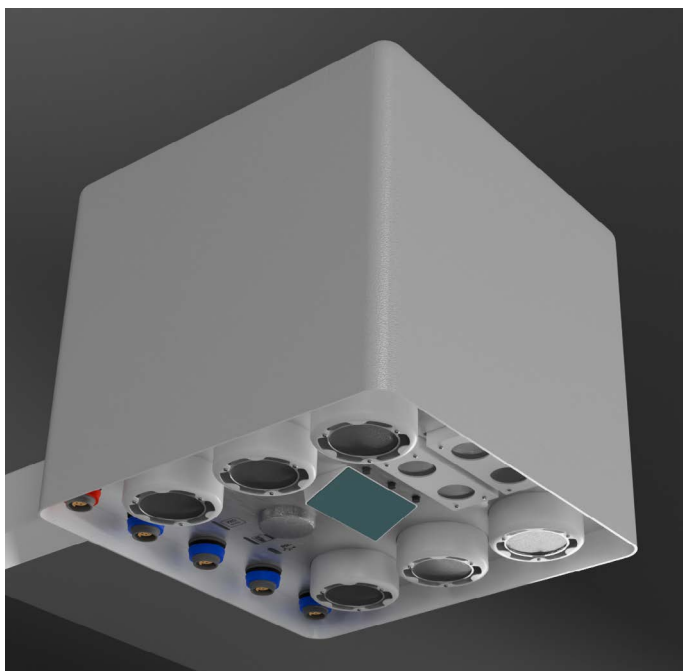


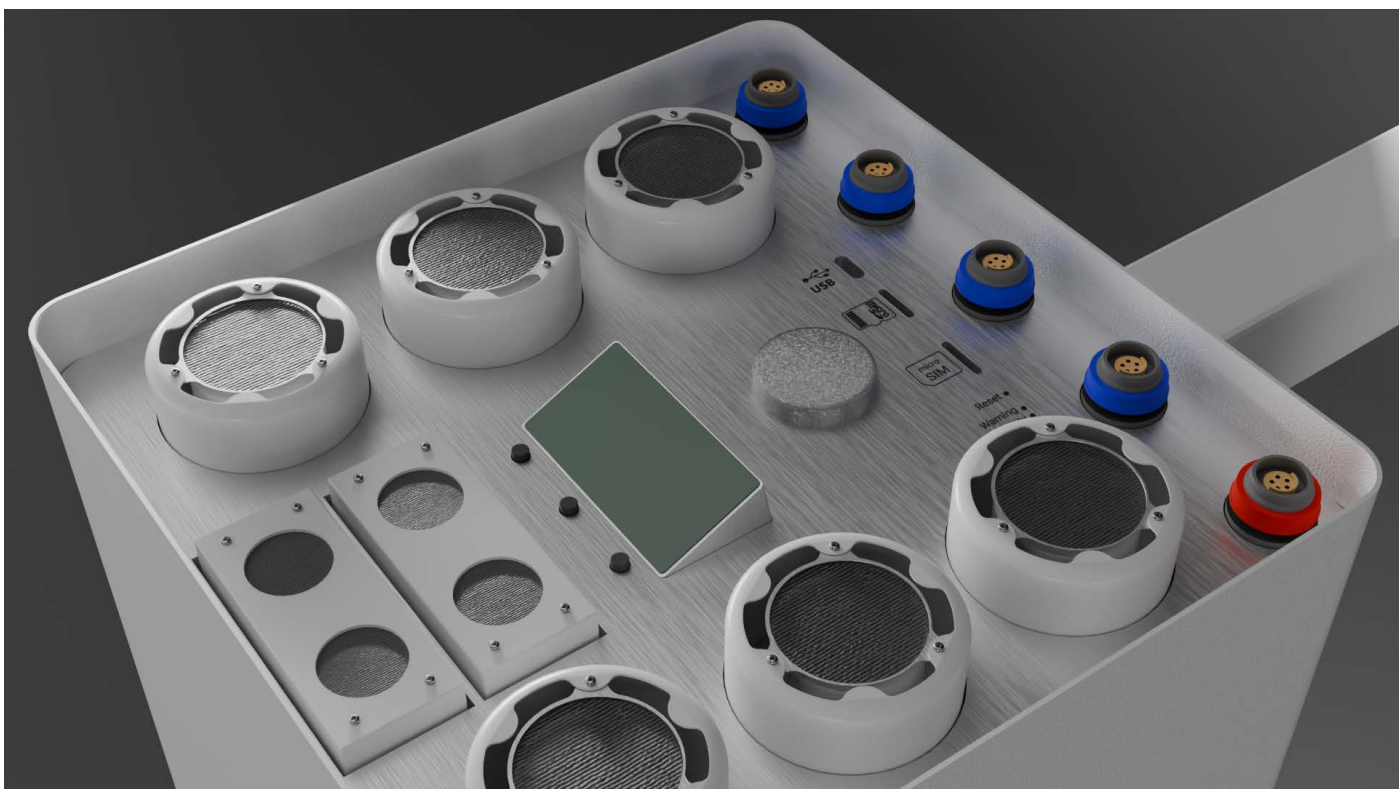
AirQube6

Near Reference Air Quality Monitor

The AirQube6 is a compact modular multi-parameter monitor designed for real-time monitoring of airborne particulate matter and up to 6 gas pollutants. Using the various sensing technologies, the modules can provide reliable measurements of $PM_{1.0}$, $PM_{2.5}$, PM_{10} , CH_4 , CO , CO_2 , H_2S , NH_3 , NO , NO_2 , O_3 and SO_2 . Its small form factor and low power consumption make it suitable for indoor as well as outdoor applications.



