云滴谱仪

The Cloud Droplet Analyzer is an optical aerosol spectrometer for high-resolution measurement of the size distribution and number concentration of cloud aerosols.

优势

- Continuous and simultaneous measurement of particle number concentration and particle size distribution
- Intuitive and simple operation
- Remote monitoring, operation and maintenance easily possible
- No radioactive material
- No consumables
- Low energy consumption
- Low maintenance
- On-site calibration possible

特点

- Determination of the MVD (Mean Volume Diameter), ED (Equivalent Diameter) and LWC (Liquid Water Content) parameters
- Designed for 24/7 operation
- Heated sampling head
- Weather sensor
- Use under difficult climatic conditions

应用领域

- Cloud research
- Ice nucleation events
- Environmental research

技术数据

测量原理	Optical light scattering at single particles	报告数据	Particle size distribution, particle number concentration, mean volume diameter, equivalent diameter, water content
测量范围(数量浓度)	0 – 200 particles/cm^3	测量范围(粒径)	0.6–40 μm, 0.8–100 μm
体积流量	5 l/min	Size channels	64 (32/decade)
Time resolution	1 s–24 h	接口	USB, 以太网（局域网）, RS-232/485
User interface	Touchscreen, 800 • 480 pixel, 7″ (17.78 cm)	Protocols	UIDEP, UDP, ASCII, MODBUS
软件	PDAnalyze	Data acquisition	Digital, 20 MHz processor, 256 raw data channels
Light source	Long term stable LED	外壳	防护等级IP55的防水外壳
Operating system	Windows 10 IoT Enterprise	电源	115–230 V, 50/60 Hz
Installation conditions	-30–+40 °C, <95% rH, non-condensing, max. 4.000 m (above sea level)	Probenahmekopf	Sigma-2被动收集器，可加热并自动调节
Dimensions	约1,150 • 742 • 404 mm (H x W x D)	重量	Approx. 40 kg

additional parameter on our website . . .