Meets your aviation weather needs with inherent flexibility and proven reliability

As the aviation industry is impacted by rapid technological advances, airlines and air traffic management are transforming to become more effective and efficient, particularly when it comes to weather data. The ability to rely on accurate weather information is critical for enabling safer, more efficient flight operations. According to the University Corporation for Atmospheric Research's COMET Program, weather is responsible for as much as 76 percent of air traffic delays. Being able to reliably and securely manage weather observations systems — with the flexibility to ensure those observations meet specific requirements — is critical to airports around the world, as they strive to enable aviation operations.

- Enhance efficiencies by automating operational processes.
- Keep passengers and personnel out of harm's way.
- Decrease weather-related delays and cancellations.
- Ensure efficient integration with other air traffic management systems.

Highly configurable software-based aviation weather information system

DTN, with more than 35 years of experience, providing aviation weather systems, has reinvested in the software-based MetConsole® Automated Weather Observation System (AWOS) platform to help you best manage your weather observation system with the latest technology. Our newly re-engineered, multilingual-capable MetConsole AWOS provides a flexible and reliable solution for automating weather observation functions critical to safe, efficient airport operations. With its enhanced, real-time operational weather intelligence, independent meteorological, organizations such as national meteorological services, civil aviation authorities, airports and air traffic management authorities can focus on traffic control while minimising flight delays and runway accidents attributed to adverse weather.

Be prepared to handle any wind shear event with this industry-leading detection system. In fact, LLWAS is the most commonly installed wind shear alert system across the globe, and for good reason; it has a Probability of Detection of more than 90 percent and a false alert rate of less than 10 percent. Plus, it integrates seamlessly with other remote-sensing systems and combines the information into a single set of alerts, making it not only the most comprehensive technology, but also the easiest.
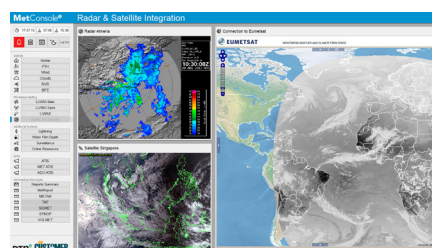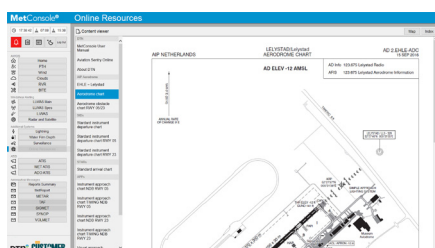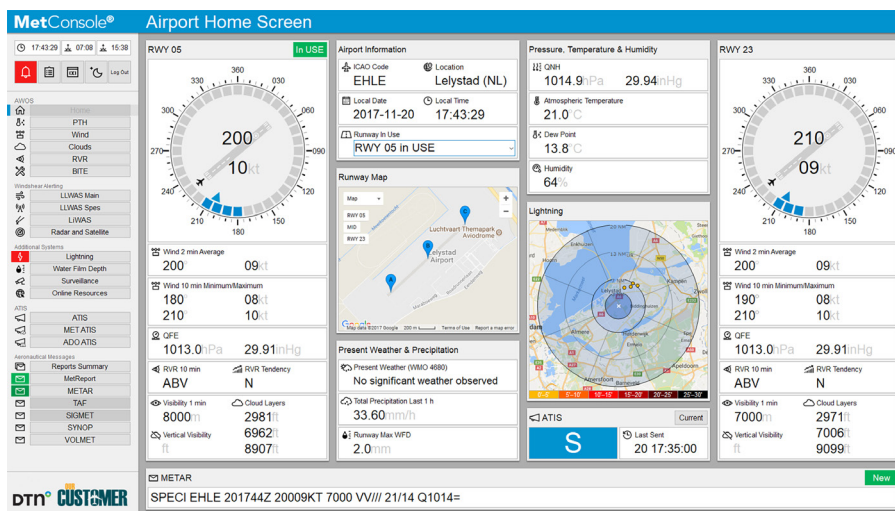
Greater functionality than ever before

- MetConsole AWOS automates the weather observation functions that are vital to safe, efficient airport operations. Its interoperability and adaptability is made possible by its flexible architecture, and modern technology frameworks.

- MetConsole AWOS's open and modular architecture allows you to deploy only necessary functions — from the simplest AWOS up to a nationwide network of CAT III AWOS with contingency and training systems. It provides a complete set of calculations, quality checks, and algorithms that can be mixed in any way to produce the data you need.

