

CERTIFICATE

of Product Conformity (QAL1)

Certificate No: 0000035011_03

Evaluation device: UmweltOffice/TALAS

Manufacturer: Siempelkamp NIS Ingenieurgesellschaft mbH
Industriestraße 13
63755 Alzenau
Germany

Test Institute: TÜV Rheinland Energy & Environment GmbH

**This is to certify that the data acquisition and handling system (DAHS)
has been tested and found to comply with the standards
Uniform practice in monitoring emissions 2017
and EFÜ interface definition 2017 (remote emission control)
as well as EN 14181 (2014), EN 15267-1 (2009) and EN 15267-2 (2023).**

Certification is awarded in respect of the conditions stated in this certificate
(this certificate contains 10 pages).

The present certificate replaces certificate 0000035011_02 dated 5 November 2019.



Suitability Tested
EN 15267
QAL1 Certified
Regular
Surveillance

www.tuv.com
ID 0000035011

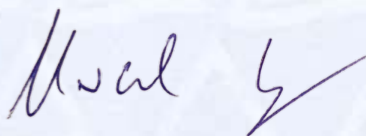
Publication in the German Federal Gazette
(BAnz) of 22 July 2019

German Environment Agency

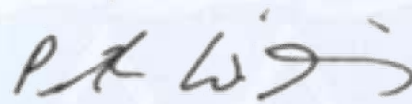
Dessau, 3 July 2024

This certificate will expire on:
21 July 2029

TÜV Rheinland Energy &
Environment GmbH
Cologne, 2 July 2024



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Test institute accredited to EN ISO/IEC 17025 by DAkkS (German Accreditation Body).
This accreditation is limited to the accreditation scope defined in the enclosure to the certificate D-PL-11120-02-00.

*Uniform practice in monitoring emissions 2017 – Circular of the FMW 23.01.20217 – IG 12-45053/5
qal1.de

info@qal.de

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Test report:	936/21242054/B dated 1 March 2019
Initial certification:	2 March 2012
Expiry date:	21 July 2029
Certificate:	Renewal (of previous certificate 0000035011_02 of 5 November 2019 valid until 21 July 2024)
Publication:	BAnz AT 22.07.2019 B8, chapter IV No. 1.3

Approved application

The tested emission data evaluation system is suitable for the continuous recording and evaluation of emission measurement data at installations in accordance to Directive 2010/75/EU chapter III (13th BImSchV 2021), chapter IV (17th BImSchV 2013), plants according to the 1st BImSchV (2017), plants according to the 2nd BImSchV (2020), plants according to the 27th BImSchV (2013), plants according to the 30th BImSchV (2017), plants according to the 31th BImSchV (2017), plants according to Directive 2015/2193/EU (44th BImSchV 2021), plants compliance with TA-Luft (2002) and for monitoring and reporting of greenhouse gas emissions EU-Regulation 601/2012 (TEHG BEP 2017).

The test was carried out in accordance with the Federal Standard Practice (2017). Data transmission between the AMS and the evaluation system is analogue (0 - 20 mA) and digital (VDI 4201 Modbus (2012)).

The system also includes remote emission data monitoring via Modem / FTPS.

The tests were carried out as a performance test in the laboratory and as a three-month long-term test at a powerplant within the scope of the 13th BImSchV. In the laboratory test, different types of installations were simulated.

The emission data evaluation system is approved for the ambient temperature range of +5 °C to +40 °C.

The notification of suitability of the DAHS, performance testing and the uncertainty calculation have been effected on the basis of the regulations applicable at the time of testing. As changes in legal provisions are possible, any potential user should ensure that this DAHS is suitable for monitoring the emission limit values relevant to the application. Any potential user should ensure, in consultation with the manufacturer, that this DAHS is suitable for the installation at which it will be installed.

Note

The legal regulations mentioned correspond to the current state of legislation during certification. Each user should, if necessary, in consultation with the competent authority, ensure that this DAHS meets the legal requirements for the intended use. In addition, it cannot be ruled out that legal regulations governing the use of a data acquisition for emission monitoring may change during the lifetime of the certificate.

