

Ceilometer CL61 for aviation

Comprehensive measurement of volcanic ash, icing and more for safer aviation operations



Key benefits

Get the most reliable information for better situational awareness

Provides accurate liquid and frozen differentiation plus detection of dust, sand and volcanic ash layers by depolarization. For improved situational awareness, Vaisala BL-View software visualizes high-resolution backscatter profiles with intensity indication based on time and height.

Integrate easily for greater prediction modelling

Uses common data formats for easy integration with existing networks. You can also improve coverage to enhance your forecasting capabilities with a network at and in the vicinity of the airport as well as the terminal approach area.

Get secure, uninterrupted operation in any weather

Provides comprehensive profiling data 24/7 in the harshest weather for improved understanding of atmospheric conditions. Built-in software with integrated professional security ensures data quality and integrity.

Save time and costs

Unattended, autonomous operation saves time with little maintenance. Modular structure, remote monitoring, automated basic maintenance and troubleshooting, and embedded fault analysis minimize lifetime ownership costs.

Count on the weather industry experts

Vaisala is a dedicated partner with 85+ years of experience, customers in more than 170 countries, a presence at the North and South poles, and NASA on Mars. You're covered if questions arise with 24/7 global support.

Get comprehensive profiling data 24/7—even in the harshest weather conditions—that goes beyond standard cloud height measurements to help airports and airlines operate with greater safety.

The Vaisala Ceilometer CL61 provides insight on specific conditions such as icing, dust and volcanic ash as well as the melting layer for better situational awareness. This high-end lidar ceilometer features depolarization profiles, providing additional data which enables accurate liquid / frozen differentiation plus detection of atmospheric particles — all of which are critical for aviation safety.

The CL61 offers constant, reliable data including hard-to-identify conditions. New advanced processing with single-lens optics significantly improves signal-to-noise ratio for the highest-resolution backscatter profiles, all in a cost-efficient design. Understand local conditions fast with Vaisala BL-View, which provides an online visualization of vertical profiles.



Expertise means quality

Thousands of Vaisala ceilometers are installed in over 110 countries.

Key features

- **Comprehensive data reporting** including cloud base height, depth and penetration, precipitation and fog, sky condition, attenuated backscatter profile, parallel and cross-polarized profiles, and depolarization ratio profile.
- **Depolarization measurement** for accurate 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.
- **High-resolution, ultrapure backscatter profiles** for best-in-class signal-to-noise ratio.
- **Single lens technology** ensures excellent measurement, even at low altitudes.
- **Rugged design for performance** in all weather conditions with no consumable parts, extensive self-diagnostics and automatic troubleshooting aids.
- **Traceable factory calibration** for accurate time of flight factory calibration.

Why Vaisala?

We believe in the relentless pursuit of quality and performance, anywhere and everywhere.

Vaisala is the most experienced aviation weather company in the world, with a suite of solutions built on more than 45 years of aviation expertise. Our technology is trusted in more than 160 countries from the Nordics to Africa, the Americas and Asia, with options to fit the needs of any airport system.

Look to Vaisala for dependable support, project capabilities, and training so you can get the most from your solution. With decades of experience providing the best technologies and the finest support, our philosophy of partnership is unmatched in the industry.



Trusted aviation weather from cloud to ground

VAISALA

vaisala.com/airports



Scan the code for more information

Ref. B212557EN-A ©Vaisala 2022

This material is subject to copyright protection, with all copyrights retained by Vaisala and its individual partners. All rights reserved. Any logos and/or product names are trademarks of Vaisala or its individual partners. The reproduction, transfer, distribution or storage of information contained in this brochure in any form without the prior written consent of Vaisala is strictly prohibited. All specifications – technical included – are subject to change without notice.