly connecting with Vaisala AviMet airport weather systems, including the latest AviMet 10 software, AWS810 Airport Edition becomes part of the complete aviation weather solution. Together, they deliver a truly scalable approach, from single runway installations to fully connected, airport-wide systems.

With Vaisala Care, airports gain structured lifecycle services including expert support, remote diagnostics, extended warranty, and predictable performance over time.