Basis of the certification

This certification is based on:

- Test report 936/21242054/B dated 1 March 2019 of TÜV Rheinland Energy GmbH
- Suitability announced by the German Federal Environment Agency (UBA) as the relevant body
- The ongoing surveillance of the product and the manufacturing process

Publication in the German Federal Gazette: BAnz AT 22.07.2019 B8, chapter IV No. 1.3,
Announcement by UBA dated 28 June 2019:

Data acquisition and handling system:

UmweltOffice/TALAS

Manufacturer:

Siempelkamp NIS Ingenieurgesellschaft mbH, Alzenau

Field of application:

Data acquisition, evaluation and remote emission control at continuously monitored plants

Tested features during performance testing:

- analogue data transmission
- digital data transmission in line with VDI standard 4201, parts 1 (general) and 3 (Modbus)
- Remote emission control via modem and FTPS

Software version:

Data evaluation and parameterisation

UmweltOffice: 7.3.1

Oracle data base: 11.2, 11.2 Express or 12.2

Data acquisition:

TALAS/net: 5.3 (000)

TALAS/7 7.3 (001)

Restrictions:

At IP20 and IP21, the DAHS enclosure did not meet the requirement for the degree of protection during the performance test. The DAHS must be installed in an enclosure for evaluation systems which provides a sufficient degree of protection for the intended site of installation. This must be verified in the context of correct installation.

Notes:

1. The emission data acquisition and evaluation consists of the front-end system for recording analogue and status signals and a PC with the UmweltOffice program package and the TALAS/7 program for data transfer. The TALAS/ net and the TALAS/ 7 IO modules IO8/AI, IO8/ DI, IO8/AIDI, IO4/AI, IO4/ DI, IO4/AIDI, IO4/ DIDO are available as front-end systems.
2. The DAHS comes with a digital Modbus interface (serial and TCP/IP) in accordance with VDI 4201, parts 1 (general) and 3 (Modbus).
3. The TALAS/7 programme can optionally run on a TALAS/7 IOC controller, a TALAS/7 LPM controller as hat rail module or an additional PC to receive data.
4. The programme is also offered as small edition "UmweltOffice sE" with 12 analogue inputs and without remote emission control.
5. Supplementary test (adaptation to BEP2017 and moving monthly average for refineries under the 13th BImSchV) as regards Federal Environment notices of 23 February 2012 (BAnz. S. 920, chapter III number 1.1) and of 3 July 2018 (BAnz AT 17.07.2018 B9, chapter III 2nd notification).

Test Institute:

TÜV Rheinland Energy GmbH, Cologne

Report No.: 936/21242054/B dated 1 March 2019

Publication in the German Federal Gazette: BAnz AT 24.03.2020 B7, Chap. IV notification 59, Announcement by UBA dated 24 February 2020:

59 Notification as regards Federal Environment Agency (UBA) notice of 28 June 2019 (BAnz AT 22.07.2019 B8, chapter IV number 1.3)

The TALAS/7 IOC+ controller has been added to the hardware of the UmweltOffice/Talas emissions computer from Siempelkamp NIS Ingenieurgesellschaft mbH. In addition to the IOC controller for data acquisition and evaluation with the TALAS/7 program, this version also contains 8 analogue inputs, 12 status inputs and 4 digital outputs.

The test results are documented in the summary report no.: 936/21247814/A dated September 24, 2019.

The current software versions of the UmweltOffice emissions calculator from Siempelkamp NIS Ingenieurgesellschaft mbH are

Data evaluation and parameterization:

UmweltOffice: 7.3.2

Oracle database: 11.2, 11.2 XE, 12.2, 18c XE or 18c SE

Data acquisition:

TALAS/net: 5.3 (000)

TALAS/7 7.3 (002).

Statement by TÜV Rheinland Energie und Umwelt GmbH dated September 23, 2019

Publication in the German Federal Gazette: BAnz AT 03.05.2021 B9, Chap. III notification 44, Announcement by UBA dated 31 March 2021:

44 Notification as regards Federal Environment Agency (UBA) notices of 28 June 2019 (BAnz AT 22.07.2019 B8, chapter IV number 1.3) and of 24 February 2020 (BAnz AT 24.03.2020 B7, chapter IV notification 59)

The software for the emission evaluation system UmweltOffice from the company Siempelkamp NIS Ingenieurgesellschaft mbH has been extended by the option of TEHG evaluation according to BEP2017 Appendix J. The results are documented in the test report 936/21249876/A of 17 September 2020.

