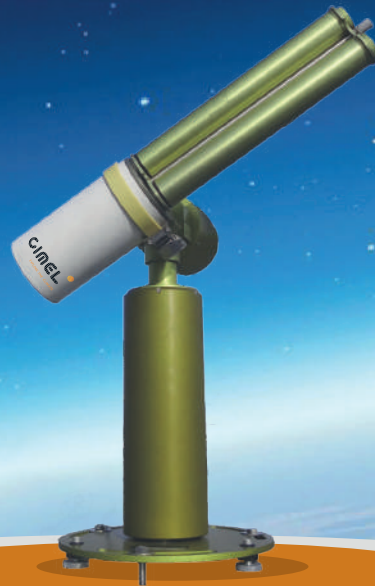
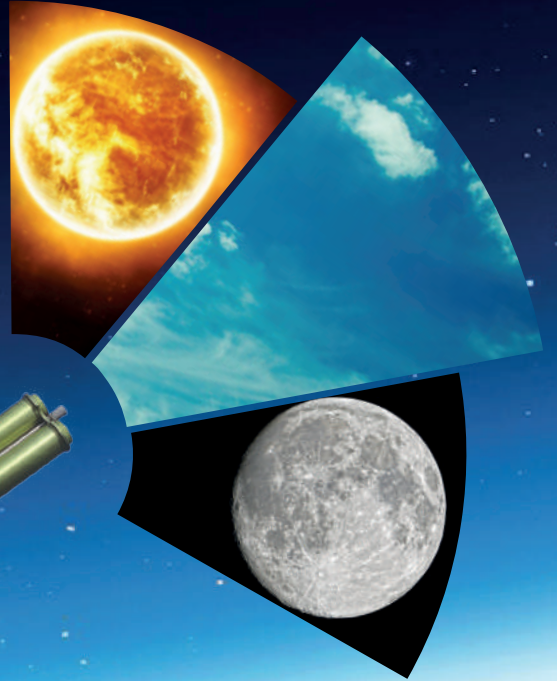
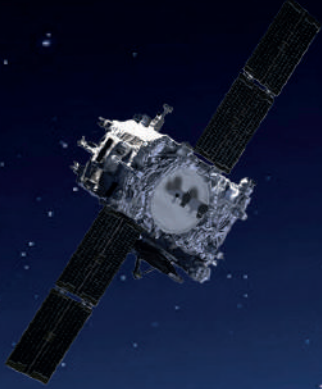


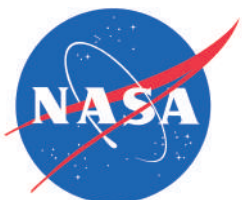
# Sun Sky Lunar Multispectral **Photometer**



## Photometer

Satellite / Meteorology / Solar / Air quality

## CE318-T



EXPLORE THE CLIMATE



September 2022

## GLOBAL OVERVIEW

The effects of **atmospheric aerosols** at global scale on climate change and environmental evolution are critical for coming generations and the future of our planet.

To better manage their impacts, observers and decision makers need to monitor atmospheric aerosols nature and concentration to understand, alert, and forecast.

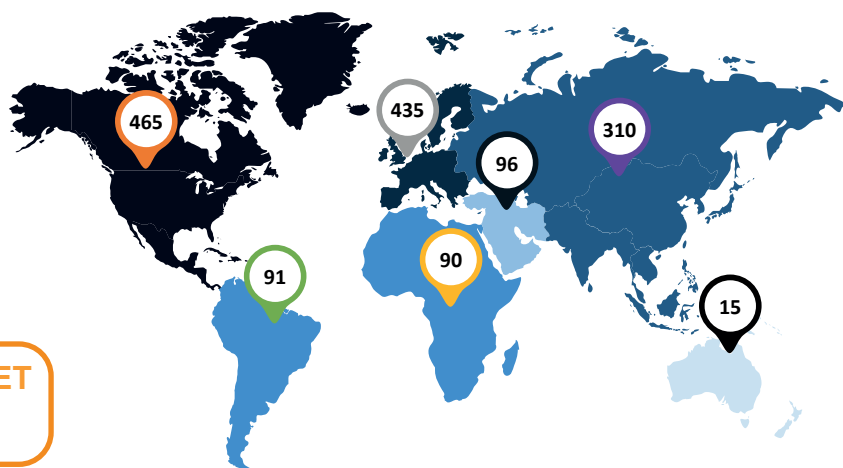
## OUR SOLUTION

Cimel provides the CE318-T multispectral photometer dedicated to aerosols monitoring through the **NASA - AERONET** international network. It is recognized as the **worldwide reference** for aerosol measurements since 1992.

