SIEMPELKAMP
NIS Ingenieurgesellschaft

Intelligent engineering
for future generations.

UmweltOffice®/TALAS

DATA ACQUISITION AND HANDLING SYSTEM

The future-proof and compliant solution for emissions monitoring across Europe.

COMPLIES WITH EN 17255

TRUST THE EXPERTS IN EMISSIONS MONITORING

Since 1985

TALAS with the UmweltOffice® software system is the Data Acquisition and Handling System from SIEMPELKAMP NIS: a complete, network-compatible solution for managing, evaluating and remotely transmitting emission data to environmental authorities. The emission values are recorded by local TALAS data acquisition units at each site.

- Enables central management of widely dispersed locations
- Data interfaces for seamless integration with the client systems
- Efficient remote maintenance by the manufacturer
- Modular and scalable from small plants to large industrial complexes

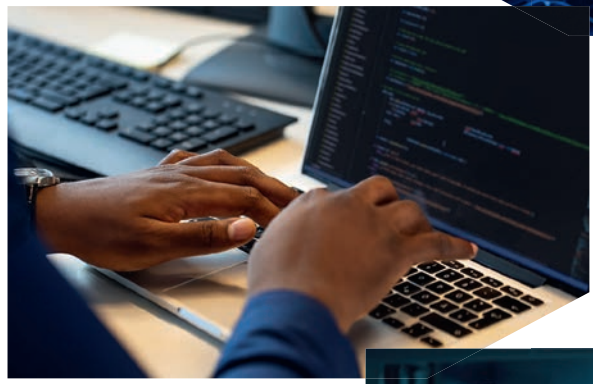
Suitability-tested by TÜV Rheinland for compliance with EN 17255 and the German BEP2023, with QAL1 certified evaluation equipment in line with EN 15267 and MCERTS. Over 1,500 SIEMPELKAMP systems have been delivered, including 1,000 TALAS units for continuous emissions monitoring. The system has also been tested in line with FNADE requirements.