The latest software versions of the UmweltOffice emission data evaluation system manufactured by Siempelkamp NIS Ingenieurgesellschaft mbH are:

Data evaluation and parameterisation UmweltOffice: 7.3.3

Oracle data base: 11.2, 11.2 XE, 12.2, 18c XE, 18c SE or 19c SE2

Data acquisition: TALAS/net: 5.3 (000), TALAS/7 7.3 (003),

Furthermore, the emission evaluation system UmweltOffice is supplemented by the version UmweltOffice mE.

Statement issued by TÜV Rheinland Energy GmbH dated 17 September 2020

Publication in the German Federal Gazette: BAnz AT 11.04.2022 B10, Chap. VI
notification 45, Announcement by UBA dated 9 March 2022:

**45 Notification as regards Federal Environment Agency (UBA) notices
of 28 June 2019 (BAnz AT 22.07.2019 B8, chapter IV number 1.3) and
of 31 March 2021 (BAnz AT 03.05.2021 B9, chapter III notification 44)**

The software for the emission evaluation system UmweltOffice of the company Siempelkamp NIS Ingenieurgesellschaft mbH was extended by the evaluation of the current 13th BImSchV (July 2021) and by the use of the alternative database PostgreSQL. The results are documented in the test report 936/21249876/B dated 6.01.2022.

The software also fulfills all requirements of the 44th BImSchV.

The current software versions for the emission evaluation system UmweltOffice / Talas (ID = 0000035011) of Siempelkamp NIS Ingenieurgesellschaft mbH are:

Data evaluation and parameterization:

UmweltOffice:	7.4.0
Oracle database:	11.2, 11.2 XE, 12.2, 18c XE, 18c SE or 19c SE2
PostgreSQL:	13.3
Data acquisition:	
TALAS/net:	5.3 (000)
TALAS/7	7.4 (000)

Statement issued by TÜV Rheinland Energy GmbH dated 6 January 2022

Publication in the German Federal Gazette: BAnz AT 02.08.2023 B7, Chap. III
notification 34, Announcement by UBA dated 5 July 2023:

**34 Notification as regards Federal Environment Agency (UBA) notices
of 28 June 2019 (BAnz AT 22.07.2019 B8, chapter IV number 1.3) and
of 9 March 2022 (BAnz AT 11.04.2022 B10, chapter VI notification 45)**

The software for the emission evaluation system UmweltOffice/TALAS7 from Siempelkamp NIS Ingenieurgesellschaft mbH has been extended to include NO_x limit value monitoring as a bell function and additional operating thresholds.

The current software versions for the emission evaluation system UmweltOffice/Talas (ID = 0000035011) from Siempelkamp NIS Ingenieurgesellschaft mbH are:

Data evaluation and parameterization:

UmweltOffice:	7.4.1
Oracle database:	12.2, 18c XE, 18c SE or 19c SE2
PostgreSQL:	13.3
Data acquisition:	
TALAS/net:	5.3 (000)
TALAS/7:	7.4 (001)

Statement issued by TÜV Rheinland Energy GmbH dated 10 February 2023

Certified product

This certificate applies to automated measurement systems conforming to the following description:

The evaluation system consists of the UmweltOffice programme suite and various frontend systems to ensure the acquisition of analogue operational status signals.

The following systems are available for the acquisition of analogue operational status signals:

- TALAS/net
- TALAS/7 IO modules

TALAS/net

A 12bit analogue to digital converter converts analogue to digital signals. Analogue signals are scanned at a rate of 100/sec.

TALAS/7 IO modules

The TALAS/7 IO modules operate at a scan rate of 40/sec and have a 16bit analogue to digital converter.

TALAS/7

The TALAS/7 programme receives data from the input modules which it then averages and converts in accordance with the calibration function, then standardises and validates measured values and communicates shortterm averages to the UmweltOffice. Moreover, raw data is transferred as 5 sec-averages for the purpose of documenting data. The TALAS/7 programme can operate on the same PC as the UmweltOffice, on a separate PC or on the TALAS/7 IOC Controller.

