wind power

weather & climate 📥 🛛 aviation weather 🛪 👘

#### **Vertical Profiler** WINDCUBE°v2 Doppler LIDAR OFFSHORE

### SITE ASSESSMENT



The WINDCUBE® v2 Offshore is the most flexible and cost effective solution to measure accurately the wind components up to 200m on any offshore fixed platform. Specially dedicated to marine environment, it offers a highly reliable solution in complement or replacement to traditional masts.



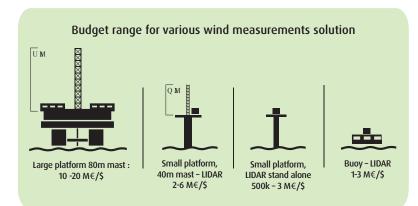
Accurate, easy to deploy, and affordable equipment is needed to measure the wind on stable or moving platforms located several kilometers from the shore.

**Installations of offshore met mats on large and heavy platforms** require large vessels, weeks of work by highly trained technicians and engineers, and calm sea conditions. This costs millions and is dramatically time consuming in a wind farm project.

The reduction of capital costs required for assessing the wind resource offshore with high accuracy at modern hub heights has therefore become a critical challenge for the offshore wind industry. A LIDAR remote sensor integrated on a stable platform or buoy is the most cost effective and optimized solution currently available.



## The 200m ultra portable wind profiler



The original WINDCUBE v2 Lidar Remote Sensor is already in use in more than 20 countries worldwide, in various applications, from early stage prospecting and bankable resource assessment to site suitability measurements and power performance verifications.

The WINDCUBE v2 Offshore uses the same technology core as the standard WINDCUBE v2 and has been reinforced to operate for extended periods in harsh sea conditions (saltwater, humidity and bird presence).

It is the ultimate wind measurement tool to reduce both investment costs and uncertainties thanks to 200m wind measurements.

# Optional Features



#### WINDCUBE® Power Pack

The WINDCUBE power pack is the ultimate solution for remote locations. Ultra-portable, green and affordable, this stand-alone power supply is available worldwide power supply is



#### WINDCUBE<sup>®</sup> Anywhere SAT / 3G

The built-in modem card provides a secured web-based interface from any location. The WINDCUBE Anywhere option features:

- Remote access to real time data - System health monitoring



GPS Geofencing Security The optional GPS geofencing security provides reliable, affordable peace of mind.



### PERFORMANCES

Range	40 to 200m
Data sampling rate	1s
Number of programmable heights	12
Speed accuracy	0.1 m/s
Speed range	0 to +60 m/s
Direction accuracy	2°

HARDWARE AND ENVIRONMENTAL		SOFTWARE / DATA	
Dimensions	L-W-H : 543 x 552 x 540 mm	Data format	ASCII
Weight	45 kg	Data storage	SSD and compact flash (backup storage)
Power consumption	<ul> <li>45 W nominal</li> <li>Salt atmosphere compliant IEC 60068-2-52</li> <li>Temperature range -30°C to +45°C/-22°F to108°F</li> <li>Operating humidity: 0 to 100% RH (non-condensing)</li> </ul>	Data transfer	LAN/USB
Temperat to108°F     Operatin (non-cor		Standard WIND- SOFT™ Software	<ul> <li>Configuration and control</li> <li>Real time display</li> <li>Diagnostic</li> </ul>
	Housing classification IP67 (for inner racks)	Output data	<ul> <li>1s/10min horizontal &amp; vertical wind speed</li> </ul>
Safety	Class 1M IEC / EN 60825-1		<ul> <li>Min &amp; Max</li> <li>Direction</li> <li>SNR Quality factor (data availability)</li> <li>GPS coordinates</li> </ul>
Compliance	CE		

- Ultra portable (45 kg) simple installation on stable platforms
- Lowest cost of ownership
- Class 1 anemometer matched accuracy
- Unmatched reliability and date availability
- Backed by industry leaders





For further information about



please contact us: info@leosphere.com

# www.leosphere.com



LEOSPHERE is a world leader in LIDAR (laser radar) atmospheric remote observations. The company develops, sells and services new turnkey remote-sensing instruments allowing wind measurement and aerosol (ice, ash, dust, smoke) characterization.

LEOSPHERE has deployed hundreds of LIDARs throughout the world in severe environments with the same concern of reliability, reduction of operational costs for clients, and dedication to atmospheric hazards control.





OV2/2014 LEOSPHERE. This document is not contractual



