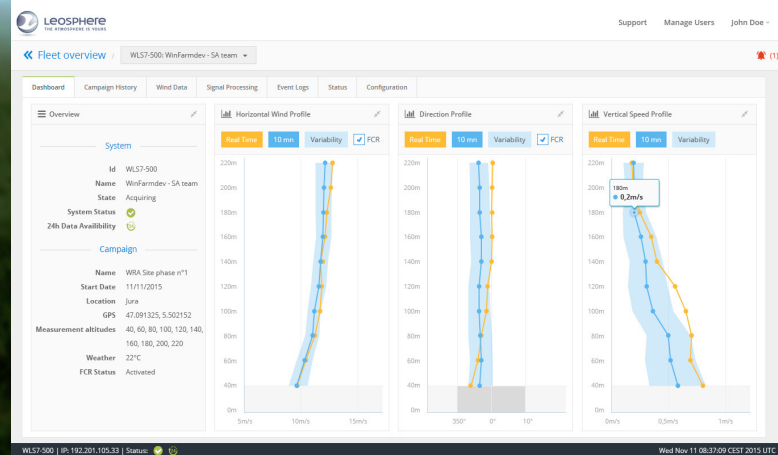


UPGRADED

WINDCUBE Vertical Profiler
Lidar

With over 500 systems manufactured and thousands of campaigns across 50+ countries, the Windcube is the reference Lidar for the wind industry. Keeping the same proven design, we are now presenting its latest evolution with hardware, software and services improvements.



Preview of the new Windcube, suitable for both onshore and offshore

System and campaign dashboard on the new web interface

New hardware and software standard features

- **Unique system** for onshore and offshore operations
- **Enhanced local and web interface** for easier campaign and fleet management
- **Built-in 3G modem** for remote operations
- **Stronger feet** for easier installation on all ground surfaces
- **2-year warranty** to better protect your asset
- **2-year maintenance interval**, in line with TR6 recommended calibration cycle

Leosphere will launch in 2016 **additional measurement functionalities** fully compatible with the new Windcube.

Extended range of services

- **Unique Lidar to Lidar calibration accredited by DTU**, for faster access to external validations
- **Data analysis training** from our scientific team, for faster access to the full system value
- **Fleet monitoring** to ensure maximum data availability
- **Operational continuity** with custom offers for maximized Lidar uptime
- **Facilitated ownership** through operational expenditures solutions
- **Service commitments** for higher uptime and optimised campaign management

Already a Windcube owner? Contact us to know how you can benefit from the new offer.

Main applications

At any stage of the wind farm life cycle, the Windcube will **reduce uncertainties and increase your profitability** through accurate and fast measurement campaigns, as well as easy operations in all terrains. It serves several applications, including:

- Wind resource assessment
- Site suitability
- Site calibration
- Power curve measurements

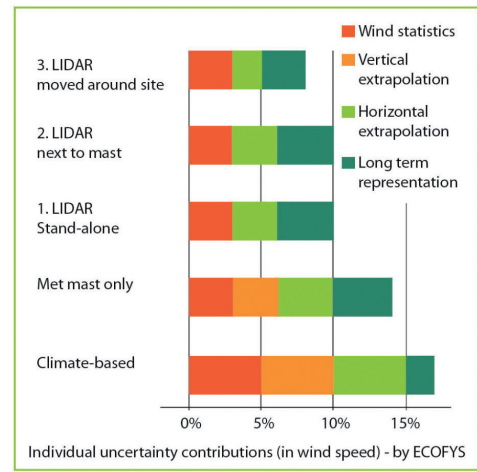
Service commitments

Leosphere provides a **complete range of supporting services**, from installation to data analysis. As Lidar is now part of operational practices, the needs for **higher system uptime and optimised campaign** management are increasing. To support this evolution, and based on feedback from our last customer survey, **we will implement early 2016 stringent and shorter time commitments** on Hotline response time, access to maintenance slots and maintenance duration.

Specifications

PERFORMANCE	
Range	40 to 200+ meters
Data sampling rate	1 Hz
Measuring distances	12 user defined distances simultaneously
Speed accuracy	0.1 m/s
Speed uncertainty	2-3% (following IEC 61400-12-1 Ed.2)
Speed range	0 to +60 m/s
Direction accuracy	2°
Beam geometry	4 inclined beams at 28° + 1 vertical beam

DATA	
Output data	1s/1,2,5,10min (user defined) horizontal and vertical wind speed Standard deviation Direction CNR (signal to noise) GPS coordinates Data Availability
Data storage	32 GB – over 5 years @1Hz + 18 months backup storage
Data format	ASCII (encoding), .RTA/.RTD (file)
Communication	Ethernet (RJ45), Internet 2G/3G, CANBus (optional) + Peripheral (USB)
Time synchronization	GPS, NTP



Reference: Improved Bankability: The ECOFYS position on LIDAR use

OPERATIONS	
Dimensions	L54cm, W55cm, H54 cm
Weight	45 kg
Power consumption	45 W nominal
Temperature range	-30°C to +45°C / -22°F to 108°F
Environment	Housing classification IP67 (inner racks) Marine atmosphere compliant (IEC 60068-2-52) Operating humidity 0 to 100% RH
Safety	Class 1M / EN 60825-1
Compliance	CE



LEOSPHERE



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