CAML™ : Cloud and Aerosol Micro Lidar

Incoherent backscattering LIDAR (LIght Detection And Ranging) systems are key tools to retrieve spatial distribution and optical properties of aerosol and clouds. Such information is critical to operational field and lab applications related to meteorology and environment.

A new Cloud and Aerosol Micro Lidar from CIMEL

In that respect, the new CAML™ instrument has been developed by CIMEL Electronique, in collaboration with the Centre National de la Recherche Scientifique (CNRS).

The CAML™ CE 370-2, is a portable, eye safe and unattended backscattering lidar that features the ability to profile atmospheric cloud and aerosol structures, and to retrieve aerosol optical and dynamic properties. **The main features of this instrument are the self-alignment of the emission and reception axis and the eye-safety.**

CAML™ CE 370-2 specifications

Transmitter	**Laser : Nd:YAG, SHG 532 nm**
Output wavelength	532 nm
Output energy per pulse	4 µJ
Repetition rate	5 kHz
Pulse duration	< 1 ns
Effective aperture	314 cm²
Field of view (full angle)	55 µrad
Filter bandwidth	0.5 nm
Detector	APD
Detection mode	Photon counting
Acquisition time	> 0.8 s
Vertical resolution	15 m
Size (diameter x height)	220 x 1000 mm
Weight	12.5 kg

Main features

- Self-alignement of the emission and reception axis
- Eye safety
- High detection range
- High temporal and vertical resolution
- Computer controlled (MS Windows OS)
- Connect throw an USB port
- Compact and portable

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