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CONFIRMATION

of Product Conformity (QAL1)

Approved DAHS:	UmweltOffice / UmweltOffice sE
Manufacturer:	Siempelkamp NIS Ingenieurgesellschaft mbH Industriestraße 13 63755 Alzenau Germany
Test Institute::	TÜV Rheinland Energy & Environment GmbH

This is to certify that the AMS has been tested according to the standards

EN 17255-1 (2019), EN 17255-2 (2020), EN 17255-3 (2021), BEP (2023)*, EFÜ (2017), EN 14181 (2014) as well as EN 15267-1 (2009), EN 15267-2 (2023).

The DAHS underwent independent expert testing and was accepted.
This confirmation is valid up to the publication of the certificate,
but no longer than 6 months from the date of issue
(this document contains 6 pages).

This confirmation is valid until: 31 December 2025

TÜV Rheinland Energy & Environment GmbH
Cologne, 4 July 2025

i. V. Dipl.-Ing. G. Baum

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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 certificate D-PL-11120-02-00.

* BEP (2023) Uniform practice in monitoring emissions 2023 and
EFÜ (2017) Tele transmission definition 2017 (remote emission control)

Test Report:	EuL/21265723/A dated 27 January 2025
Initial certification:	2 March 2012
Expiry date:	31 December 2025

Approved application
The tested data acquisition and handling system (DAHS) is suitable for emission data acquisition and evaluating emission measurements at installations with continuous monitoring as well as the general evaluation of asphalt mixing plants in accordance with the current standardised federal procedure (BEP2023). The data transmission between the AMS and the DAHS can carry out analogous (0 - 20 mA) or over a digital interface (VDI 4201: Modbus (EIA-485, serial or TCP/IP Ethernet)).
The system contains also the tele transmission of emission data over modem or FTPS connection.

The tests were carried out as a performance test in the laboratory. All type of plants were simulated in the laboratory test.

The DAHS is approved for a ambient temperature range of +5 °C to 40 °C.

The notification of suitability of the DAHS and performance testing have been effected on the basis of the regulations valid at the time of performance testing. As changes in legal regulations are possible, any potential user should ensure that this DAHS is suitable for monitoring the values relevant to the application.

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 measuring device for emission monitoring may change during the lifetime of the certificate.

Basis of the confirmation
This confirmation is based on:

- Test report EuL/21265723/A dated 27 January 2025 issued by TÜV Rheinland Energy & Environment GmbH
- The ongoing surveillance of the product and the manufacturing process
- Expert testing and approval by an independent body
- Suitability announced by the relevant body.

Data acquisition and handling system:
UmweltOffice/TALAS

Manufacturer:
Siempelkamp NIS Ingenieurgesellschaft mbH, Alzenau

Field of application:
Data acquisition, evaluation and remote control for plants with continuous monitoring according to EN 17255, BEP2023 and plants under the Greenhouse Gas Emissions Trading Act .

Tested features during performance testing:
- analogue data transmission
- digital data transmission in line with VDI standard 4201, parts 1 (general) and part 3 (Modbus)
- remote emission control via modem and FTPS

Software version:
Data evaluation and parameterisation

UmweltOffice:	7.5.0
Oracle-Data base:	12, 18, 19, 21
PostgreSQL:	13, 16

Data acquisition:

TALAS/7	7.5 (000)
TALAS/net:	5.3 (001) only as I/O module for the TALAS/7

Restrictions: none

Notes:
1. 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 and the TALAS/7-IOC+ are available as front-end systems.
2. The computer has the digital Modbus interface (serial and TCP/IP) in accordance with VDI 4201 Sheet 1 (General) and Sheet 3 (Modbus).
3. As an option, the TALAS/7 programme can also run on a TALAS/7-IOC or TALAS/7-IOC+ controller, a TALAS/7-LPM controller as a top-hat rail module or another PC for data transfer.
4. The program is also available as a small edition "UmweltOffice sE" with 12 analogue inputs and without EFÜ and as a medium edition "UmweltOffice mE" with 12 analogue inputs and with EFÜ
5. Supplementary test (test according to EN 17255, and BEP2023) to the notifications of the Federal Environment Agency of 28 June 2019 (BAnz AT 22.07.2019 B8, chapter IV number 1.3) and of 31 August 2024 (BAnz AT 31.10.2024 B9, chapter IV 2nd notification)

Test Institute:
TÜV Rheinland Energy & Environment GmbH, Cologne
Report No.: EuL/21265723/A dated 27 January 2025

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Tested product

his conformation applies to automatic measuring devices that comply with the following description:

The emission computer system consists of the UmweltOffice program package and various front-end systems for accepting analogue and status signals.

The following systems are used to accept analogue and 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, digital plants are set up in the programme for each emission source and assigned to a data acquisition unit. Data evaluation can thus be performed for each plant individually or for several emission source 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 µA (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 Xeon E-2314
- 8 GB
- 2 hard disks ≥ 500 GB
- Ethernet interface for TALAS/net and TALAS/7-IO modules
- Serial (RS 232) / USB interface for modem
- USB interfaces
- Operating system Windows11 (64 bit) or Windows Server 2019 (64 bit) and 2022 (64 bit)
- Radio clocks (e.g. DCF77 receiver), internet or company-internal NTP protocols or GPS receiver.
- External modem (if EFÜ required)
- CD / DVD-ROM (optional burner)

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 limit value exceedances.

The evaluation system was tested on the basis of the following requirements:

- EN 17255 - Stationary source emissions - Data acquisition and handling systems
  Part 1: (2019) Specification of requirements for the handling and reporting of data
  Part 2: (2020) Specification of requirements on data acquisition and handling systems
  Part 3: (2021) Specification of requirements for the performance test of data acquisition and handling systems.
- Uniform Practice in monitoring emissions,
  Circular from Federal Environment Ministry of 2023-07-31 – AG C I 2 – 5025/001-2023.001
- Remote emission control (EFÜ) / interface definition
  revised edition dated April 2017
- Technical guideline VDI 4204-01 (2022) - Evaluation of emission measurements - Determination of characteristic quantities for continuous emission monitoring
- Technical guideline VDI 4201
  Performance criteria on automated measuring and electronic data evaluation systems for monitoring emissions - Digital interface -
  part 1 - General requirements (2010)
  part 3 - Specific requirements for Modbus (serial and TCP/IP) (2012)
- EN 14181 2014 (Stationary source emissions
  - Quality assurance of automated measuring systems)
  Use of this regulation with regard to the data evaluating of emission measuring systems
- Directive 2010/75/EU on industrial emissions (IED) of 24 November 2010
  (integrated pollution prevention and control)
- Directive 2015/2193/EC for medium combustion plants of 25 November 2015
  (on the limitation of emissions of certain pollutants into the air from medium combustion plants)
- 13th BImSchV of 2021-07-06
  Ordinance on large firing, gas turbine and combustion engine installations
- 17th BImSchV of 2013-05-02 changed 2024-02-13
  Ordinance on the Incineration and Co-Incineration of Waste
- 44th BImSchV of 2019-06-13 changed 2022-10-12
  Ordinance on medium-sized firing, gas turbine and combustion engine plants