AMBIENT
AQMS (Air Quality Monitoring Solutions)

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PARTICULATE MONITORS & SAMPLERS

MP101M

\[ \text{Beta-ray attenuation Analyzer} \]

Particle concentration measurement of PM10, PM2.5 and PM1 using the Standard Reference Method

- Particle concentration measurement (μg/m³)
- Built-in reference gauge for calibration: no need for factory recalibration
- Temperature-regulated sampling tube
- True volumetric air flow control
- Rugged instrument, not sensitive to vibration or humidity
- Equipped with large, 7” colour touch-screen with animated, real-time display
- Interchangeable sampling heads PM10, PM2.5, PM1 and TSP

CPM

\[ \text{Continuous Hybrid Particulates Monitor} \]

Simultaneous and real-time optical measurement of all types of particles PM1, PM2.5, PM10 using a single TSP inlet

- Real time optical indication and trends of the particles’ concentration (μg/m³)
- Particle counting (nb/L)
- Automatic calibration of the optical module CPM to the reference measurement of the MP101M (β gauge)
- Measurement of the size (0.5 to 40 μm) and quantity for each particulate size range
- Autonomous, automatic and capable of detecting short events with high precision
- Smart and automatic adjustment system integrated: no need for factory recalibration

PM162M

\[ \text{Automatic Sequential Particulate Sampler} \]

Designed to automatically sample particulates on filters using a TSP, PM10, PM2.5 or PM1 inlet

- Compliant with the last EU CEN recommendations for PM2.5 sampling and measurement
- Large filter holder capacity allowing up to 3 weeks of unattended daily sampling of particulate matter
- True volumetric air flow control with atmospheric temperature and pressure sensors to avoid artifacts in the size fractionating inlet
- Unique temperature-regulated sampling tube eliminating artifacts on the filter (evaporative losses of semi-volatile particulates...)

SENSOR BASED AQMS MINI-STATIONS

CAIRNET

Multi-parameter & autonomous micro-monitoring stations

For the centralization of real-time fugitive emissions and air quality data, with wireless access to multi-location autonomous stations.

- Wireless transmission of data to a central interface: Radio, GPRS, 3G,...
- Plug and play: add another station at any time
- Easy to deploy and to use with independent solar panels.
- Monitoring very low levels concentrations of pollutants: H₂S, NH₃, SO₂, NO₂/O₃, VOC, PM10-PM2.5, ... on realtime basis.
- Does not require maintenance, and is calibration-free for 1 year of use.
- Harsh condition resistance design that can carry up to 4 sensors.

MAIN APPLICATIONS:

- Fence Line Monitoring for Industry
- Workplace Monitoring
- Indoor Air Quality Monitoring
- Mobile Hotspot Monitoring
- Measurement Campaigns and Monitoring Studies...

«CairCloud» software included for data acquisition & processing

SAMPLING INLETS

PM 10 - EN 12341
PM 2.5 - EN 14907

PM10 louvered US-EPA

PM 2.5 VSCC adapter US-EPA

TSP US-EPA

Other sampling inlets for research or specific applications are available upon request, such as PM1 for Europe and US-EPA
The e-Series of analyzers has been fully eco-designed, with a special consideration to the environmental impacts of the product during its whole life-cycle. The exclusive «inside the box» foam modular concept makes the product more robust, power saving, simpler to service and eco-friendly.

**ADVANTAGES:**

- Environmental friendly: Low carbon footprint / Over 95% of the analyzer can be recycled / Ultra low power consumption / Common electronic boards: optimized spare parts stock
- SmartStatusLight™ power button for status of operation (ON/OFF, Alarm, Maintenance required...)
- Economic, Easy and reduced maintenance
- Service Assistant inside
- Interactivity: Smart connected instruments

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**AC32e**

Chemiluminescence Nitrogen Oxides Analyzer \( \text{NO, NO}_2 \) & \( \text{NOx} \)

CLD based analyzer offering superior metrological performances for NO, NO\(_2\), and NO\(_x\) measurements in the range 0-1 ppm or 0-10 ppm

- Option: external module for NH\(_3\) monitoring (Max 1 ppm)

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**O342e**

UV Photometric Ozone Analyzer \( \text{O}_3 \)

Provides accurate \( \text{O}_3 \) measurements in the range of 0.2 ppm to 10 ppm

- Option: internal \( \text{O}_3 \) generator (span check)

