

Nuuk Airport modernizes with AviMet AWOS

Case Study



The client:

COMSA Corporación, Kalaallit Airports Group

Vaisala solution:

AviMet® Automated Weather Observing System AWOS

THE CHALLENGE:

Increasing air traffic in Arctic conditions

At Nuuk Airport, Greenland, an expansion is underway that will help the city of Nuuk advance their goals of boosting the local economy and tourism. The single runway has served the city for decades, but its length and mountainous surroundings limited service to small aircraft. This is changing as the airport builds an expanded runway plus two taxiways, a dedicated air traffic control tower, and new terminal area.

An expansion of this scale demands modern technology that is designed to grow with an airport's needs to support safe, efficient flights. This is a significant challenge for Nuuk Airport, which is subject to Arctic weather including freezing conditions, high winds and low visibility.

COMSA Corporación is up to the task as they acquire and install the right solutions to modernize this unique airport.

THE APPROACH:

Trusted performance and reliability

Building on the airport's success and experience using Vaisala technology, COMSA and Kalaallit Airports Group chose the Vaisala AviMet® Automated Weather Observing System AWOS to provide comprehensive and reliable real-time weather data.

AviMet AWOS collects, processes and visualizes meteorological data in compliance with the International Civil Aviation Organization (ICAO) and World Meteorological Organization (WMO) standards. Based on over 45 years of aviation expertise, the system helps aviation personnel make critical decisions by providing continuous, real-time reports on airport weather conditions.

“Expanding Nuuk Airport is a significant step for this Arctic region – the airport will be able to accommodate larger aircraft and more frequent flights. But safety comes first. AviMet AWOS is trusted technology for providing meteorological conditions at airports, and we have every confidence it will help Nuuk welcome a growing international community.”

*Jens Lauridsen
CEO, Kalaallit Airports*

The solution is fully integrated with a range of Vaisala technology that provides accurate and dependable weather and runway condition reporting. Specially designed for performance with AviMet AWOS is the Vaisala Automatic Weather Station AWS310-SITE, which provides reliable and accurate weather measurements using ICAO- and WMO-compliant sensors.

The reference grade Vaisala Forward Scatter Sensor FD70 is the leading forward scatter technology for visibility and present weather, including runway visual range (RVR). The FD70 provides constant performance – even freezing drizzle and rain, ice pellets, and intense or mixed precipitation.

Nuuk Airport gets minute-by-minute awareness of runway, taxiway, and ramp conditions with the Vaisala Runway Weather Station RWS200 and Vaisala Road Sensor DRS511. The combination of devices provides precise, reliable measurements to ensure safety and mobility.

Accurate wind data is provided by the Vaisala WMT700 which performs reliably even in variable winds, complex terrain, and other challenging conditions. Rounding out the essential meteorological measurements are the Vaisala Humidity and Temperature Probe HMP155 and Vaisala PTB330 Digital Barometer –

both optimized for dependable performance in outdoor installations.

THE RESULTS:

Positioned for safe and efficient flights

Nuuk Airport is set up for success. The state-of-the-art AviMet AWOS provides the highest level of accuracy and dependability, in real time, in all weather conditions – guaranteed – which gives the airport the ability to ensure safe and efficient operations with confidence.

As the airport prepares to welcome a wider range of aircraft plus increased traffic, efficient air traffic control will become even more important. AviMet AWOS gives pilots and aviation personnel the best situational awareness to mitigate the effects of the weather, which will lead to fewer delays and cancellations plus greater uptime.

The expansion of Nuuk Airport is key for economic development and will open possibilities for the city of Nuuk and the country of Greenland. Now the airport is prepared to welcome new and greater connections.

Why Vaisala?

For over 45 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 a commitment to constantly evolving our portfolio, Vaisala remains at the forefront of the industry, continuously exploring new horizons.

