

# Air Quality Monitoring Networks

**Regulatory-grade hybrid networks combine data from IoT devices with official authority measurements**



## Features

- Integration of public air quality measurements and data from sensor-based IoT measurement devices
- Highly automated and fully managed network
- Data accessible via API or web-based Dashboards (Browser)
- CE-certified measurement devices
- Pollutants measured: NO<sub>2</sub>, O<sub>3</sub>, PM<sub>2.5</sub> and PM<sub>10</sub> (standard), SO<sub>2</sub> (optional), and CO (optional)
- Environmental parameters measured: temperature, humidity, air pressure
- Modular, plug & play system: Easy integration, installation of measurement devices in less than 30 minutes

## Your Benefits

- High spatial and temporal resolution of data
- Regulatory-grade, TÜV-proven accuracy of the measurement method (Directive 2008/50/EC)
- Dependable collection of environmental data based on state-of-the-art IoT sensor technology and AI-based algorithm
- Reliable data delivery and quality
- Remote and real-time data availability 24/7



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Hawa Dawa air quality monitoring networks are full-service data solutions. All maintenance, sensor calibration, data consistency and quality control tasks are part of the professionally managed network administration.

### Hybrid Networks

- Full coverage at regulatory grade accuracy
- Existing public/official measurement stations data included
- Spatial and temporal resolution enhanced by Hawa Dawa IoT devices



### AI-based network administration and quality control

- Reliable data acquisition: no undetected downtimes or drifts
- Automatic error detection in network operations



### Sentience Measurement Device

- Robust design of cover and components: Optimised for outdoor measurements; protected against weather impacts
- Airflow path ensures unbiased measurements
- Quality-proven sensor components from well-established manufacturers
- Various power supply and data communication options incl. solar power
- Calibration algorithm based on machine learning leverages collective intelligence of the globally installed base of Sentience devices

### Comfortable data access

- Intuitive **Sentience Cockpit**
- Integration without media discontinuity through **Sentience API**

	Sentience Cockpit / Sentience API
Free Trial / Demo	1 month free trial
Contract Period <sup>1</sup>	24 months
Access <sup>2</sup>	5 user (Cockpit), Developer Access (Sentience API)
Temporal Resolution of Values	hourly
Pollutant Values (standard)	NO <sub>2</sub> , O <sub>3</sub> , PM <sub>2.5</sub> , PM <sub>10</sub>
Pollutant Values (optional) <sup>3</sup>	SO <sub>2</sub> , CO
Number of calls included / month	800
Forecast (in API)	NO <sub>2</sub> / 24 hrs
12 Months Data History Export (CSV, XLSx)	✓
Monthly Reports (pdf) -in Cockpit	✓
Initial User Reports	1 hour webcon

<sup>1</sup> Standard contract period 24 months. Other contract periods between 12 and 60 months are possible.

<sup>2</sup> More users can be added.

<sup>3</sup> Within a network with existing stations suitable for calibration

