



CEMSuite - The CEMS Data Logging and Reporting Solution

Envirosoft

Envirosoft is the UK's leading provider of PC-based environmental data logging systems. We provide data acquisition hardware and software systems primarily for logging emissions data. Our data handling and storage systems use the very latest technology and can acquire information from nearly all analysers and sensors.

We ensure that we are compliant with all relevant EU and National Directives such as IED, WID, LCPD, PPC and EN 14181 and we were the first company to be awarded the MCERTS accreditation for environmental software.

CEMSuite

CEMSuite is our core product and provides the solution for CEMS data logging and reporting for most small boilers and power generators.

CEMSuite +

CEMSuite + includes our QAL3 assessment software (EN 14181) and the EA-designed reporting for WID.

CEMSuite Power

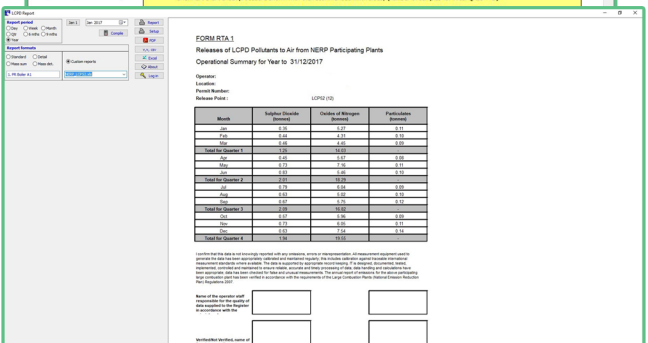
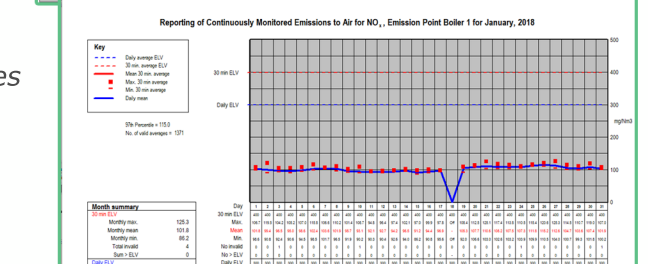
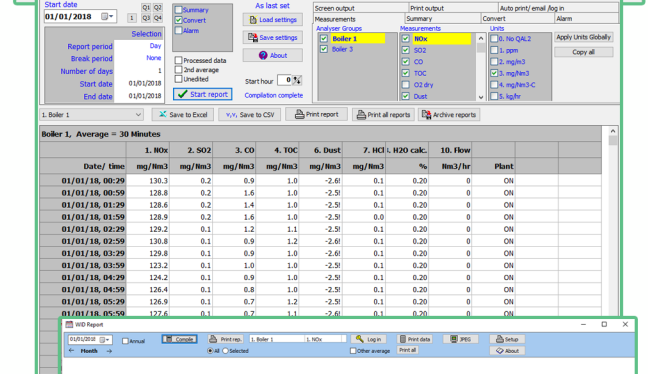
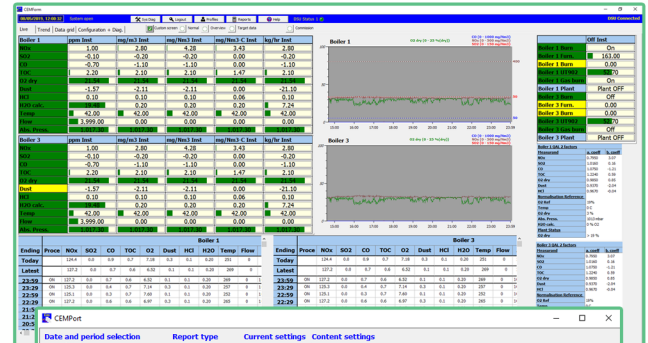
CEMSuite Power provides advanced reporting solutions for sites coming under the LCP Directive.

