

## WindCube Scan

Long-range, fully flexible wind data for wind farm development and operations



### Key Benefits

#### Trustworthy, superior metrology

WindCube Scan offers full 3D scanning with typical ranges up to 3km, 6km, or 10km (depending on model) and a maximum range of 19.5km — as well as multiple scanning patterns that make it ideal for many campaign types. The system boasts outstanding uptime, reliability, and a robust onsite maintenance program, making it an ideal solution for long-term projects. And it can be moved and repurposed to support a variety of applications, providing outstanding value over time.

#### Innovative lidars from a one-stop shop

**At-a-glance data insight and reporting** — Get rich campaign insight through your choice of data management tools. WindCube Scan offers flexible data management through API requests, communication with an FTP server, or through a user-friendly and robust graphical user interface.

#### Easy, reliable global solution

**Supported by the industry leader** — WindCube Scan is supported by decades of experience, scientific tools and expertise, and industry-standard support services — all of which enable customers to get the most from their equipment over its full life span.

**Wind farms are growing larger and more densely filled with turbines, and turbine technology continues to evolve. WindCube® Scan reliably and affordably provides accurate wind mapping and wake analysis that are now indispensable to onshore and offshore projects.**

WindCube Scan is the industry's tool of choice for providing reliable, precise spatial wind data at any stage of a wind farm project, from prospecting to operation. Suitable for short-term rental changing placements during development campaigns or long-term operations.

WindCube units feature rugged, industrial designs and can be placed in extreme environments. They are among the most flexible and accurate wind measurement technologies available complementing met masts and accurate vertical profiling lidars. Each system is fully configurable for several uses including monitoring, atmospheric cross-sectioning, and wind profiling.



# WindCube Scan at a glance

## Applications

- Large-scale wind resource assessment, onshore or offshore
- Measurement of wind turbine wake and wind farm blockage effect
- Short-term forecasting for farm power prediction
- Single or multiple power performance tests run simultaneously



## Key features

### Full 3D fast scan

Fully configurable lidar scanning strategy based on PPI, RHI, DBS and single beam scans to meet all needs

Provides NetCDF files, a robust auto-documented format that gives flexibility to the user

A wind reconstruction tool proven by international third parties is also available

Dedicated reprocessing and display software

API available for user's own configuration and data access

## WindCube Scan series specifications

	100S	200S	400S
Typical wind measurement range	3km	6km	10km
Maximum range	19.5km	19.5km	19.5km
Scanner rotation speed	Up to 30°/s		
Accumulation time	From 0.1s to 10s		
Data transfer	Ethernet/LAN		
Data format	Export in NetCDF by graphic interface or to FTP server		
API type	REST web API		
API functionalities	Lidar configuration and monitoring; status/activities/logs monitoring; data download (JSON stream and NetCDF files)		
Weight	232kg (without options)		
Temperature range	-30°C to +45°C (-22° to 113 F°)		
Power consumption	500W to 1.600W		

## Why Leosphere, a Vaisala company?

We are modern innovators, scientists, and discoverers who enable our customers to harness the power of wind energy in new ways. We are driven by passion, relentless curiosity, and the desire to create a better world, as evidenced in our commitment to four guiding principles:

1. Trustworthy, superior metrology
2. Unrivaled thought leadership
3. Innovative lidars from a one-stop shop
4. Easy, reliable global solution

As a result, Leosphere, a Vaisala company, is the iconic and trusted gold standard in wind lidar. Our turnkey WindCube product suite offers innovative, reliable, and highly accurate solutions for thousands of customers across the globe. All of this has enabled us to be catalysts for change and ambassadors for wind energy, always advancing the field and those we serve.



windcubelidar.com



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