01

UmweltOffice:
for all industries
& company sizes

02

UmweltOffice:
wide range of features



03

TALAS:
versatile & user-friendly

04

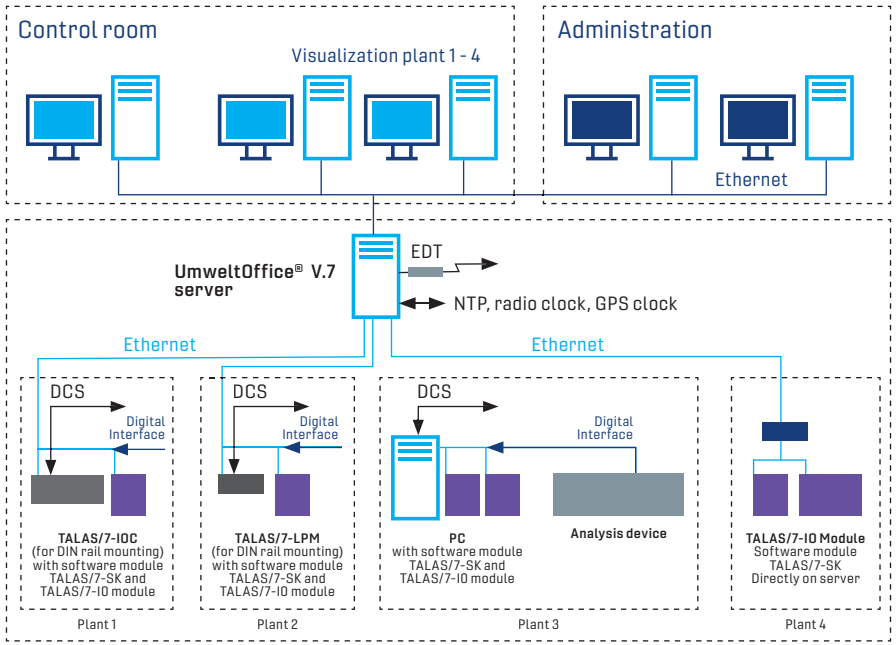
TALAS :
advanced &
reliable technology

01 UmweltOffice®: MANAGE, EVALUATE AND TRANSMIT EMISSION DATA

Monitoring dust, SO2, NOx, CO and other substances in the atmosphere: TALAS with the UmweltOffice® software system is an approved and certified system for the continuous acquisition, storage and evaluation of emission data. It also provides valuable insights to support the environmentally responsible and cost-effective operation of production facilities.

The TALAS-based software system enables:

- Transfer of data from the TALAS data acquisition units, including 5-second, minute and short-term averages as well as status reports.
- Storage of the data in a relational database, enabling clients to develop their own applications.
- Secure access via passwords and user rights management.
- Message display in list format filterable by various criteria.
- Time synchronization of all connected systems with a precision time source, e.g. NTP, radio clock, GPS clock.
- Transmission of the consolidated and client-approved data to the relevant supervisory authority in line with the German interface definition and the emission data transmission (EDT) - internet standard (based on the current remote emission data transmission specifications) or via the NIS „connect“ module.



02 UmweltOffice®: BENEFIT FROM A WIDE RANGE OF FEATURES & OPTIONS

Key features

- System workstations provided via web application
- Automatic language settings via browser
- Enhanced security with extended password protection
- Recorder replacement ensured through redundant data storage
- Customizable reports and graphics
- Flexible, configurable messaging system
- Inspection mode for rapid functional testing
- Test mode with simulated measurement values
- Remote emission data transmission (EDT) in line with the internet standard, as per the current interface definition
- E-mail notifications
- Access to data in Excel
- Remote maintenance
- Waste weight recording
- Water management with cooling water monitoring and well management

Additional options

- Redundant design of both the TALAS data acquisition system and the UmweltOffice® evaluation software
- Digital interface to the analyzer in line with VDI 4201
- Connection to higher-level systems, e.g. process control systems, via Modbus TCP (standard), Modbus RTU, Profibus DP, Profinet and OPC
- QAL3 with CUSUM control chart
- Gas Emissions Trading Actmodule in line with VDI 4204 and EU Directive 2003/87/EC
- Annual CO2 load in line with EURegulation No. 601/2012
- 'EmissionRegister' as an external module for preparing emissions declarations and reporting in line with PRTR/IEP

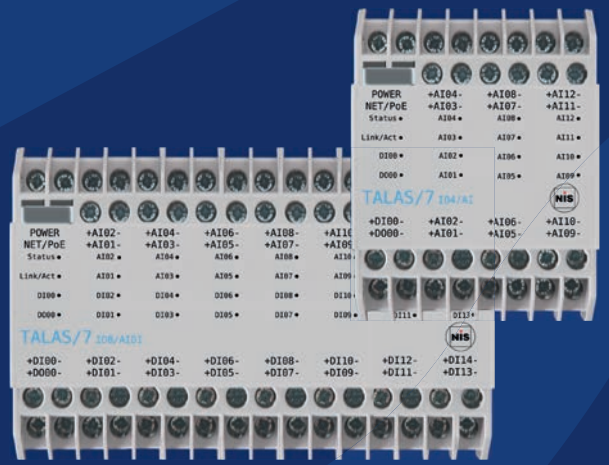
Our solution for small scale installations
TALAS with UmweltOffice® sE consists of a PC combined with a TALAS data acquisition unit. It includes a non-expandable license for connecting one TALAS software component and up to 12 analog inputs. The EDT interface and other special modules are not included.

TALAS data acquisition units with integrated software modules (TALAS-SW) and local data storage process the measured values directly at the analyzer. They provide physical measured values, minute values, partial integrals, and short-term average values, which are stored in a ring buffer.

