

# PRODUCT CONFORMITY CERTIFICATE

This is to certify that the

***atmosDAHS Emissions Reporting Software version 11.05.05***

Manufactured by:

***Protea Limited***

10 Prosperity Court  
Prosperity Way  
Middlewich Cheshire  
CW10 0GD

has been assessed by Sira Certification Service  
and for the conditions stated on this certificate complies with:

**MCERTS Quality and Performance Standards for  
Environmental Data Management Software  
Version 4, dated December 2017**

**In respect of:**

**Part A - Generic Software Quality**

**Part B - Data Management General Aspects**

**Part C1 – CEMS data management applications – Generic Requirements**

**Part C2 - CEMS Data Management Applications - EN14181 Requirements**

Project No.: 80042213  
Certificate No: Sira MC200358/00  
Initial Certification: 08 July 2020  
This Certificate issued: 08 July 2020  
Renewal Date: 10 August 2024

Andy Young  
Environmental Team Manager

MCERTS is operated on behalf of the Environment Agency by

## **Sira Certification Service**

Unit 6, Hawarden Industrial Park  
Hawarden, Deeside, CH5 3US  
Tel: +44 (0)1244 670 900

**sira**  
CERTIFICATION

*The MCERTS certificate consists of this document in its entirety.  
For conditions of use, please consider all the information within.  
This certificate may only be reproduced in its entirety and without change  
To authenticate the validity of this certificate please visit [www.csagroupuk.org/mcerts](http://www.csagroupuk.org/mcerts)*

**Certificate Contents**

Approved Site Application.....2  
 Basis of Certification .....2  
 Product Certified.....2  
 Scope of the Certified System .....3  
 General Notes .....7

**Approved Site Application**

Any potential user of the certified software should:

- 1) Ensure that it is suitable for the platform on which it will be installed (if necessary in consultation with the software producer)
- 2) Ensure that the selection and operation of the software is appropriate to the application

*For general guidance on monitoring techniques refer to the Environment Agency Monitoring Technical Guidance Notes available at [www.mcerts.net](http://www.mcerts.net)*

**Basis of Certification**

This certification is based on the following Test Report(s) and on Sira’s assessment and ongoing surveillance of the product and the manufacturing process:

- Report ref: 70007929 MCERTS Assessment Report, dated 9th April 2014
- Report ref: 80029227 MCERTS Surveillance Audit Report, dated 19th December 2019

**Product Certified**

Product	Version	Remarks
atmosDAHS Emissions Reporting Software	11.05.05	<p>Later minor changes to the certified version are permitted in accordance with the conditions of the standard.</p> <p>Excluded components:                      Progress / OpenEdge - Third party database and development environment</p>

**Software Modifications**

In the event of a major release the developer shall provide brief supporting evidence to the Certification Body who will advise whether recertification is necessary.

Certificate No : Sira MC200358/00  
 This Certificate issued : 08 July 2020

*This certificate may only be reproduced in its entirety and without change  
 To authenticate the validity of this certificate please visit [www.csagroupuk.org/mcerts](http://www.csagroupuk.org/mcerts)*

## Scope of the Certified System

The certified software, atmosDAHS Emissions Reporting Software v11.05.05 includes the following modules and components:

### Database

atmosDAHS Emissions Reporting Software is built on Progress Openedge™ Relational Database technology with:-

- Extremely fast data processing supporting one second data readings
- Secure database with encryption making data access or manipulation impossible
- Built in crash recovery ensuring no data corruption
- Real-time database replication for dual redundancy solutions
- Virtually unlimited(\*) storage so no need for archiving
- Full data auditing which is accurate and secure enough to allow applications to satisfy Sarbanes-Oxley and EU Directive on Privacy and Electronic Communications.
- atmosDAHS Emissions Reporting Software allows multi-user configuration scaling from single user to 2000+ users per server

### Data Acquisition & Processing

- atmosDAHS Emissions Reporting Software is fully configurable without the need for hard-coded programming changes, even for very complex calculations and data processing. The system can also carry out user-defined calculations and processing on incoming data if and when required.
- atmosDAHS Emissions Reporting Software can process data from a wide variety of instruments across multiple industries.
- atmosDAHS Emissions Reporting Software allows for the setting of uncertainty values, computing normalized values, adjusted values, calibrations, plant on/off and plant start-up and shutdown periods.

### Applications:

atmosDAHS Emissions Reporting Software is configurable for many different applications including:

- European Industrial Emissions Directive IED 2010/75/EU (WID/LCPD)
- BS EN 14181 Stationary source emissions - Quality assurance of automated measuring systems
- US-EPA – US Environmental Protection Agency – Various industry sectors
- UK Part A1 and Part A2 Processes
- UK Part B legislation Process Guidance Notes (PGN)
- Various other national standards across many industry sectors

### Quality Assurance

- atmosDAHS Emissions Reporting Software provides analyser quality assurance including QAL2, AST and QAL3 tests.

