

# STREAMLINE PROFILER VS+

12 km range pulsed vertical profiler LiDAR system

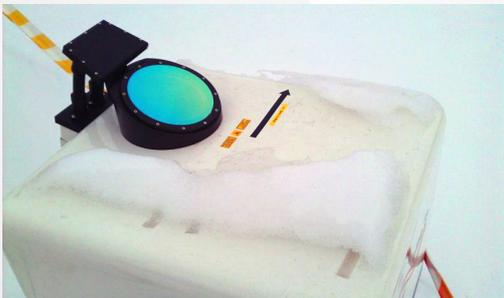


## MAIN FEATURES

- Range: up to 12 km
- Fully user configurable VAD + vertical scans or staring
- Overlapped range gates and variable gate length (up to 3950)
- Light and compact Halo Design (2-person field deployable)
- High reliability with Lumibird laser inside

## MAIN APPLICATIONS

- **BOUNDARY LAYER METEOROLOGY**
- **CLIMATE AND ENVIRONMENTAL MONITORING**
- **CLOUD STUDIES**



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THE STREAMLINE PROFILER VS+ is a self-contained, turnkey vertical scanning pulsed LiDAR system designed specifically for boundary layer meteorology, 3D wind profiling and climate monitoring. These rugged units are easy to install and operate in all weather conditions. The hardware configuration gives an easy access to raw data for post treatment and analysis. This LiDAR benefits from Lumibird's >25 years of laser design and manufacturing expertise and Halo Photonics' fast data processing algorithms.

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01/26 - Lumibird reserves the right to modify the specifications without prior notice. Photos are not contractual.

[www.halo-photonics.com](http://www.halo-photonics.com)



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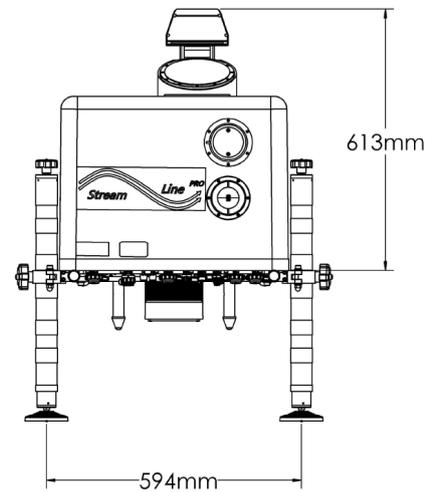


Measurement performance	Value	Notes
Beam geometry	Vertically oriented scanning +/- 20° conical field of view (elevation angle 70 to 90°)	User settable scan patterns (Stare, VAD)
Scanning head resolution	0.01°	
Max scanning speed	40°/s	
Measurement range	From 50 m up to 12 km	Typ: top of boundary layer
Accumulation time	0.1 to 30 s	
Range gates	Up to 3950	User configurable including overlapping
Spatial resolution	18 to 120 m by step of 3 m	
Radial wind speed	+/-19 m/s	
Speed accuracy	≤ 0.2 m/s	Verified against DNV verified Lidar
Speed uncertainty	≤ 0.2 m/s	Verified against DNV verified Lidar
Direction accuracy	≤ 2 °	

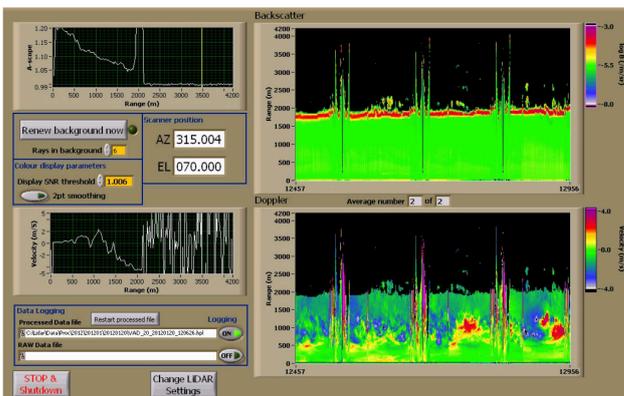
Environmental specifications	Value	Notes
Operating temperature	-20 to +45 °C	
Operating humidity	0 to 95 %	Non condensing
Rain protection	Blower	
Snow protection	Blower	
Laser safety compliance	Class 1M	IEC60825-1:2014
Housing classification	IP66	

Utility	Value	Notes
System dimensions	970 x 740 x 870 mm <sup>3</sup>	Height x width x depth
Weight	59 kg	
Direct input power supply	24 VDC +/-10 %	
AC/DC power supply input	100-240 VAC (50/60 Hz)	
Power consumption	Typ 180 W	< 525W over operating temperature range

Data Output	Value	Notes
Output data	User defined typ 1s <ul style="list-style-type: none"> <li>• Time-stamped radial velocity, SNR and spectral width vs range.</li> <li>• Time-stamped horizontal wind speed and direction vs height in wind profile mode</li> <li>• GPS coordinate</li> </ul>	
Data storage	1 TB SSD	Additional sizes available on request
Data file format	Text file (.hpl)	
Communication	LAN, USB	
Time synchronization	GPS, NTP	



LASER RADIATION  
DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS  
CLASS 1M LASER PRODUCT



Real-time data quick-look showing vertical profiling with periodic wind profiles



Climate and environmental monitoring



Boundary layer meteorology

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