

Environmental Data Acquisition System

AIR QUALITY MONITORING SYSTEMS

eSAM



- **Data acquisition** from any type of environmental system: analysers, sensors, meteo, samplers, ...
- **Automatic data validation** taking into account the acquisition context
- **Automatic management** of the analyser's calibration
- More than **250 protocols of communication** available including MODBUS/TCP
- **Remote access** to the DAS via internet and a WEB based interface
- **Data storage** in a local database
- **MQTT service** secured IoT communication protocol



Environmental Data Acquisition System

eSAM IS AVAILABLE ON:

■ Rack 19" 3U Frame

- > WINDOWS or LINUX OS
- > Standard configuration
 - 6 serials ports
 - 2 Ethernet ports
 - 6 USB ports
- > Option: additionnel I/O
 - 6 or 8 analog input
 - 6 DI + 6 relay
 - 8 additional RS 232



■ Desktop Computer

- > WINDOWS OS
- > Standard configuration
 - 8 RS 232
 - 1 Ethernet
- > Option: additionnel I/O
 - 6 or 8 analog input
 - 6 DI + 6 relay
 - 8 additional RS 232



■ Fanless industrial chassis

- > Linux OS
- > Standard configuration
 - 4 Serial ports (3 RS232, 1 RS232/485)
 - 2 Ethernet ports
 - 4 USB Ports
- > Option: additionnel I/O
 - 6 or 8 analog input
 - 6 DI + 6 relay
 - 8 additional RS 232



Remote access to the data acquisition system

TECHNICAL FEATURES:

■ Data Acquisition



- > Acquisition of instantaneous measurements at a configurable frequency ranging from 5 seconds to 24 hours
- > Management of the metrological context: analysers' parameters and internal failures, technical measurements, external signals (door opened, flow, etc.)
- > Controls of lower and higher validity limits, sensitivity threshold, immobility, slope and follow-up of peak episodes

■ Automatique Validation



- > Automatic validation of the data with the XR software
- > Association of a quality code with each value
- > Evaluation of quality indicators for each data value: min, max, standard deviation, the number of over-thresholds, availability ratio
- > Prevalidation of the data according of the metrological context

■ Communication



- > Various communication modes: land line, GSM, IP, GPRS...
- > Remote software update
- > Data file exchange according to the ISO 7168 standard
- > Bi directional communication
- > Automatic polling at user defined intervals
- > Modbus/TCP
- > MQTT IoT communication protocol

■ Calibration



- > Automatic management of calibration sessions: 5 span points
- > Ability to adapt the linearization parameters according to calibration results
- > Control of absolute, relative drifts, drifts between span points, standard deviation drifts
- > Storage of all the information related to the calibration



ENVEA (iséo)
 230 Allée Théodore Monod - Technopole Izarbel
 64210 BIDART - FRANCE
 ☎ +33(0)5 59 41 56 66
 ✉ info.data@envea.global



Visit us on:
www.envea.global