The PC operating the UmweltOffice downstream of the data recording unit receives data for the purpose of storing and processing them. The computer classifies and evaluates data in accordance with the applicable provisions and generates the required messages and protocols.

The PC operating UmweltOffice is able to receive and process data from several data recording units. For this purpose, clusters are set up in the programme for each and assigned to a data acquisition unit. Data evaluation can thus be performed for each cluster individually or for several clusters combined. This also applies to remote emission control.

The **TALAS/net** is equipped as follows:

- Analogue input chip with 7 analogue inputs (up to 3 optional A/D chips)
- Two chips with 12 digital inputs (up to 4 optional additional digital chips)
- up to 2 optional analogue output chips with 4 outputs each
- up to 2 optional digital output chips with 7 outputs each
- Processor: Motorola MC68EN302 25 MHz
- Multi-user, multi-tasking real-time OS-9/68K operation system
- 1 MByte static RAM
- 1.5 Mbyte programme memory divided into:
- 8 Mbyte Flash-EPROM as data memory (not volatile)
- up to 16 Mbyte dynamic RAM
- internal temperature control
- programmable watchdog
- Ethernet interface
- Serial interface

The **TALAS/7 IO** modules are available in the following versions:

Module	AI	DI	AO	DO
TALAS/7 – IO8/AI	28	1		1
TALAS/7 – IO8/DI		29		1
TALAS/7 – IO8/AIDI	14	15		1
TALAS/7 – IO8/AO		1	14	1
TALAS/7 – IO4/AI	12	1		1
TALAS/7 – IO4/DI		13		1
TALAS/7 – IO4/AIDI	6	7		1
TALAS/7 – IO4/DIDO		7		7
TALAS/7 – IO4/AO		1	6	1
TALAS/7 – IO4/DO		1		13

AI = analogue input; DI = digital input, AO = analogue output, DO = digital output

Analogue inputs

Resolution: 0.763 μ A (15 Bit)
 Scan rate: ~ 25 ms
 Measured range: 0 ... > 24 mA
 Load: 50 Ohm
 Protected against polarity reversal, galvanic isolation between pins and from the module

Digital inputs

External voltages: 12 ... 230 V AC/DC
 Potential-free contacts: require a 24V power supply
 Internal resistance: > 50 kOhm
 Scan rate: ~ 2 ms
 Protected against polarity reversal, galvanic isolation between pins and from the module

The computer downstream operating UmweltOffice is an industrial PC with the following minimum configuration:

- Intel Dual Core 2 or equivalent processor
- 2 GB for 32bit Windows 7 or 4 GB for 64bit Windows 7/Server 2008
- 2 hard drives > 500 GB
- Ethernet interface for TALAS/net and TALAS/7 IO modules
- Serial (RS 232)/USB interface for modem
- Parallel interface/USB interface for printer
- Windows 7 or Windows Server 2008 operating system
- DCF77 receiver
- External modem
- CD/DVD ROM (optional writer)

For backup purposes, the PC has been equipped with a second hard drive for data mirroring, a backup drive (e.g. CD writer) and/or an Ethernet interface to backup data on a separate PC. A printer can be connected to the PC. It prints daily protocols, messages and excessive limit values.

General notes

This certificate is based upon the equipment tested. The manufacturer is responsible for ensuring that on-going production complies with the requirements of the EN 15267. 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 systems shall be subject to regular surveillance.

If a product of the current production does not conform to the certified product, TÜV Rheinland Energy & Environment GmbH must be notified at the address given on page 1.

A certification mark with an ID-Number that is specific to the certified product is presented on page 1 of this certificate. This certification mark may be applied to the product or used in advertising materials for the certified product.

This document as well as the certification mark remains property of TÜV Rheinland Energy & Environment GmbH. With revocation of the publication the certificate loses its validity. After the expiration of the certificate and on requests of the TÜV Rheinland Energy & Environment GmbH this document shall be returned and the certificate mark must not be employed anymore.

The relevant version of this certificate and its expiration is also accessible on the internet: **qal1.de**.

