

Cirrus[®] Sounding System MW51 for defense applications

Product Spotlight

Making weather your ally

Portable, secure multisoundings for mission-critical weather forecasts

When weather forecasts are critical to the mission, upper-air soundings can make the difference in complete situational awareness. Vaisala radiosondes provide world-class data: Now you can release multiple radiosondes, receive all data simultaneously, and monitor fast-changing weather conditions in real time to gain a strategic edge in atmospheric measurements and forecasting.



Key benefits

Multisounding capability: Gain a strategic edge in atmospheric measurements and forecasting by releasing multiple radiosondes – and receiving the data from all of them simultaneously – for real-time monitoring of fast-changing weather conditions.

Iron-clad data security: MW51 ensures data integrity and security through encryption, buffering, and secure login. Industry-leading security measures protect against threats and unauthorized access, with regular updates for data integrity and operational confidence.

Intuitive software: The new software offers plug & play usability with an intuitive interface for easy deployment with minimal orientation. It includes a built-in quality control system that checks for errors and anomalies, while customizable settings meet your specific operational needs.

Mission-specific forecasts: Generate mission-specific weather forecasts using up-to-date data from the MW51 system to improve accuracy. Enhance situational awareness and decision-making with precise weather information, reducing risks of mission failure.

Why Vaisala?

With over 85 years of experience in weather and environmental technology, Vaisala is the world's most trusted provider of weather observation systems for tactical operations.

Committed to excellence, we take every measure to ensure our systems are not only comprehensive in their observations but also meet the most stringent performance requirements in any situation.

We provide 24/7 global support, extensive project capabilities and thorough training throughout the entire lifespan of your system to help you make weather your ally when it matters most.

Vaisala Cirrus® Sounding System MW51 is the revolutionary solution for mission-critical weather forecasting. This system provides exceptional capabilities in a compact, secure, and truly portable package.

With multisounding, release multiple radiosondes and receive all the data simultaneously, for real-time monitoring of rapidly changing weather conditions. Increase data frequency and coverage with a streamlined process managed by just one operator.

Data encryption and buffering prevent loss or tampering, while the secure login and user management system ensures industry-leading security. User-friendly software and customization options make it easy to use and tailor to your needs.

MW51 generates mission-specific weather forecasts for scenarios like space launches, field artillery, test ranges, and naval operations. Enhance situational awareness, reduce uncertainty, and improve decision-making to minimize the risks of mission failure.

The advanced MW51 is specifically designed for defense applications. It prioritizes robust cyber security, ensuring data integrity and protection through a transparent security architecture and regular updates. Complying with the latest cyber security industry standards and best practices, MW51 provides a secure and reliable solution for defense operations.

Built on state-of-the-art software and hardware components, including the Vaisala DigiCORA sounding software and Vaisala SPS511 Processing Subsystem, MW51 delivers exceptional performance and accuracy. Its software diagnostics feature enables quick and precise identification of error sources, facilitating efficient troubleshooting and maintenance.

With a long telemetry range and high resistance to near-band interference, MW51 ensures reliable and uninterrupted data transmission in challenging environments. Additionally, its radio unit is designed with no moving parts, conductive cooling and an IP54 rating, guaranteeing durability and protection against harsh conditions.

