

CLOUD DROPLET ANALYZER



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DESCRIPTION

The Cloud Droplet Analyzer is a high-resolution optical aerosol spectrometer optimized for measuring size distribution and number concentration of cloud aerosols like droplets and ice crystals.

AEROSOL SPECTROMETER FOR IN-SITU CLOUD MONITORING

Droplets and ice crystals can be distinguished based on the measurement principle of optical light scattering (90°) on single particles and high-resolution components.

The optical sensor is also used in research applications from KIT for Ice Nucleation Studies at [AIDA -Chamber](#).¹

The cloud water content and mean droplet diameter can also be reported.

¹AIDA-Chamber: <https://www.imk-aaf.kit.edu/73.php>

DATASHEET

Measurement range (number C_N)	0 – 200 particles/cm ³
Measurement range (size)	0,6 – 40 μm , 0,8 – 100 μm
Measuring principle	Optical light scattering on single particle with evaluation of signal length and amplitude
Reported data	Particle size distribution, number concentration, water content, mean volume equivalent diameter
Volume flow	5 l/min
Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Interfaces	USB, Ethernet (LAN), Wi-Fi, RS-232/485

CASE STUDIES

- In-situ-Cloud monitoring
- Environmental Research
- Climate Research
- Cloud formation
- Ice Nucleation Events



Mehr Informationen:
<https://www.palas.de/product/cda>