



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx PRE 15.0064X** Page 1 of 4 [Certificate history:](#)
Issue 0 (2015-12-18)

Status: **Current** Issue No: 1

Date of Issue: 2020-03-02

Applicant: **NEO Monitors AS**
Prost Stabels vei 22
2019 Skedsmokorset
Norway

Equipment: **LaserGas II SP ,H2, OP**

Optional accessory:

Type of Protection: **Ex pxb**

Marking: Ex pxb [op is Ga] IIC T4 Gb, -20°C≤Ta≤+55°C.
Ex pxb [op is Da] IIIC T100°C Db, -20°C≤Ta≤+55°C.

Description	Option 1	Option 2
Volume of enclosure	12 Litre	12 Litre
Minimum purge flow	11 l/min	48 l/min
Minimum purging time	3m 40 sec	1 min 15 sec
Minimum Overpressure	0.8mbar	4mbar
Maximum Overpressure	20 mbar	20mbar
Maximum leakage rate	2 l/min	2 l/min

Approved for issue on behalf of the IECEx
Certification Body:

Asle Kaastad

Position:

Certificatoin Manager

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DNV GL Presafe AS
Veritasveien 3
1363 Høvik
Norway





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Manufacturer: **NEO Monitors AS**
Prost Stabels vei 22
2019 Skedsmokorset
Norway

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-2:2014-07 Explosive atmospheres - Part 2: Equipment protection by pressurized enclosure "p"
Edition:6

IEC 60079-28:2015 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[NO/PRE/ExTR14.0013/00](#)

[NO/PRE/ExTR15.0057/00](#)

[NO/PRE/ExTR15.0057/01](#)

Quality Assessment Report:

[NO/PRE/QAR16.0002/01](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

SP : The LaserGas Monitor is an optical instrument based on transmitting infrared laser light from a transmitter unit on one side of the stack to a receiver unit in the diametrically opposite side of the stack. The measurement principle is called infrared single-line absorption spectroscopy.

SP H2: Similar construction like SP. Equipment differs with optical measurement technique optimised to measure Hydrogen. Also slightly different in construction at the lens area at the receiver , but uses same O-ring type like SP and OP for IP protection.

OP: The LaserGas II OP Monitor is also an optical instrument based on transmitting infrared laser light similar to SP but transmitter and receiver housed in a single enclosure (trans-receiver).

Rating : 18-32VDC

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Safety control system are not part of the assessment. Ex certified safety control system complying relevant safety integrity level shall be used.
- The monitoring device of the pressurization, consisting at least of the control, the pressure resp. flow monitoring and the protective gas distribution, has to be tested with regard to the function of the monitoring device according to the requirements of the Clause 7 of the IEC60079-2 concerning the function of the monitoring device.
- The monitoring device of the pressurization has to be set at least with due observation of the data fixed in the certificate for the disconnection of the LaserGas Monitor or connection of a warning signal in case of the fixed minimum excess pressure for the protective gas has fallen below, - examination of the leakage loss rate, - the minimum volumetric flow of protective gas during purging.
- If not already embodied into the pressurization control system, a safety device limiting the pressure to the specified maximum overpressure of the equipment must be mounted.
- The equipment contains a 3V lithium cell. Do not open equipment when an explosive atmosphere may be present



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

01- Updated electronics, inclusion of new variant SP H2, assessment to new version of standards