- Multi-parameter measurement**: Represented by an icon of three interlocking gears.
- Near reference data**: Represented by an icon of a target symbol with a checkmark.
- Wide communication options**: Represented by an icon of a central point with eight arrows pointing outwards.
- Low consumption**: Represented by an icon of a hand holding a leaf.



The AirQube6 utilizes the smart modules and can include 1 or 2 (for increased reliability) PM sensors, each measuring PM_{1.0}, PM_{2.5} and PM₁₀, and up to 6 gas sensors (CH₄, CO, CO₂, H₂S, NH₃, NO, NO₂, O₃, SO₂).

PM_{1.0}

Type: Optical particle counter

Mass concentration measurement range: 0 – 1000 µg/m³

Resolution: 1 µg/m³

PM_{2.5}

Type: Optical particle counter

Mass concentration measurement range: 0 – 1000 µg/m³

Resolution: 1 µg/m³

PM₄

Type: Optical particle counter

Mass concentration measurement range: 0 – 1000 µg/m³

Resolution: 1 µg/m³

PM₁₀

Type: Optical particle counter

Mass concentration measurement range: 0 – 1000 µg/m³

Resolution: 1 µg/m³

CH₄

Type: Thermopile

Measurement range: 0 – 25 000 ppm

Zero Resolution: 200 ppm

CO

Type: Electrochemical

Measurement range: 0 – 1 000 ppm

Resolution: 1 ppb

CO₂

Type: Pyroelectric

Measurement range: 0 – 5 000 ppm

Zero Resolution: 1 ppm

H₂S

Type: Electrochemical

Measurement range: 0 – 50 ppm

Resolution: 1 ppb

NH₃

Type: Electrochemical

Measurement range: 0 – 50 ppm

Resolution: 1 ppb

NO

Type: Electrochemical

Measurement range: 0 – 20 ppm

Resolution: 1 ppb

NO₂

Type: Electrochemical

Measurement range: 0 – 20 ppm

Resolution: 1 ppb

O₃

Type: Electrochemical

Measurement range: 0 – 20 ppm

Resolution: 1 ppb

SO₂

Type: Electrochemical

Measurement range: 0 – 50 ppm

Resolution: 1 ppb

Applications

- Air quality networks supplementing existing regulatory stations
- Air quality modeling
- Building automation
- Monitoring of dust emitting industrial facilities and construction sites
- Road dust monitoring and traffic management
- Fire smoke monitoring
- Smart city and IoT networks

Easy Deployment

The AirQube6 is designed with respect to the needs of the air quality networks, for road and traffic management, for monitoring dust-emitting construction sites and industrial installations as well as fire smoke. The intelligent monitor calculates the output data and provides the output via serial interface or, optionally, 4G/IoT modem. It can be coupled with the MicroStep-MIS AMS 111 data logger and transfer data to your EnviDB database or MicroStep-MIS EnviDB.Cloud / 3rd party platform. Optionally, the variant with 4G/IoT modem can establish communication on its own.

Typical configurations (custom configurations available)

	PM 1st sensor	PM 2nd sensor	CH ₄	CO	CO ₂	H ₂ S	NH ₃	NO	NO ₂	O ₃	SO ₂
Basic air quality setup	✓			✓					✓		✓
Extended setup	✓		✓	✓	✓				✓		✓
Full setup	✓	✓	Any combination of the six sensors								

Dimension and weight

Dimension	22 x 22 x 20 cm
Weight (depends on actual configuration)	sensor body < 1 kg + weight modules and batteries used

Output

Serial outputs	RS-485, SDI-12 RS-232, USB (available with 4G/IoT modem option)
Option	4G/IoT modem (SMS, FTP, http, MicroStep-MIS EnviDB protocol)
Output rate	from 60s

Electrical parameters

External power in Li-on power version	5 V to 30 V (AC/DC, PV panel)
External power in 12 V Pb accumulator power version	15 V to 30 V (AC/DC, PV panel)
Consumption in sleep mode	0.37 mW
Consumption in active mode	Depending on the configuration
Built-in charger with MPPT algorithm	Available with 4G/IoT option

Environmental parameters

Operating temperature	processing unit -40 °C to +60 °C, depends on configuration
Operating humidity	0 to 100 % RH
Protection rating	IP 65