Our historic partner, the NASA's Goddard Space Flight Center, is the founder of the Aerosol Robotic Network (AERONET).

### Main objectives

- Satellite data validation
- Satellite instrument calibration
- Validation of climate models
- Instrumental synergies
- Unique data center



**Exclusive supplier of NASA AERONET**

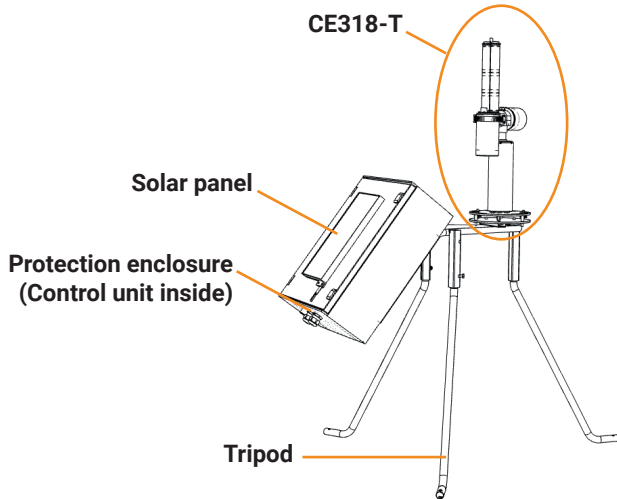
**1 500 photometers worldwide**

Our photometers have proven robustness and low maintenance operations. This high instrumental reliability allows to set up wide monitoring networks, even under harsh environmental conditions.

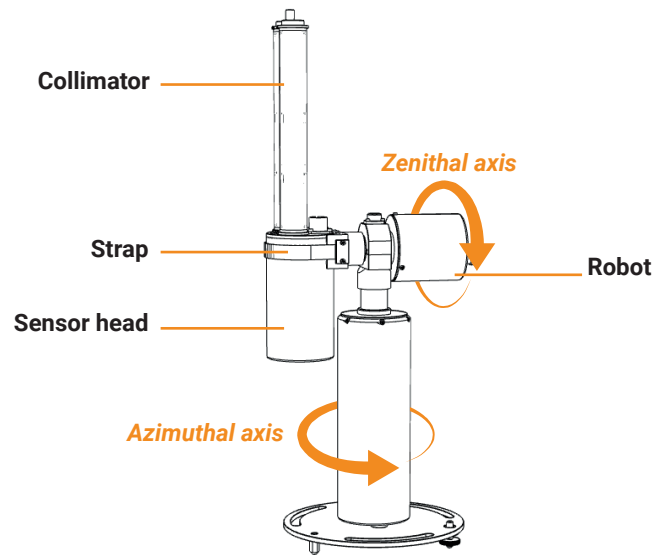
This new version provides a complete measurement of several parameters: day & night Aerosol Optical Depth (AOD), volume size distribution, refractive index and water vapour measurements which are essential for atmospheric monitoring.

The high sensitivity tracking, detection chain & data treatment ensure trustable & accurate measurements.

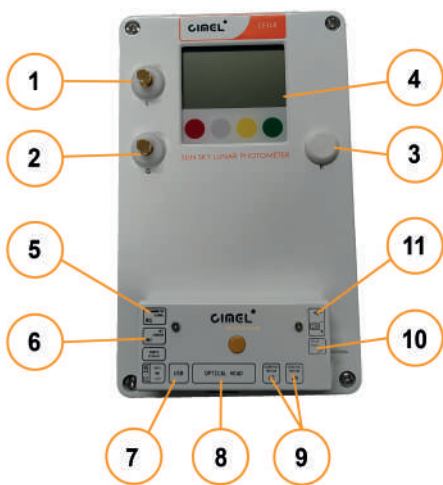
## CE318-T + infrastructure



## CE318-T



### Control unit

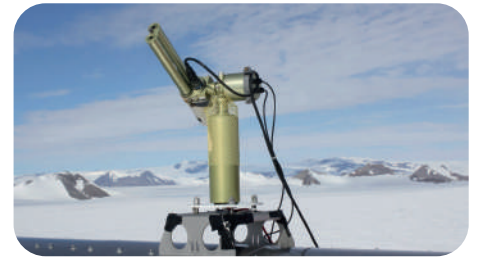
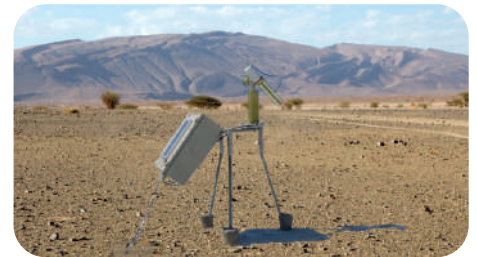


