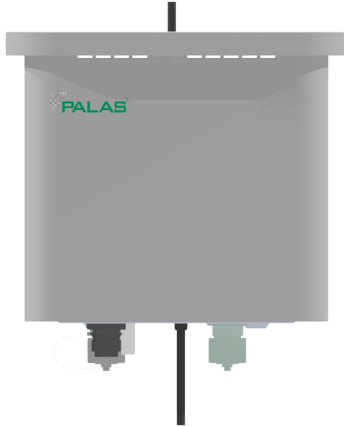


AQ GUARD SMART SYSTEM WITH MULTIGAS EXTENSION



BENEFITS

- 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 PM₁, PM_{2.5}, PM₄, PM₁₀, TSP, C_N, CO₂
- Versatile application possibilities even in demanding environments
- Suitable for high dust concentrations
- Access to data in real time and with high temporal resolution

APPLICATIONS

- Urban air quality monitoring
- Smart city projects
- Open pit mining and landfills
- Formation and dispersion studies
- Construction sites
- Immission monitoring of industrial plants
- Measurement of dust emissions from road and rail traffic as well as ports
- Risk areas (natural and anthropogenic)

FEATURES

- On-site calibration and adjustment (particle size and volume flow)
- Communication via GPRS / 3G / 4G / Ethernet / Wi-Fi, optional: LoRaWAN
- Technology based on the certified Fidas® 200 series
- Expandable with third-party devices, metrology and sensors
- Data visualization via Palas Cloud (MyAtmosphere-ready)
- Secondary measurement data acquisition

DATASHEET

Measuring principle	Optical light scattering at single particles
Reported data	PM ₁ , PM _{2.5} , PM ₄ , PM ₁₀ , TSP, CN, CO ₂ ; particle size distribution, ambient pressure, ambient temperature, rel. ambient humidity
Measurement range (number C _N)	0 – 20,000 particles/cm ³
Measurement range (size)	0.178 – 17.8 µm
Measurement range (mass)	0 – 100 mg/m ³ (depending on the composition of the aerosol)
Volume flow	1 l/min ± 1,5% (-20 - +50°C), time-of-flight volume flow control, usable up to altitudes of 5,000 m a.s.l.
Size channels	64 (32/decade)
Time resolution	1 min, moving average 1 min (MyAtmosphere), every second via internal protocols
Interfaces	USB, Ethernet (LAN), Wi-Fi, 3G/4G via Modem, optional: LoRaWAN
Protocols	ASCII, MODBUS, UDP
Light source	Long term stable LED
Power supply	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)
Weight	Approx. 6 kg
Special features	Heated inlet, mast / tripod mount
Data Management	Prepared for connection to the Palas Cloud MyAtmosphere (“MyAtmosphere-ready”)

NORMS AND CERTIFICATES

ISO 21501-1, MCERTS (Sira MC 220412/01)