VAISALA

Ceilometer CL61 for defense

Product Spotlight

Making weather your ally

Real-time atmospheric data is important for planning and executing missions safely, whether you're managing airfields, sailing the seas or flying drones. This information is crucial for everyone's safety, especially in conditions like fog or dust storms.

The Vaisala Ceilometer CL61 provides critical atmospheric data for defense applications, ensuring mission success and personnel safety. Get a decisive advantage with 24/7 access to all-weather vertical profiling data.



Key benefits

Airfield operations, naval deployments and drones: Gain real-time cloud base height data for safe and efficient operations — crucial for planning and executing maneuvers.

Takeoff, landing and ship maneuvers: Precisely detect low-level threats like fog, dust storms and volcanic ash that can significantly impact visibility. Get early warnings of these conditions to ensure personnel safety.

Flight operations for jets, drones and helicopters: Get real-time data on icing — essential for the safety of flight operations that are highly susceptible to icing hazards.

CBRN defense: Enhance safety by measuring the mixing layer height and convection height data, which is critical for dispersion modeling of chemical, biological and nuclear threats.

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.

CL61 equips you with a comprehensive data suite to empower strategic decision-making across various defense operations.

Rugged, reliable, ready

CL61 is built to withstand harsh environments, delivering dependable data around the clock for mission-critical decisions — even in demanding Arctic conditions.

More than a ceilometer, CL61 includes depolarization measurement. This provides exceptional accuracy for liquid/frozen differentiation including icing conditions such as freezing rain, drizzle and supercooled liquid layers, plus the detection of dust, sand and volcanic ash layers.

Broad support for defense missions

The ceilometer contributes to improved numerical weather prediction (NWP) modeling, leading to superior mission planning and logistical support for naval operations. This includes providing vital data for helicopter deployments on frigates and aircraft carriers.

Accurate cloud base data for land, sea and air operations supports airfield operations, drone missions, and naval deployments. Early warning of low-level visibility threats like fog and dust storms improves takeoff, landing and ship maneuvering safety.

The data CL61 improves targeting and decisionmaking for mission success, especially for drone and helicopter operations which are highly susceptible to icing.

