

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

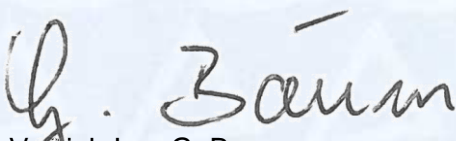
**This is to certify that the AMS has been tested and certified
according to the standards**

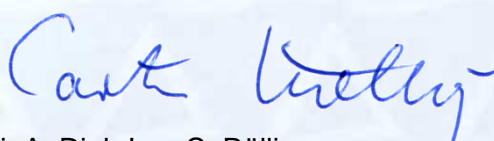
**EN 15267-1: 2009, EN 15267-2: 2009, EN 15267-3: 2007
and EN 14181: 2014**

The AMS underwent independent expert testing and was accepted.
This confirmation is valid up to the publication of the certificate,
but no longer than 6 months from the date of issue
(this document contains 4 pages)

Expiry date: 19 December 2018

TÜV Rheinland Energy GmbH
Cologne, 20 June 2018


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


i. A. Dipl.-Ing. C. Röllig

www.umwelt-tuv.eu
tre@umwelt-tuv.eu
Phone. +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:
20 June 2018

Test Report: 936/21239647/B dated 4 March 2018
Expiry date: 19 December 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 and 30th BImSchV and TA Luft. 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 six-months 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/B dated 4 March 2018 issued by TÜV Rheinland Energy GmbH
- The ongoing surveillance of the product and the manufacturing process
- Expert testing and approval by an independent body

Confirmation:
20 June 2018

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*	0–1 000*	0–2 500*	mg/m ³ ·m
NO	0–70*	0–700*	0–1 302*	mg/m ³ ·m

* at 1 m measurement path length

Software versions:

9246548_YXI6_160914

Operating software: SOPAS ET 3.2.4

Restrictions:

none

Notes:

1. The maintenance interval is three months.
2. The vibration test was performed with a two-meter long GMP measuring probe.
3. Supplementary testing (extension of the maintenance interval) as regards Federal Environment Agency (UBA) notice of 21 February 2018 (BAnz AT 26.03.2018 B8, chapter I number 3.3).

Test Report:

TÜV Rheinland Energy GmbH, Cologne

Report no.: 936/21239647/B dated 4 March 2018

Tested product

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

The GM32 LowNO_x GMP In-Situ gas analyser continuously measures the concentration of NO and SO₂ in gas ducts.

The GM32 LowNO_x 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 AMS tested here comprises the following components:

- - 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 length, measuring gap and factors

Measuring gap in mm	Factor for the upper limit of measurement (ULM)	Probe lengths available in mm (nominal)
250	ULM * 4	900, 1500, 2000, 2500
500	ULM * 2	1500, 2000, 2500
750	ULM * 1.333	1500, 2000, 2500
1000	ULM * 1	1500, 2000, 2500
1250	ULM * 0.8	2000, 2500
1500	ULM * 0.666	2000, 2500
1750	ULM * 0.571	2500

The current software version is:

9246548_YX16_160914

Operating software: SOPAS ET 3.2.4