

VAISALA

Lidar without limits

Innovative WindCube® enhancements
for wind energy



We are innovators, scientists, and discoverers who enable our customers to harness wind energy in new ways.

In that spirit, we're unveiling powerful enhancements to WindCube that increase data accuracy, operational continuity, and bankability.

1



Trustworthy, superior metrology

WindCube is a scientifically mature technology that keeps getting better. The latest enhancements include:

- **Increased range of 300m** covering the wind profile of even the largest wind turbines now and in the future, including emerging offshore technologies
- **20 simultaneous measurement heights** enabling even more accurate yield assessments and data-driven decision-making
- **Hybrid wind reconstruction algorithm** that further reduces uncertainty, enabling unparalleled IEC classification
- **IEC-classification** by Deutsche WindGuard demonstrating best-in-class Lidar technology
- **WindCube Golden Validation by DNV.** Each WindCube is validated by DNV against a Golden Lidar before it leaves the factory.
- **IEC-compliant pre-validation (option)** making DNV fully validated WindCube units available right away, saving about two months of third-party, onsite, validation time (estimated availability Q1 2021).
- **Validation continuity (option)** WindCube automatically maintains IEC-compliant validation by DNV during repair, ensuring validation continuity while saving time and money (estimated availability by end of Q1 2021).

All new WindCube systems will include these new capabilities, and existing WindCube customers can schedule an upgrade option to be performed in one of our factory workshops.



2



Easy, reliable global solution

Industry-leading service offerings and turnkey solutions increase efficiency and uptime, while validation/certification services save time and increase trust. Together, they make WindCube an even simpler and more reliable solution, no matter your location.

- **Standard service** included with every WindCube providing accelerated workshop service; average time to repair reduced from weeks to days.
- **Premium Service Level (option)** guaranteeing 15-day maximum case duration and offering onsite repair to facilitate customer operations. Available first in Europe and China from our Vaisala Service Centers in France and Shanghai, with wider service added throughout 2021.
- **Upgrade & retrofit for WindCube v2.1 system (option)** bringing existing systems up to new measurement capabilities (300m range and 20 simultaneous heights, plus hybrid wind reconstruction). Includes a complete check-up and component retrofit to the latest standard.
- **Online refresher training (MOOC)**, ensuring you can continually sharpen your skills and get the most from your WindCube system.

3



Innovative lidars from a one-stop shop

WindCube delivers additional value through single-source, turnkey, complementary solutions built for your specific needs — providing benefits well beyond excellent data.

- **New 4G modem** for increasing the speed of data transfer
- **Affordable remote power pack** enabling successful deployment in the harshest and most remote areas
- **More coming soon**

4



Unrivaled thought leadership

With these latest enhancements Vaisala continues to lead the way in wind lidar. WindCube's industry breakthroughs are unmatched.

- 15+ years of scientific lidar innovation
- 2,000+ lidar units
- 5,000+ deployments
- **Reference lidar** for wind energy
- 500+ authored or co-authored publications

WindCube®

The gold standard

WindCube® is the iconic and trusted gold standard in wind lidar. The turnkey product suite offers innovative, reliable, and highly accurate solutions for thousands of customers across the globe. Borne from a passion to advance the field, WindCube continues to take wind energy ever higher through a commitment to four guiding principles:



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Unrivaled thought leadership



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