AQ Guard Smart 1000

AQ Guard Smart 1000 是紧凑且云互联的空气质量监测设备。适应智能城市环境下对室外空气监测的网格密度需求，同时保持了与环保及公共健康监管监测的高度可比性。

优势

- Quick and easy installation
- Long-term stability (24/7) and low maintenance
- Flexibility in communication and data transmission
- Reliable measurements (near-reference standard for particles)
- Simultaneous measurement of PM_1, $PM_{2.5}$, PM_4, PM_{10}, TSP, C_N, CO_2
- Versatile application possibilities even in demanding environments
- Suitable for high dust concentrations
- Access to data in real time and with high temporal resolution

应用领域

- 城市空气质量监测
- 智能城市项目
- 露天采矿和管控填埋场
- 污染物形成和扩散
- 建筑工地和环境整治区
- 工厂排放监测
- 公路、铁路及港口的颗粒物排放监测
- 风险管控区（自然及人为活动）

特点

- 支持现场校准(粒径分辨率和流量)
- 支持GPRS / 3G / 4G / Ethernet / Wi-Fi 通信，可选：LoRaWAN
- 技术基于获认证的Fidas® 200 系列设备
- 可通过第三方供应商的设备、测量技术及传感器扩展
- 基于Palas Cloud (”MyAtmosphere-ready”) 的数据可视化
- 每秒测量数据采集

技术数据

测量原理	Optical light scattering at single particles
报告数据	PM_1, $PM_{2.5}$, PM_4, PM_{10}, TSP, CN, CO_2; particle size distribution, ambient pressure, ambient temperature, rel. ambient humidity
测量范围(数量浓度)	0 – 20,000 particles/cm^3
测量范围(粒径)	0.178 – 20 μm
测量范围(质量)	0 – 100 mg/m^3 (depending on the composition of the aerosol)
体积流量	1 l/min
Size channels	64 (32/decade)
Time resolution	1 min, moving average 1 min (MyAtmosphere), every second via internal protocols
接口	USB, Ethernet (LAN), Wi-Fi, 3G/4G via Modem, optional: LoRaWAN
Protocols	ASCII, MODBUS, UDP
Light source	Long term stable LED
电源	Supplied power supply: 12 V
Power consumption	Standard operation: 1.2 A (1.7 A with additional heating)
Installation conditions	-20 – +50 °C
Dimensions	530 • 270 • 208 mm (H • W • D)
重量	Approx. 6 kg
Special features	Heated inlet, mast / tripod mount
Data Management	Prepared for connection to the Palas Cloud MyAtmosphere (“MyAtmosphere-ready”); Internet access and separate registration required. The MyAtmosphere terms of use apply.

标准和证书

ISO 21501-1, MCERTS (Sira MC 22041/00)