- For further processing in line with emissions legislation, the emission data are transmitted via the network to the UmweltOffice® PC and stored in the database.
- TALAS accepts analysis data from analyzers connected via a digital interface in line with VDI 4201.
- Through the UmweltOffice® web interface, the TALAS modules can be configured to meet a wide range of requirements.
- Various interfaces allow TALAS to be easily connected to a wide range of process control systems (Modbus TCP/RTU, Profibus DP, Profinet, OPC DP/UA).
- An integrated website enables direct access to the TALAS modules directly via the intranet/internet for service purposes.

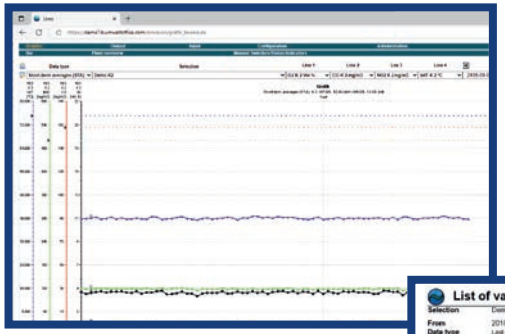
1,000

TALAS UNITS SUPPLIED FOR CONTINUOUS EMISSIONS MONITORING.



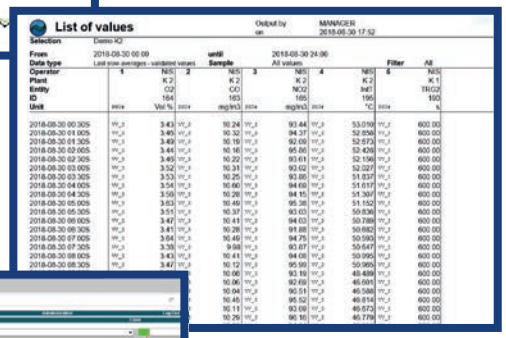
Network linked TALAS input/output modules can be combined to flexibly perform a wide range of measurement tasks.

04
TALAS: VERSATILE & USER-FRIENDLY SOLUTION



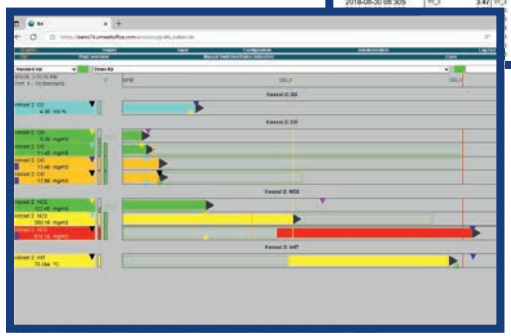
01

UmweltOffice® user interfaces are displayed in a web browser.



02

All reports are generated as PDF files for on-screen viewing and for downloading.



03

Data series can be displayed in CSV or XLSX format and exported for further processing.

“Safety, efficiency, control: With TALAS, we set international quality standards.”

siempelkamp-nis.com

Locations:

Austria
Belgium
Bosnia
China
Germany
Greece
Ireland
Lithuania
Luxembourg
Netherlands
Romania
Singapore
Switzerland
Turkey

Customer industries:

Asphalt mixing plants
Automotive industry
Cement industry
Chemical industry
Energy suppliers
Glass industry
Iron and steel
Municipal utilities
Paper and wood industry
Pharmaceutical and healthcare
Waste-to-energy plants

ANY QUESTIONS? WE'VE GOT ANSWERS

SIEMPELKAMP NIS Ingenieurgesellschaft mbH is part of the globally operating SIEMPELKAMP Group. NIS specializes in providing solutions that ensure maximum safety, availability, and cost-effectiveness for plants and their components.

As an independent provider, NIS delivers turnkey systems, high-quality products, and customized concepts for a wide range facilities, including energy generation, waste incinerators, cement plants and more. Our customers include industrial companies, government agencies, and institutions in Germany and worldwide.

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