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**CO12e**

IR-GFC Carbon Monoxide Analyzer \( \text{CO} \)

IR-GFC analyzer designed for high sensitivity monitoring of low CO concentrations in the range of 40 ppb to 300 ppm

- Option: \( \text{CO}_2 \) measuring module (max 2000 ppm)

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**AF22e**

UV Fluorescence Sulfur Dioxide Analyzer \( \text{SO}_2 \)

Uses UV radiation to measure \( \text{SO}_2 \) with excellent performance, for a range from 0.4 ppb to 10 ppm

- Option: module for H\(_2\)S or TRS monitoring (max 1 ppm), special configuration for TRS measurements in CO\(_2\) matrix

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**HC51M**

**VOC72M**

**AS32M**

**Free Apps**

**iOS / Android**

**ESATM Connect™**

Download Here our application: ESA Connect

TÜV Rheinland® QAL1 CERTIFIED

U.S. EPA APPROVAL

Air Quality Monitoring Systems

SyStème de Mesur de l’Air

 Télécharger ici notre application : ESA Connect

TÜV Rheinland® certifié

U.S. Environmental Protection Agency

Homologué série

Free Apps

iOS / Android

ESA Connect™

Download Here our application: ESA Connect
**Multi-gas Mass Flow Dynamic Calibrator**

- Manual or remote multi-point generation of gas concentrations from one to several high concentration span gas cylinders
- Internal ozone generator: Standard or Photometer for GPT mode
- Meets all US EPA requirements
- Built-in permeation benches, for most of the certified permeation tubes disposable type (SO₂, NO₂, H₂S, NH₃...)

**Pure air generator**

- Check of zero point for ambient air gas analyzers
- Supply of dilution air for calibration systems and zero air for dilution-based samplers
- Option: CO & HC internal heated catalytic scrubber

Purity:

- CO < 25 ppb
- NO₂, SO₂, O₃, H₂S < 0.5 ppb
- HC (including CH₄) < 20 ppb

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**XR® SOFTWARE: DATA ACQUISITION & MANAGEMENT SYSTEM**

Fully compliant with constantly changing international guidelines and standards, the XR® software suite provides breakthrough features:

- Acquisition, processing and display of any type of environmental data: gas and dust analysers, meteorological sensors, samplers, ...
- Advanced tools for statistics, validation and reports
- Exclusive system of automatic data validation
- Advanced control of the measurement chain
- Input and import of analysis results
- Traceability and high availability of the raw and validated data

**COMPLIANCE WITH:**
- European Directive 2008/50/CE
- AFNOR NF X 06-044 norm
- ISO 7168-1: 1999
Our monitoring solutions are European QAL 1 certified and in compliance with the latest international regulations & standards. They are also approved and certified by various laboratories and organizations around the world such as: US EPA, TÜV, GOST, CEN, JQA, CNEMC, JMOE, KTL, CNSA, LCSQA...

CUSTOM-TAILORED DESIGN & ENGINEERING OF YOUR AQMS PROJECTS

We design, assemble, calibrate and operate complete integrated systems for simultaneous and continuous measuring of multiple pollutants (gases & particulates). We operate on a worldwide basis with hundreds of active real-time environmental monitoring sites.

Integrated instruments and customized systems

› Fixed monitoring stations for continuous measurements and analysis of gases and air pollutants

› Mobile laboratories that help examine the air quality at various locations, as well as the geographic distribution of air pollution.
Faithful to the principles on which it was founded – innovation & quality, social responsibility & shared values – the ENVEA group is committed to providing you with solutions and assistance at the highest standards in order to comply with applicable regulations, as well as the optimization of industrial processes for an improved efficiency, significant savings of raw materials & energy, the reduction of environmental impacts…

A STRONG GLOBAL PRESENCE

Our worldwide references guarantee a perfect understanding of your needs and ability to manage a vast range of applications:

More than 35 000 air quality monitors are measuring the pollution of cities worldwide: Rio de Janeiro, Istanbul, Seoul, Mecca, Delhi, Hanoi, Paris, Budapest, Abu Dhabi, Bangkok, Dakar, Beijing…

Over 25 000 emission sources & processes are monitored worldwide across a broad range of industries such as: cement plants, glass manufacturing, metal factories, paper mills, engine manufacturers, waste to energy plants…

Process - Emissions - Ambient monitoring solutions