



WINDCUBE⁺

**Vertical profiler Lidar for wind resource assessment
and power performance verification onshore & offshore**

Vertical Profiler Lidar



Features & benefits

Measurements

- Bankable data with constant accuracy up to 200+ meters at 12 simultaneous heights
- Full compliance with IEC 61400-12-1 ed2 2017 for contractual power performance testing
- FCR correction module embedded for direct measurements in complex terrain

Operations

- Portable (46kg) for quick and easy deployment on any site, without permits
- Reliable remote operations with low power consumption (45 W)
- 3 year warranty and maintenance cycle, with onsite maintenance service options, for increased uptime and lower total cost of ownership

Included access to the Windweb cloud-based platform for Lidar systems, users and campaigns management

- See dedicated brochure for more information -

Main applications



Wind resource assessment



Site suitability



Power curve measurements



Site calibration





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 range	0 to +60 m/s
Speed uncertainty	2% - 3% (following IEC 61400-12-1 Ed.2)
Direction accuracy	2°
Beam geometry	4 inclined beams at 28° + 1 vertical beam



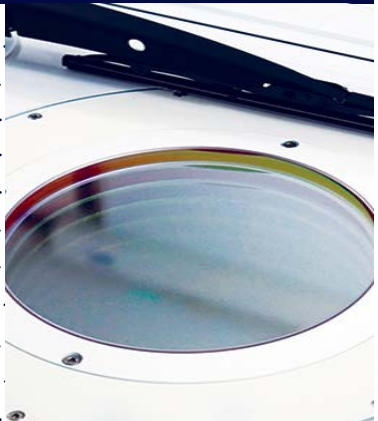
DATA

Output data	1s/1,2,5,10min averaged (user defined)
	horizontal and vertical wind speed
	Standard deviation
	Direction
	CNR (signal to noise ratio)
Complex terrain measurements	GPS coordinates
	Data availability
	FCR unlimited license
Data storage	120 GB industrial disk
	Windweb secure cloud-based server
Data format	.RTD and .STA (file), UTF-8 Encoding
Communication	LAN, USB, 3G modem, Modbus RTU
	(gateways available), Wi-Fi
Time synchronization	GPS, NTP



OPERATIONS

Warranty and maintenance	3 year cycle (factory or onsite maintenance)
Dimensions	L55 cm, W56 cm, H55 cm
Weight	46 kg
Power consumption	45 W
Temperature range	-30°C to +45°C / -22°F to 113°F
Housing classification	IP 67 (inner rack)
Operating humidity	0% to 100% RH (non-condensing)
Rain protection	Wiper
Marine atmosphere	IEC 60068-2-11
Shocks & Vibration	ISTA / FEDEX 6B
Laser safety	1M Class / EN 60825-1:2014
Compliance	CE, FCC, ICES



About Leosphere

Leosphere, founded in 2004, is the world leader in ground-based and wind turbine-nacelle mounted Lidar (Light Detection and Ranging) equipment for atmospheric observation. The company designs, develops, manufactures, sells and services turnkey remote-sensing instruments for wind measurement and aerosol characterization.



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