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CONFIRMATION

of Product Conformity (QAL1)

Approved AMS:	MCS200HW for CO, NO, NO_2, N_2O, SO_2, HCl, NH_3, CH_4, TOC, O_2, H_2O and CO_2
Manufacturer:	Endress+Hauser SICK GmbH + Co. KG Bergener Ring 27 01458 Ottendorf-Okrilla Germany
Test Institute::	TÜV Rheinland Energy & Environment GmbH

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

EN 15267-1 (2009), EN 15267-2 (2023), EN 15267-3 (2023), EN 12619 (2013) as well as EN 14181 (2014).

The AMS underwent independent expert testing and was accepted.
This confirmation is valid up to the publication of the certificate,
but no longer than 9 months from the date of issue
(this document contains 5 pages).

This confirmation is valid until: 31 December 2026

TÜV Rheinland Energy & Environment GmbH
Cologne, 10 April 2026

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

i. A. Dipl.-Ing. C. Röllig

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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.

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Test Report:	EuL/21266095/B dated 21 October 2025
Initial certification:	26 March 2019
Expiry date:	31 December 2026

Approved application
The tested AMS is suitable for use at plants according to Directive 2010/75/EC, chapter III (combustion plants / 13th BImSchV:2021), chapter IV (waste incineration plants / 17th BImSchV:2021), Directive 2015/2193/EC (44th BImSchV:2022), TA Luft:2021, 30th BImSchV:2019 and 27th BImSchV:2013. The measured ranges have been selected so as to ensure as broad a field of application as possible.

The suitability of the AMS for this application was assessed on the basis of a laboratory test and a more than twelve month field test at a waste incineration.

The AMS is approved for an ambient temperature range of +5 °C to 40 °C.

The notification of suitability of the AMS, 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 AMS is suitable for monitoring the emission limit values and oxygen concentration relevant to the application.

Any potential user should ensure, in consultation with the manufacturer, that this AMS is suitable for the intended purpose.

Note
The legal regulations mentioned do not correspond to the current state of legislation in every case. Each user should, if necessary, in consultation with the competent authority, ensure that this AMS 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/21266095/B dated 21 October 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.

AMS designation:
MCS200HW for CO, NO, NO_2, N_2O, SO_2, HCl, NH_3, CH_4, H_2O, CO_2, O_2 and TOC

Manufacturer:
Endress+Hauser SICK GmbH + Co. KG, 01458 Ottendorf-Okrilla, Germany

Field of application:
Modular measuring system for plants requiring official approval according to the 13th BImSchV, the 17th BImSchV, the 30th BImSchV, the TA Luft and for plants according to the 27th BImSchV and 44th BImSchV

Measuring ranges during performance testing:

Component	Module name	Certification range	Supplementary range	Unit	Maintenance interval
CO	„CO“	0 - 30	0 – 10,000	mg/m³	6 Months
NO	„NO“	0 - 50	0 – 2,500	mg/m³	6 Months
NO_2	„NO_2“	0 - 50	0 – 500	mg/m³	6 Months
N_2O	„N_2O“	0 - 45	0 – 2,000	mg/m³	6 Months
SO_2	„SO_2“	0 - 75	0 – 2,500	mg/m³	6 Months
HCl	„HCl“	0 - 15	0 – 3,000	mg/m³	6 Months
NH_3	„NH_3“	0 - 7	0 – 500	mg/m³	6 Months
CH_4	„CH_4“	0 - 50	0 – 500	mg/m³	6 Months
CO_2	„CO_2“	0 - 25	-	Vol.-%	6 Months
H_2O	„H_2O“	0 - 40	-	Vol.-%	6 Months
O_2	„O_2“	0 - 25	-	Vol.-%	6 Months
TOC	„TOC“	0 - 15	0 – 50 / 150 / 500	mg/m³	3 Months

Software version:
MCS200HW: 9264565_1.8.6.5R_1NRE
GMS811 FIDORi: 9230690_4.003
BCU: 9150883_4.007

Restrictions:
The modules labelled “SO2” and “HCl” cannot be used to monitor the emission limit values of the 17th BImSchV (2024 edition).

