WEX™ system is a DAHS dedicated for Industrial Emission Monitoring System (CEMS) based on more than 20 years of experience from iseo, the IT branch of Environnement S.A. Thanks to this expertise, the powerful multi-users WEX™ system is compatible with the main measuring equipments available on the market and is in full compliance with international and national standards. The WEX™ system is made to be highly reliable and to sustain your activity in the same way.

WEX™ system includes the following main features:

- Acquisition from all devices with all types of parameters and manufacturers;
- Data sources: emission, imission, meteorological, water and process;
- Remote Configuration and Control of measuring devices (acquisition systems, analyzers, communication systems);
- Follow up of all events and technical reporting;
- Data Quality control: validation and availability;
- Event warnings (failures, overthreshold, etc.);
- Data processing with a set of tools for data storage, reports, and broadcasting;
- On-line information for the relevant authorities;
- Connection with optional modules:
  - Control charts, (QAL3 / Daily check calibration)
  - Web Portal for data access and display
  - CMMS for maintenance management...

Supported by one of the largest sales and service organisations worldwide, WEX™ is continually evolving around customer requirements, in order to guarantee the continuity in your compliance to regulations.
WEX™ is built on a core basis and various complementary modules:

**Data acquisition (WEX-SAM)**
- Data acquisition from all analyzers and other devices via digital or analog channels
- Calculations (scaling, adjustment, linearization, standardization), aggregation of the resulting data on various time periods to calculate means
- SCS connection (Modbus, OPC)
- Data storage (raw, adjusted, aggregated) in server database

**Supervision (WEX-SPV)**
- System status display
- Multi-window representation (slideshow)
- Data display: raw, means, trends, graphs...
- Supervision of virtual devices, monitoring and driving of redundant analyzers
- Analyzers takeover locally or remotely: real-time graphic follow-up, interactive set-up, calibration and automatic results monitoring, remote testing of interfaces...

**Report management (WEX-RPT)**
- Laboratories data import, automatic or manual data export in various file formats: Excel, XML, HTML (Internet Explorer and others browsers), PDF, CSV
- Automatic output of compliant reports with local authorities requirements

**Regulatory controls (WEX-REG)**
- Real-time monitoring of parameters, overruns and means
- Detection of EUs’ overruns and devices unavailability’s
- Recording of overruns duration and transmission of alerts and early-warnings to supervision

**Data validation (WEX-VAL)**
- Tables and/or charts data display
- Several validation levels with respective rights and markers
- Event logging for the period
- Actions traceability (data validation, invalidation, adjustment)
- Quality codes for the data (maintenance, calibration, drift, alerts, defaults...)

**Quality assurance (WEX-QAL2)**
- Audit of the compliance of every CEM installation with the EN 14181 requirements
- Management of the calibration function in conformity with EN 14181 standard
- Application of calibration function on dry data, wet data... depending on AMS type parameters input for the ax2+bx+c function of each AMS
- Online parameters modification and successive history settings back-up
- Automatic marking of data out of the validity domain (overrun periods)
- Reports generation, automatically and manually

**Data control and quality assurance (WEX-QAL3) – Optional**
- Automatic QAL3 calibration, compliant with EN 14181 standard
- Automatic analysis and results checking
- Three different control cards available simultaneously and automatically for each analyzer: CUSUM (NFX06-031-4), EWMA (NFX06-031-3) and Shewart (ISO 8258)
- Charts display to track calibration verification and data history
- Storage in database of every information, data, messages for reports editing
- Assignment of a quality code for raw and average data (e.g. maintenance, calibration, drift, alert, defaults...)
- Maintenance report of the manufacturer

**Maintenance planning and management (WEX-CMMS) – Optional**
- Programmable planning and management of the maintenance, directly linked to electronic documentations
- Automatic generation of working orders and storage of vital information for plant operating

**Internet access for data visualization (WEX-WEB) – Optional**
- Full software suite with WEB interface for interactive data consultation on maps, tables and reports
- Hosting service provided (annual contract)
- Generic web site customizable by the customer with its logo and texts

**WEX-Workstation**
- **Supervision**
- Settings (alarms, trends, measurements...)
- User profiles management
- Data visualization
- Reports...

**WEX-Server**
- **Database management**
- Redundancy and backup management
- Local or remote communication
- Message sending
- Regulatory requirements control

**Regulatory and operating reports management, automatic or manual editing**

**QAL2 Calibration functions management: settings and application of the coefficients**

**Modeling of emissions’ impacts**

2 types of architectures:
- **Centralized**, with every software and associated modules on the same computer
- **Distributed**, on several computers connected via local Ethernet network