Certificate No : Sira MC200358/00  
This Certificate issued : 08 July 2020

*This certificate may only be reproduced in its entirety and without change  
To authenticate the validity of this certificate please visit [www.csagroupuk.org/mcerts](http://www.csagroupuk.org/mcerts)*

- Management tools are supplied to enable implementation of QAL 2 Calibration Functions, Uncertainty, and QAL3 Control Charts (CUSUM Precision & Drift, Shewhart and EWMA) for on-going Analyser Quality Assurance

### **User interface**

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

- Multi-lingual User Interface
- Warnings, Alarms, Violations, System Information and Calibrations
- Block, Rolling and Partial averages
- Trend charts
- Bar charts
- Data grids
- Error logging
- Event logs
- Auditing
- QAL3 Control Charts
- Comprehensive online HELP manual

Web based User Interface option offers secure, real-time direct access into the AC-DC Emissions Reporting Software emissions monitoring system from anywhere with an internet connection.

All displays have selectable units of measurement and selectable Raw, Validated and Adjusted (QAL2 Calibration function & Uncertainty) readings along with any 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.

### **Alerts & ELVs**

Configurable Warnings and Alarms alert users of potential or actual ELV breaches via on-screen messages, email, SMS and plant wide audible/visible alarms where necessary.

Configurable Partial Averaging can help to alert users of impending breaches by giving operators more time to make plant adjustments before ELVs are exceeded.

### **Different Fuels**

atmosDAHS Emissions Reporting Software provides for the calculation of ELVs for single, multi or mixed fuel applications.

### **Configurable reporting**

Reports access all data immediately on creation to provide the most up-to-date measurement and system statuses. These reports can also include historical data from the date of commissioning and include:-

- Averaged Data Report
- System Configuration Report
- LCPD Reports
- WID Reports

Certificate No : Sira MC200358/00  
This Certificate issued : 08 July 2020

*This certificate may only be reproduced in its entirety and without change  
To authenticate the validity of this certificate please visit [www.csagroupuk.org/mcerts](http://www.csagroupuk.org/mcerts)*

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

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

#### **Data access**

- All data can also be exported in a variety of formats for external examination and processing. This can assist with maximising plant efficiencies and diagnosing potential problems with the plant processes.
- MODBUS output to control systems such as DCS and SCADA
- Data can be accessed via digital communication protocols, analogue signals, ODBC, CSV export and others on request.

#### **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.

Certificate No : Sira MC200358/00  
This Certificate issued : 08 July 2020

*This certificate may only be reproduced in its entirety and without change  
To authenticate the validity of this certificate please visit [www.csagroupuk.org/mcerts](http://www.csagroupuk.org/mcerts)*

## Description

atmosDAHS Emissions Reporting software has been developed to the high standards required by continuous emissions monitoring standards, certificates and directives including MCERTS, the IED regulations for power plants (Directive 2001/80/EC) and waste incinerators (Directive 2000/76/EC), European Standard EN 14181, US EPA and Environmental Permitting (EP) regulations (Part A and Part B). atmosDAHS also meets the requirements of EN 17255 Data acquisition and handling systems.

Running within Protea's CEM analysers or on the atmoStation data server, atmosDAHS can provide a complete historical log of emissions data to meet the needs of any local inspections.

High quality displays of real-time data can be configured to be as simple or as detailed as needed, featuring multi-windows and resizable graphs and charts. Historical data from commissioning onwards is accessible via the trend and reporting facilities.

Unlimited sensor readings can be inputted at 1 second intervals, so as well as the internal multigas readings from the atmosFIR CEM, atmosDAHS can record critical emissions data such as dust, flow, temperature and pressure from 3rd party instruments. Any instrument with a digital or analogue output signal can be integrated.

The operator can select and export data for any time periods in real-time whilst the CEM is operating. Configurable reports can be built for local inspectors and Environment Agency needs in the required formats. User interaction can be as simple as generating regular reports, or advanced users can configure bespoke reports when needed.

Data can be displayed as raw data, in a number of different measurement units, or data corrected to reporting conditions, with or without QAL2 calibration functions, can be shown. Dynamic time-weighted average data can be displayed, such as 1min, 30min, 1hr, Daily, Weekly and Monthly averages. Configurable Partial Averaging can be used to alert users of impending breaches giving operators time to make plant adjustments before ELVs are breached.

A non-MCERTS approved version, ProDAHS, is available with all the data handling features but does not include the required functions or reports to satisfy the requirements of EN 14181.

Certificate No : Sira MC200358/00  
This Certificate issued : 08 July 2020

*This certificate may only be reproduced in its entirety and without change  
To authenticate the validity of this certificate please visit [www.csagroupuk.org/mcerts](http://www.csagroupuk.org/mcerts)*

## General Notes

1. This certificate is based upon the equipment tested. The Manufacturer is responsible for ensuring that on-going production complies with the standard(s) and performance criteria defined in this Certificate. The Manufacturer is required to maintain an approved quality management system controlling the manufacture of the certified product. Both the product and the quality management system shall be subject to regular surveillance according to 'Regulations Applicable to the Holders of Sira Certificates'.
2. The design of the product certified is defined in the Sira Design Schedule V00 for certificate No. Sira MC140255/01
3. If certified product is found not to comply, Sira Certification Service should be notified immediately at the address shown on this certificate.
3. The Certification Marks that can be applied to the product or used in publicity material are defined in 'Regulations Applicable to the Holders of Sira Certificates'.
4. This document remains the property of Sira and shall be returned when requested by the company.

Certificate No : Sira MC200358/00  
This Certificate issued : 08 July 2020

*This certificate may only be reproduced in its entirety and without change  
To authenticate the validity of this certificate please visit [www.csagroupuk.org/mcerts](http://www.csagroupuk.org/mcerts)*