### Communication & interface

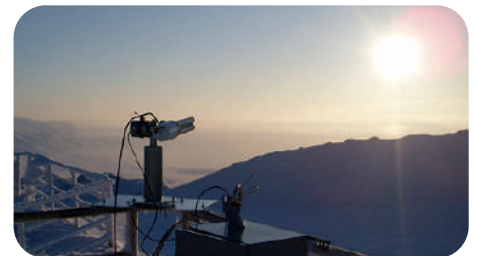
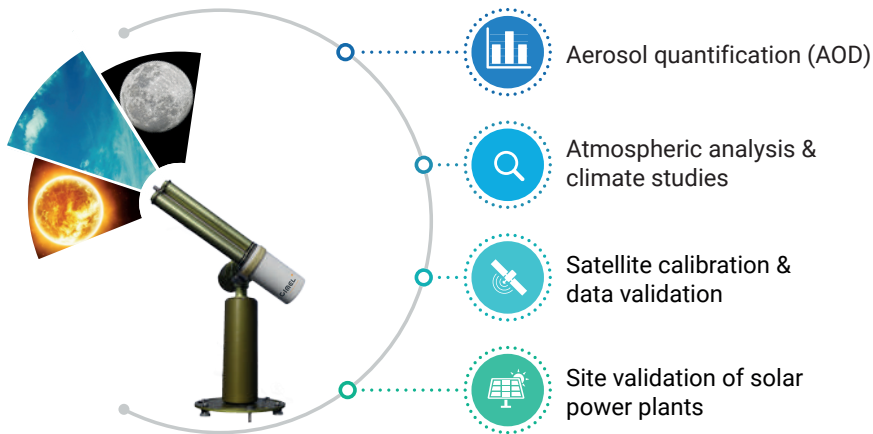
- 1: GPS antenna
- 2: Cellular modem antenna
- 3: Short range radio antenna
- 4: Display (touch buttons)

### Removable terminal block

- 5: Pyranometer input
- 6: Rain detector
- 7: USB
- 8: Sensor head
- 9: Robot (azimuthal & zenithal)
- 10: Solar panel
- 11: External battery

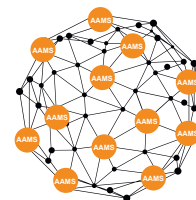


## APPLICATION FIELDS



## YOUR BENEFITS

- Day and night measurements
- Evolutive product with various models:
  - Standard, polarized, BRDF, Ocean Color & Lake Color
- High calibration stability on the long term
- Large number of communication modes



Synergy with Cimel LiDARs for vertical profiles



Cimel Electronique is a French manufacturer of meteorological and atmospheric observation systems for “climate - sensitive” activities

## TECHNICAL PARAMETERS

Optical Sensor Head	Half field of view	0.63°
	Spectral range	Si detector: from 340 to 1020 nm InGaAs detector: from 1020 to 1640 nm
Control Unit	Communication outputs	RS232, USB, Hexa-Band (UMTS/3G/W-CDMA), Quad-Band (GPRS)
	Storage	Flash memory (4 MB) + SD card (32 GB)
	Additional measurements	Rain detector, GPS, Barometer, Temperature & Humidity sensors (inside of the protection enclosure)
	Additional input	Thermopile pyranometer (not supplied)
Robot	Azimuth range	0°-360°
	Zenith range	0°-180°
	Resolution/Tracking precision	0.003°
Software	Features: - Instruments - Settings - Data processing	Instruments setup, wavelengths selection, scan modes & scenarios configuration, measurement scheduling, data analysis, data visualization, data storage (raw data, k8, ASCII files)
Environmental Conditions	Temperature range	-20°C to 50°C
Power	Power supply	5 W solar panel or AC supply 110 - 240 V + 2 batteries of 6 V / 8.0 Ah in series as backup
General	Infrastructure	Tripod, with protection enclosure
	Packaging dimensions	Photometer: 66 x 52 x 47 cm Tripod + enclosure: 103 x 57 x 60 cm
	Gross weight	Photometer: 30 kg Tripod + enclosure: 21 kg

\* Other models available (see the technical datasheet)

Scan to see the datasheet



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