

# Conception et réalisation de systèmes de télémesure numérique

# **CALITOO**

## **Aerosol photometer**

# Sun photometer

Calitoo is a photometer to measure a rate of aerosol in the atmosphere.

For this, the sunlight is measured in three wavelengths. These lights are attenuated depending on the type and quantity of aerosols.

The photometer includes a tri-chromic sensor, a GPS, a pressure sensor and a temperature sensor.

The use of components using the latest technology allows us to produce a portable measuring device specific low cost.

### **Technicals characteristics**

- Light channel: 465, 540 et 619 nm
- Possible 999 measures stored in memory
- AOT calculated in real-time
- Data download thru USB
- Free software on web site.
- Supply: 4 batteries AA (1,5V)
- Dimensions: 210 x 100 x 35 mmWeight: 400 g (With batteries)
- Operating temperature : -20 °C à 55 °C



# Califor Californ

### Certification

Calitoo photometer has been qualified by the Laboratoire d'Optique Atmosphérique at Lille (France) in March 2013.

Each device is sold calibrated in a kit with calibration bulletin and an USB cable.

### **Measures**

The measurement principle is to point the Sun and search for the maximum flow. The photometer keeps only the maximum measured and then calculated the optical thickness.

The Sun alignment is done manually. It is facilitated by the sighting device located above the display of the calitoo.

The calculation of optical depth, detailed in the user manual, use the raw brightness measurements, calibration coefficients, date and the GPS position as well as atmospheric pressure.

More informations on : http://www.calitoo.com