History of documents

Certification of UmweltOffice UmweltOffice sE is based on the documents listed below and the regular, continuous monitoring of the Quality Management System of the manufacturer:

Initial certification according to EN 15267

Certificate No. 0000035011_00: 16 March 2012
Expiry date of the certificate: 1 March 2017
Test report: 936/21216122/A dated 19 October 2011
TÜV Rheinland Energie und Umwelt GmbH
Publication: BAnz. 02 March 2012, No. 36, p. 920, chapter III number 1.1
UBA announcement dated 23 February 2012

Notifications

Statement issued by TÜV Rheinland Energie und Umwelt GmbH dated 14 February 2013
Publication: BAnz AT 23.07.2013 B4, chapter V notification 9
UBA announcement dated 3 July 2013
(Software changes)

Statement issued by TÜV Rheinland Energie und Umwelt GmbH dated 14 February 2014
Publication: BAnz AT 05.08.2014 B11, chapter V notification 29
UBA announcement dated 17 July 2014
(Software changes)

Statement issued by TÜV Rheinland Energie und Umwelt GmbH dated 8 December 2014
Publication: BAnz AT 26.08.2015 B4, chapter V notification 2
UBA announcement dated 22 July 2015
(Software changes)

Statement issued by TÜV Rheinland Energie und Umwelt GmbH dated 15 October 2015
Publication: BAnz AT 14.03.2016 B7, chapter V notification 20
UBA announcement dated 18 February 2016
(Software changes and extension for digital data communication - Modbus seriell and TCP/IP)

Statement issued by TÜV Rheinland Energie und Umwelt GmbH dated 18 January 2016
Publication: BAnz AT 01.08.2016 B11, chapter IV correction 1
UBA announcement dated 14 July 2016
(Manufacturer change name)

Renewal of certificates

Certificate No. 0000035011_01: 28 February 2017
Expiry date of the certificate: 1 March 2022

Notifications

Statement issued by TÜV Rheinland Energy GmbH dated 12 October 2016
Publication: BAnz AT 15.03.2017 B6, chapter V notification 15
UBA announcement dated 22 February 2017
(Software changes notice: version 7.2.0 and 7.2.1 may no longer be used.)

Statement issued by TÜV Rheinland Energy GmbH dated 8 March 2017
Publication: BAnz AT 31.07.2017 B12, chapter II notification 2
UBA announcement dated 13 July 2017
(Software changes)

Statement issued by TÜV Rheinland Energy GmbH dated 2 May 2018
Publication: BAnz AT 17.07.2018 B9, chapter III notification 2
UBA announcement dated 3 July 2018
(Software changes)

Supplementary testing according to EN 15267

Certificate No. 0000035011_02: 5 November 2019
Expiry date of the certificate: 21 July 2024
Test report: 936/21242054/B dated 1 March 2019
TÜV Rheinland Energy GmbH
Publication: BAnz AT 22.07.2019 B8, chapter IV number 1.3
UBA announcement dated 28 June 2019

Notifications

Statement issued by TÜV Rheinland Energy GmbH dated 23 September 2019
Test report: 936/21247814/A dated 24 September 2019
Publication: BAnz AT 24.03.2020 B7, chapter IV notification 59
UBA announcement dated 24 February 2020
(Software changes and new hardware version (TALAS/7 IOC+ Controller))

Statement issued by TÜV Rheinland Energy GmbH dated 17 September 2020
Test report: 936/21249876/A dated 17 September 2020
Publication: BAnz AT 03.05.2021 B9, chapter III notification 44
UBA announcement dated 31 March 2021
(Software changes, new software version (UmweltOffice mE) and evaluation for Green House Gases)

Statement issued by TÜV Rheinland Energy GmbH dated 6 January 2022
Test report: 936/21249876/B dated 6 January 2022
Publication: BAnz AT 11.04.2022 B10, chapter VI notification 45
UBA announcement dated 9 March 2022
(Comply with 13. BImSchV:2021)

Statement issued by TÜV Rheinland Energy GmbH dated 10 February 2023
Publication: BAnz AT 02.08.2023 B7, chapter III notification 34
UBA announcement dated 5 July 2023
(Software changes)

Renewal of certificates

Certificate No. 0000035011_03: 3 July 2024
Expiry date of the certificate: 21 July 2029