Notes:

1. The maintenance interval is six months. When using the TOC module, the maintenance interval is three months.
2. When testing the HCl and NH3components, both dry and humid test gases may be used.
3. The measuring system performs an automatic zero adjustment daily. Suitable instrument air or synthetic air is required for this.
4. The integrated FID type GMS811 FIDORi performs a daily zero adjustment. The zero air required for this is generated using the integrated zero air preparation system (version ‘i’).
5. The measuring system features a digital Modbus (TCP/IP) interface in accordance with VDI 4201 Part 1 and Part 3.
6. Maintenance work must be spread over several days in order to comply with the criteria for plant downtime under 13th BImSchV and 17th BImSchV.
7. When checking the correct installation and functionality of the assembly of the measuring system’s modules, the maintenance interval for the individual device configuration must be determined.
8. The measuring system can be optionally equipped with a climate control unit. With an integrated climate control unit, the measuring system can be used in an ambient temperature range of 5 °C to 50 °C. Without an integrated climate control unit, the measuring system can be used in an ambient temperature range of 5 °C to 40 °C.
9. In addition to the basic display, the measuring system can also be fitted with the larger web display on the front door.
10. The measuring system can alternatively be operated with the revised SFU200 gas sampling filters with protection class IP54 or SFU250 with protection class IP66.
11. Supplementary test (extension of maintenance intervals for reduced certification ranges for CO, NO, N_2O and NH_3) relating to the announcement by the Federal Environment Agency of 27 August 2025 (BAnz AT 31.10.2025 B5, Chapter I, Section 3.1).
12. The supplementary test for the reduced certification scopes CO, NO, N_2O and $NH_3$was carried out in accordance with standard DIN EN 15267-3:2024.
13. The test report forms an integral part of the TÜV Rheinland test report numbered 936/21242470/C dated 6 March 2019.

Test Institute: TÜV Rheinland Energy & Environment GmbH, Cologne
Report No.: EuL/21266095/B dated 21 October 2025

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Tested product

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

The modular MCS200HW measuring system is a measurement rack equipped with a single-beam infrared photometer using the bi-frequency and gas filter correlation method. The MCS200HW can measure up to 10 IR components present in the flue gas emitted by industrial combustion plants.

The MCS200HW operates extractively: a sampling probe extracts flue gas from the duct which is then transported to the analyser via a sample line. All gas-carrying components from the sampling probe to the cell are heated above the dew point. An ejector pump transports the sample gas.

A zirconium dioxide sensor is used to measure oxygen alongside the IR components. As an option, a GMS811 FIDORi flame ionisation detector can be integrated to measure total organic carbon. The optional use of internal adjustment cells facilitates span point checks.

The AMS under test comprises the following individual components:

- Sampling probe Sick sampling filter SFU-BF NI GL
  heated to 200 °C with zero gas and back purge connection,
- Sample gas filter made of metal mesh SilicoNert® covered,
- Heated sample line, inner diameter 6 mm, heated to 200 °C,
- Analyser rack manufactured by Rittal c/w:
  - Modular analyser comprising the heated sample gas cell with single-beam infrared photometer with bi-frequency and gas filter correlation method as well as a zirconium dioxide to measure oxygen,
  - GMS811 FIDORi FID analyser for the determination of total organic carbon with integrated zero air conditioning at the inner door of the analyser rack with (optional) BCU control unit located underneath,
  - Display unit at the outer wall of the analyser rack, measured value display and operation of the analyser system,
  - active fan unit installed in the rack door and air intake on top of the analyser rack,
  - Pressure reducer to adjust the instrument air,
  - Electronics unit with analogue interfaces for the output of measured signals and status signals,
  - the measuring system provides a digital Modbus interface (TCP/IP) in accordance with VDI guideline 4201, parts 1 and 3 (optional).

The data output is under standard conditions wet and without offsetting waste gas moisture.