



EmiDAS 2023

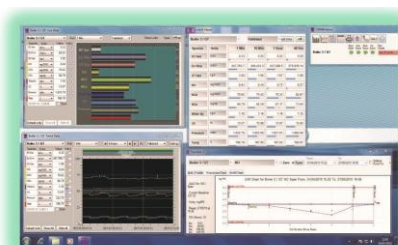


Premium Mcerts Continuous Emissions Monitoring Application

- MCerts Certified
- High speed acquisition & logging
- Configurable alerts for warnings
- Real-time graphs and charts
- QAL3
- Unlimited sensor readings
- Configurable Reporting
- Live Data Feeds

Overview

- **MCerts Certified**
Certified to the highest standards as covered by the Environment Agency's Monitoring Certification Scheme
- **High speed acquisition & logging**
Proven to read and log data at 1 second intervals with no restriction on recording historical data other than available disk space
- **Real-time graphs and charts**
High quality displays of real-time data featuring multi monitors, multi windowed and resizable graphs and charts
- **QAL3**
Management tools for implementing QAL3 and specialised reports
- **Unlimited sensor readings**
Any instrument with digital or analogue output signal can be integrated
- **Configurable Reporting**
Configure reports for local inspectors and the Environment Agency needs in the required formats
- **Live Data Feeds**
Select and export data for any time periods in real-time



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Data Acquisition & Processing

EmiDAS is fully configurable without the need for hard-coded programming changes, even for very complex user-defined calculations and data processing.

- There is no limit to the complexity or number of user defined calculations that can be specified by the end user.
- EmiDAS can process data from a wide variety of instruments across multiple industries. If an instrument has a digital or analogue output signal it can be integrated into the EmiDAS system.
- EmiDAS allows for the setting of uncertainty values, computing normalized values, adjusted values, calibration periods, plant status, instrument status, system status and plant on/off delay periods for plant start-up and shut-down.
- Emissions data can be input (and output) in any user-definable unit including ppm, mg/m³, mg/Nm³, Kg/hr, %, m/s and mass emissions in Kg/Hr.

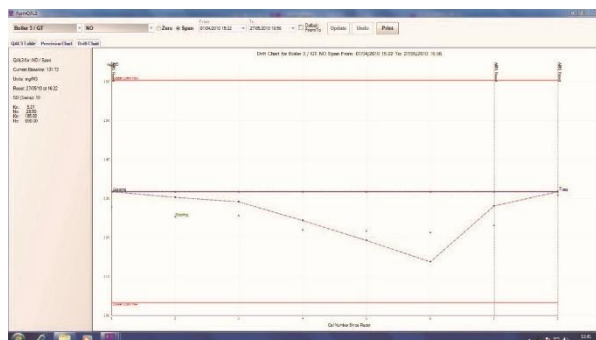
An almost unlimited number of auxiliary inputs can also be logged and reported such as steam flow and fuel flow. These auxiliary inputs can be a valuable tool to aid in the maximisation of plant efficiencies and detecting problems such as boiler tube leaks.

Quality Assurance

EmiDAS provides analyser quality assurance including QAL 1, QAL2, AST and QAL3 Control Charts.

Management tools are supplied to enable implementation of:-

- QAL 2 Calibration Functions
- Uncertainty, and
- QAL3 Control Charts
 - CUSUM Precision & Drift
 - Shewhart



QAL 1 data can be entered into the system to provide the settings needed to determine maximum allowable drift limits of the instruments being monitored by the QAL 3 functions.



User Interface

Real-time data and system information is displayed via a multi windowed user interface including:

- Alarm & warning indicators
- Block, Rolling and Partial averages
- Trend charts
- Bar charts
- Data grid displays user defined averaged data in textual and graphical format
- Error and Event logs storing all alarms, systems warnings and maintenance
- System Auditing provides details of all logins / logouts and changes or attempted changes to the system
- QAL3 Control Charts
- Comprehensive online HELP manual



Being multi windowed and having the ability to re-size each window, EmiDAS looks great equally on one or more large flat panel or standard sized monitors.

All displays have:

- Selectable units of measurement
- Selectable Raw, Validated and Adjusted (QAL2 Calibration function & Uncertainty) readings, user-defined measurements and averages that have been configured within the system
- Historical data from commissioning onwards is accessible via the trend and reporting facilities.

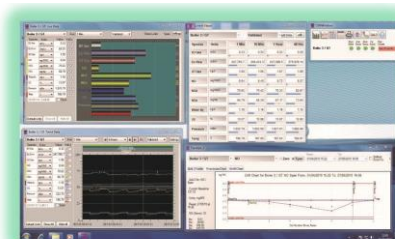
Alerting

Configurable warning levels and Emission Limit Values (ELV) alarm levels can alert users of impending or actual ELV breaches via:-



- on screen audible/visible alarms
- email
- SMS
- plant wide audible/visible sirens and warning lights where necessary.

Configurable Partial Averaging can be used to alert users of impending breaches giving operators time to make plant adjustments before ELVs are breached.



Configurable reporting

User-definable report generation allows for submission of data to local inspectors and the Environment Agency in the required formats for the site and in bespoke formats specified by the end-user.

Reports access data immediately on its creation to provide the most up-to-date measurement and system statuses. Any date range can be queried, and this range can even be selectable to an accuracy of 1 second.

This also includes historical data from the date of commissioning and report types are as follows:

- User Configurable Averaged Data Report
- System Configuration Report
- Averaged Data Report (Excel/PDF)
- IED Reports including:
 - Form Air 2, 3, 6, 11
 - WID Report
 - QAL3 Report (Tables & Charts)
 - IED AR1 Annual return
 - IED BD1 Quarterly Breakdown Return
 - IED CON1 Quarterly Return
 - IED CON2 Quarterly Return
 - IED HR1 Annual Operating Hours return
 - IED MF1 Malfunction and Breakdown Data
 - IED RTA1 Quarterly Return Mass Release

- QAL3 Reports
 - CUSUM Drift
 - CUSUM Precision
 - Shewhart
 - Exponentially Weighted Moving Average (EWMA)



The MCERTS reports come in PDF format with our official MCERTS Watermark ensuring that all data reported has been processed as per the standard.



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Other

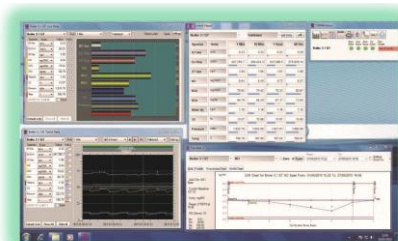
Data Access: All data can also be exported in a variety of formats for external examination and processing.

OPC / DCS / SCADA: Integration into external control systems such as DCS and SCADA can be achieved via MODBUS or OPC Communications protocols as well as the live data feeds below

Live Data Feeds: Monitoring data can be selected and exported in real-time for use in 3rd party systems at time periods of the user's choice.



DATA SYSTEMS



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