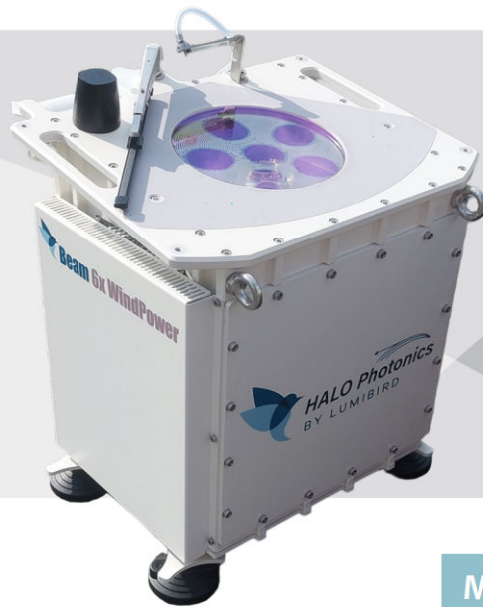


BEAM 6x Wind power

500m range vertical wind profiler pulsed LiDAR



MAIN FEATURES

- IEC classification pending by independent third party
- True push-button installation and operation
- Best data availability from 40 to 500 m
- Up to 380 user selectable heights
- Turbulence intensity : more accurate data thanks to 6x beam setup
- Best stand-alone operation (low consumption, high temperature range, low weight, large data storage)
- Light and compact (backpack size)
- High reliability with Lumibird laser inside

MAIN APPLICATIONS

- **WIND SITE ASSESSMENT (ON-SHORE/OFF-SHORE)**
- **WIND TURBINE POWER CURVES**
- **WIND TURBINE WAKE STUDIES**



Sentrex Wind Services Inc.
506 849-0026 office
506 651-6882m Paul Woodhouse

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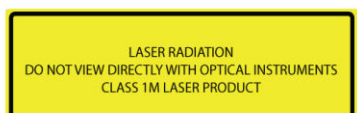
The **BEAM 6x** Wind power is a self-contained, turnkey vertical wind profiler pulsed Doppler LiDAR system designed specifically for wind energy applications. These rugged units are easy to install and operate in all weather conditions and terrain. They benefit from Lumibird's >25 years of laser design and manufacturing expertise and Halo Photonics' fast data processing algorithms.

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BEAM 6x Wind power

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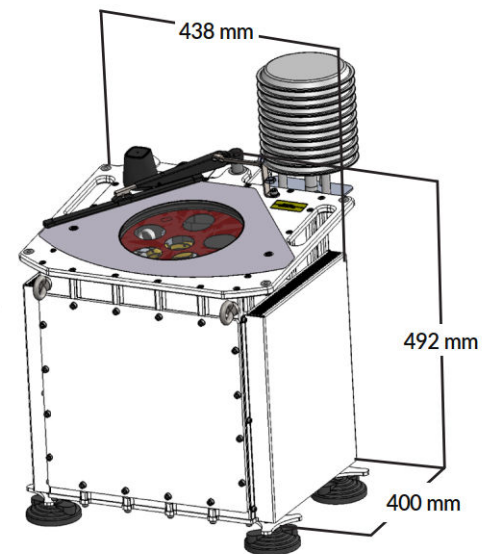


Measurement performance	Value	Notes
Beam geometry	5 inclined beams at 30 ° and 1 vertical beam	Switch every second from one beam to the next one.
Measurement range	40 to 500 m	Optional extension to 1000 m
Data sampling rate	Std 1 Hz	10000 accumulated back-scattered signals per second
Range gates (overlapping)	Up to 380 gates	User defined
Wind speed range	0 to 76 m/s	
Wind direction range	0 – 360 °	
Speed accuracy	< 0.1 m/s	
Speed uncertainty	< 3 % between 45 m and 50 m < 2 % for altitudes higher than 50 m	
Direction accuracy	2 °	

Data Output	Value	Notes
Output data	User defined: 1s instantaneous and 10 min average • GPS coordinates • Time stamp • Radial speeds • Horizontal and vertical wind speed • Wind direction • Wind reconstruction error • Turbulence intensity • SNR	
Data storage	Up to 1 To	
Data file format	Instantaneous radial winds, instantaneous wind profiles and 10 minutes average wind profiles	Optional NetCDF
Communication	LAN	
Time synchronization	GPS, NTC	

Environmental specifications	Value	Notes
Operating temperature	-40 to +50 °C	
Operating humidity	0 to 95 %	
Rain protection	Wiper	
Snow protection	Inclined surface, window heater and wiper	
Shocks and vibrations	ISTA / FEDEX 6B	

Utility	Value	Notes
System dimensions	492 mm x 438 mm x 400 mm	Height x Width x Depth
Weight	< 30 kg	
Direct input power supply	24 +/- 0.5 VDC	
Standard power consumption	50 W	
Extreme condition power consumption	< 155 W	
Housing classification	IP66	
Laser safety compliance	Class 1M	IEC60825-1:2014



COMPATIBLE WITH

- Power pack (solar panel, battery, fuel cell on a trailer)
- 3G/4G/5G or satellite router
- Anti-theft detection and tracker system
- IEC 61400-50-2:2022 / IEC61400-12-1 verification



Wake effect studies



Site assessment



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