Program Features

- All programs have full MCERTS certification.
- Real-time and historical data screens.
- User configurable alarms for multiple averages.
- Calculated target levels to achieve compliance.
- Advanced primary data storage facilities.
- Report generation and data output to Excel, csv, html etc.
- Compliant with PPC, EN 14181 and LCP Directives.
- Latest EA designed WID report.
- QAL3 analysis with CUSUM (Drift & Precision), Shewhart and EWMA charts.
- Valid Calibration Range (VCR) Report.

QAL3 - EN 14181

- Automatic control chart generation.
- CUSUM Drift with pass / fail criteria.
- CUSUM Precision.
- Shewhart, including the TGN M20 pass / fail assessment.
- Valid Calibration Range (VCR) Report.
- Exponentially Weighted Moving Average (EWMA).
- Summary report for rapid assessment of compliance, with email facilities.
- Display range selectable (1 day to >1 year).
- Comment entry, storage and display.
- Archiving for long term record-keeping.
- Automatic calibration gas audit module.



Specifications

Data Screens / Reports

- Real-time display of raw / normalised / averaged data.
- Historical data trends from all stored data (instant recall).
- User configurable alarms for multiple averages.
- Email / SMS from alarms.
- Calculated target levels to achieve compliance.
- QAL2 data entry and adjustment.
- Report generation and output to Excel, csv, html etc.
- EA designed LCPD reports - Form Air 1 to 11.
- EA designed WID reports.
- Custom reports available.
- Daily, weekly, monthly, quarterly, bi-annual and annual analysis periods.
- Data acquisition of process parameters from DCS.
- Multiple fuels and complex startup and shut down logics.
- Calculated Data Pages for:
 - o Flow-weighted averages for concentrations.
 - o Total mass calculations from multiple stacks / whole site.
 - o Switching from duty to standby analysers.

Analyser Interfaces

- **ABB** - LIMAS, URAS, MAGNOS, ACF/NT, AO2000, ACX, ACF5000, EL3000.
- **Sick Maihak** - RM230/210, GM31, MCS100E, MCS100FT, SIDOR, GMS800
- **Siemens** - Ultramat23, Ultramat 6, Fidamat (All ELAN Units).
- **Land** - FGA II, 4500 / Premier.
- **Opsis** - AR600, AR650 + Logger.
- **Gasmert** - FTIR.
- **Procal** - 2000, 5000.
- **ADC** - MGA3000.
- **Durag** - DRx250, DR800, DR290, DFL100.
- **Goyen** - EMS6.
- **Davis** - Weather Station.
- **Environnement SA** - MIR9000.
- **Servomex** - Servopro 4900.
- **Dr. Födisch** - MCA04, MCA10.
- **MetPak** - Pro Weather Station.
- **PCME** - QAL181.
- **Horiba** - PG250.
- Analogue - 4-20mA, 0-10V etc.
- Volt-free contacts for measurement validity & plant information.

Plant DCS Interfaces

- **Modbus** - RS232, RS485, Ethernet.
- **Profibus** - DP.
- **OPC**.
- **PI** (SDK and OPC).
- Analogue (4-20mA) Retransmission.
- Digital (V.F.C.C.) Retransmission.

Data Storage

- Data storage Unit (DSU) provides primary data storage (>10yrs).
- Up to 8 DSUs per system.
- Personal computer provides inherent data backup.
- Up to 288 data points: 12 pages, 24 measurands per page.
- Resolution: 16 bit data, 8 bits for validity data.
- Backup and redundant systems for max availability.
- Storage / update frequency: selectable, 5-10 seconds.
- Averaging: 1 min to 1 year.
- Data Retention: >10 years.

Backup / Redundancy

- Replicated data access, logging and processing.
- Replicated outputs to the DCS.
- Configurable for backup or redundant analyser operation.
- Shared peripheral data.
- Dual fibre-optic redundancy.

