

CONFIRMATION

of Product Conformity (QAL1)

AMS designation: GM32 LowNO_x GMP for NO and SO₂

Manufacturer: SICK AG
Nimburger Straße 11
79276 Reute
Germany

Test Laboratory: TÜV Rheinland Energy GmbH


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

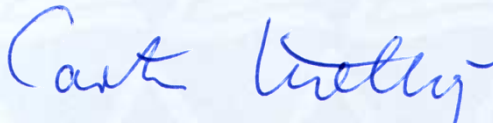
**EN 15267-1 (2009), EN 15267-2 (2009), EN 15267-3 (2008)
and EN 14181 (2015)**

The AMS 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 4 pages).

Expiry date: 21 August 2018

TÜV Rheinland Energy GmbH
Cologne, 22 February 2018


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


i. A. Dipl.-Ing. C. Röllig

www.umwelt-tuv.eu
tre@umwelt-tuv.eu
Tel. +49 221 806-5200

TÜV Rheinland Energy GmbH
Am Grauen Stein
51105 Köln

Test institute accredited to EN ISO/IEC 17025:2005 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.

Confirmation:
22 February 2018

Test Report: 936/21239647/A dated 4 October 2017
Expiry date: 21 August 2018

Approved application

The tested AMS is suitable for use at combustion plants according to Directive 2010/75/EU, chapter III (13th BImSchV), at waste incineration plants according to Directive 2010/75/EU, chapter IV (17th BImSchV), the 27th BImSchV, TA Luft and other plants requiring official approval. The measured ranges have been selected so as to cater for 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 three-month field test at a waste incineration plant.

The AMS is approved for an ambient temperature range of -20 °C to +50 °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 limit values relevant to the application.

Any potential user should ensure, in consultation with the manufacturer, that this AMS is suitable for the installation at which it will be installed.

Basis of the confirmation

This confirmation is based on:

- Test report 936/21239647/A dated 4 October 2017 issued by TÜV Rheinland Energy GmbH
- The ongoing surveillance of the product and the manufacturing process
- Expert testing and approval by an independent body

AMS designation:

GM32 LowNO_x GMP for NO and SO₂

Manufacturer:

SICK AG, Reute

Field of application:

For plants requiring official approval and for plants according to the 27th BImSchV

Measuring ranges during performance testing:

| Component | Certification range | Supplementary measuring ranges | | Unit |
|-----------------|---------------------|--------------------------------|--------|-----------------------|
| | | | | |
| SO ₂ | 0–75 | 0–1000 | 0–2500 | mg/m ³ ·m* |
| NO | 0–70 | 0–700 | 0–1302 | mg/m ³ ·m* |

* at a measurement path length of 1 m

Software versions:

9246548_YXI6_160914

Operating software: SOPAS ET 3.2.4

Restrictions:

none

Notes:

1. The maintenance interval is four weeks.
2. The influence of vibration was assessed with a GMP measuring rod of 2 m in length.

Test Report:

TÜV Rheinland Energy GmbH, Cologne

Report no. 936/21239647/A dated 4 October 2017

Tested product

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

The GM32 LowNOX GMP In-Situ gas analyser continually monitors NO and SO₂ concentrations in gas ducts.

The GM32 LowNOX GMP In-Situ gas analyser, GMP measuring probe version, relies on the in-situ technology with direct opto-electronic measurement. Measured values are collected directly and contactless in the gas flow via an open measurement path of the GMP measuring probe which extends into the duct.

The measuring system under test consisted of:

- Sender/receiver unit (SR unit)
- GMP measuring probe
- Purge air attachment for SR unit and reflector
- SLV4 purge air unit for SR unit and reflector
- Connection unit c/w I/O modules
- SICK SOPAS ET parameterisation software
- Heated filter box

Active measurement path or open measurement path and factors:

| Measuring gap in mm | Factor for the upper range value (URV) | Available rod lengths (nominal) in mm |
|---------------------|--|---------------------------------------|
| 250 | URV* 4 | 900, 1500, 2000, 2500 |
| 500 | URV* 2 | 1500, 2000, 2500 |
| 750 | URV* 1.1 | 1500, 2000, 2500 |
| 1000 | URV* 1 | 1500, 2000, 2500 |
| 1250 | URV* 0.8 | 2000, 2500 |
| 1500 | URV* 0.666 | 2000, 2500 |
| 1750 | URV* 0.571 | 2500 |

The current software version is:

9246548_YX16_160914

The current manual version is:

8012706/ZVF0/V2-1/2018-02.