- MetConsole AWOS's graphical editor and configuration tools allow you to design the human/machine interface to meet your specific requirements. The configuration information is stored in a database, allowing it to be customised and upgraded on demand during the system's life cycle.

- The system meets stringent aeronautical weather observation requirements and complies fully with all relevant international standards, such as ICAO Annex and Doc, WMO Guides, ARINC, EUROCAE, ESARR, ISO, EN, and CE — ensuring efficient integration with other air traffic management systems.

- MetConsole AWOS's standardised design is sensor independent, enabling you to use best in class sensors that suit your operation, allowing you to change and increase the scale and scope of the system as necessary.

- Enhanced communication tools allow the system to be configured for automatic generation and delivery of METARs, including trend forecasts and other necessary messages or bulletins.

- A technician/maintenance tool provides a robust range of functions for technicians and system administrators for more efficient maintenance.

A networked system that's comprehensive and flexible

- Our fully customisable and automated MetConsole AWOS collects data and performs quality checks with dual redundancy, optimising data availability and ensuring high reliability and consistency.

- Independent meteorological sensors and AWS automatically update current temperature, visibility (RVR), cloud height, wind direction and speed, dew point, barometric pressure and other parameters.

- Redundant servers receive, validate, disseminate and store the data for retrieval.

- Windows®-based user clients featuring graphic displays, report generation tools and statuses, and maintenance monitoring interfaces make the information readily available to your meteorological office, air traffic control, and airport operations staff.
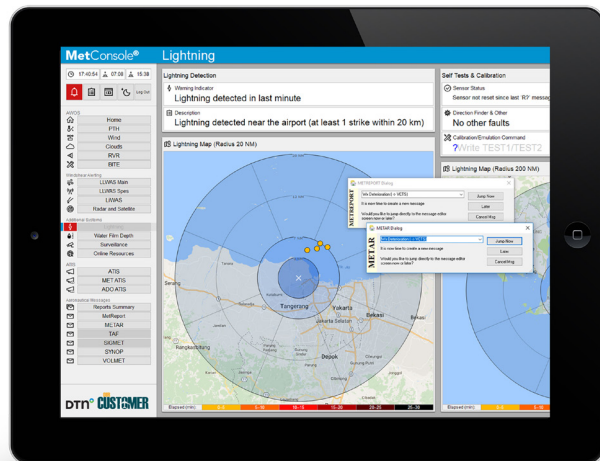
- MetConsole AWOS interface provides your staff a quick and easy way to access the information they need. You can change screen layout as you work, or access the system using Web displays via your local area network. The display can be customised to fit your specific needs, and offers day and night mode colour sets to ensure optimal visibility and comprehension 24/7.

- MetConsole AWOS has simulation and training tools, which can be used to prepare your staff for safely managing real life scenarios. These tools are fully configurable and have access to real-time data, which dramatically improves their effectiveness.

Seamless automation and data sharing

MetConsole AWOS' client/server architecture allows you to reliably share data, which in turn enables better business decisions.

- Ensure reliable web-based delivery of information — no extra work or programming required due to embedded Web GUI, which can also run on Linux® or any other operating system with a browser.

- Exchange data with third parties using XML-based formatting.

- Seamlessly obtain data from your redundant back-up system, if needed, as easily as if the information were sourced on site.

- Automatically receive reports from a national met office during unmanned hours, on a defined basis, or as required by special meteorological conditions.

- Work simultaneously with a remote forecaster or observer to create periodic METAR reports.

- Take advantage of centralised, nationwide technical monitoring and maintenance of sensors, and servers, helping to ensure proper operation, software upgrades and configuration.

MetConsole AWOS works for you

The extensibility built into MetConsole AWOS maximises your investment. User customised algorithms be enabled by end users to facilitate specialized applications. The solution's modular, standardised design and TCP/IP networking ensures that you receive an optimal return on your investment.

Unmatched professional expertise

Every day, we continue to successfully delivered aviation weather solutions with MetConsole technology. Many of these installations have MetConsole AWOS exchanging information with other solutions in our MetConsole Aviation Weather Suite — such as our MetConsole ATIS/VOLMET and LLWAS modules — or with third-party systems to provide a complete aviation meteorological solution.

What's more, our aviation systems are supported by our in-house team of professional meteorologists and aviation application specialists. Our clients benefit from efficient and effective implementation guided by our experienced project managers and technical staff all the way through the entire project life cycle.

Contact us for more information about putting these advanced aviation weather systems to work at your airport, helping to improve the safety and efficiency of your operations.

Get to know DTN AWOS and the rest of DTN Weather Solutions.

www.dtn.com