LEOSPHERE
Lidar Environmental Observations

EZ LIDAR™
Aerosol Lidar System

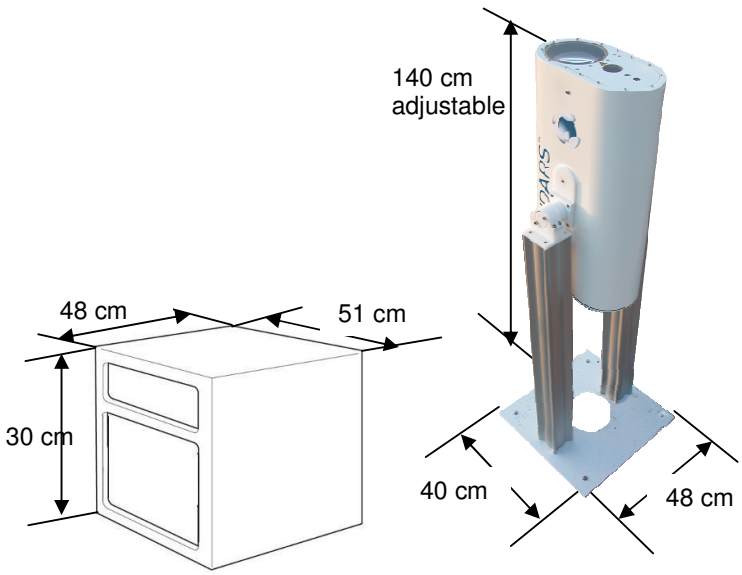
Very low overlap (200 m), eye-safe (UV laser), post processed atmospheric data, PBL and troposphere analysis

Features

- Compact
- Transportable and robust
- User friendly
- Upgradable

Applications

- Air quality monitoring
- Cloud characterization
- Climate change assessment
- Meteorology and aviation services
- Dust event monitoring
- ...



ALS (Aerosol Lidar System) is an active remote sensor based on LIDAR technique. It has been designed by researchers for researchers as an easy, reliable and robust tool.

Output Data

- Calibrated raw & range corrected data
- Backscatter & extinction coefficient
- Backscatter ratio
- Cloud layers (base, top if penetrable and multilayers if penetrable)
- PBL height (mixing layer)
- Optical depth

Technical specifications

ELECTRICAL		
Power Supply		110/230 V – 50/60 Hz
Average Power Consumption		700 W
OPTICS & ELECTRONICS		
Laser		Tripled YAG 355 nm
Pulse energy		16 mJ
Pulse repetition rate		20 Hz (tunable)
Pulse duration		5 ns
Eyesafety		IEC 60825-1
DATA		
Data Transfert		LAN/TCP-IP
ENVIRONMENTAL	**Lidar Head**	**Electronics unit**
Temperature Range	-5°C to +35°C	+10°C to +30°C
Operating Humidity	IP65	IP40
Watertight	Yes	No
Compacity	Portable	Portable
Size	700x370x200 mm^3	480x510x300 mm^3

Functional specifications

PERFORMANCES	ALS 300	ALS450
Range Min-Max	0.2* to 15 km	0.5 to 20 km
Accumulation time (PBL)	10 s	
Accumulation time (Cirrus)	30 s	
Vertical resolution	1.5 / 15 m	
Upgradability	Water vapor and nitrogen Raman channel	

*95% of the total signal amount at 100 m, optional overlap correction function is available.

Options (sold separately)

Depolarization module	Cross polarization detection channel
Outdoor casing	All climate, full IP65
Photon counting	Optional for ALS300 to improve long distance detection
Expert software	Advanced features for expert users
3D Scanning device	All weather, acquisition and display of PR^2 software
Data reader software	Recorded data display

Please contact us for any assistance.

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