IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.: IECEx PRE 15.0043X

Status: **Current**

Date of Issue: **2018-10-30**

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

Equipment: **Tuneable Diode Laser Spectrometer**
Optional accessory:

Type of Protection: **Ex d, tb and op-is**

Marking:

Issue No: 4

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Certificate history:
Issue No. 4 (2018-10-30)
Issue No. 3 (2017-12-04)
Issue No. 2 (2017-03-13)
Issue No. 1 (2016-06-22)
Issue No. 0 (2015-08-21)

LaserGas III	LaserGas III Ext
Ex db [op is Ga] IIC T4 Gb	Ex db [op is Ga] IIC T4 Gb
Ex tb [op is Da] III C T90°C Db	Ex tb [op is Da] III C T100°C Db
-20°C ≤ Ta ≤ +55°C	-40°C ≤ Ta ≤ +60/65°C

Approved for issue on behalf of the IECEx Certification Body: Asle Kaastad

Position: Certification 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 the Official IECEx Website.

Certificate issued by:

DNV GL Nemko Presafe AS
Veritasveien 3
1363 Høvik
Norway

Presafe
A DNV GL & NEMKO COMPANY

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

Additional Manufacturing location(s):

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 apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-28 : 2015 Edition:2	Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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 Report:

NO/DNV/ExTR10.0004/01
NO/DNV/ExTR10.0007/00
NO/PRE/ExTR14.0013/00
NO/PRE/ExTR15.0032/02
NO/PRE/ExTR15.0032/03
NO/PRE/ExTR15.0032/04
NO/PRE/ExTR15.0075/00

Quality Assessment Report:

NO/PRE/QAR16.0002/00

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The LaserGas III 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.

Inside Ex d enclosure for transmitter there is an optical instrument providing Ex [op is Ga/Da] beam (covered by this report and the following reports: NO/PRE/ExTR14.0013 and NO/DNV/ExTR10.0007, NO/PRE/ExTR15.0075/00).

Both transmitter and receiver enclosures are fitted with glass lens either cemented in the lid or mounted to form the flameproof joint. Mounting according to manufacturer's instructions must be followed to ensure protection of lens.

Equipment is provided with one or two certified threaded holes and delivered with permanently connected cable and certified cable glands. The second hole can be delivered with appropriate certified breathing device instead of the cable or can be delivered closed with appropriate certified blanking element.
The free end of the permanently connected cable shall be protected by type of protection listed in clause 1 of IEC 60079-0:2011.

The examination of the gas detector doesn't include the functional performance of the apparatus, as the instruments do not have measuring function for explosion protection.

SPECIFIC CONDITIONS OF USE: YES as shown below:

a) Repairs of the flameproof joints must be made in compliance with the structural specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in table 3 of EN/IEC 60079-1.
b) The fasteners used on the Ex-d enclosure must be the type specified by the manufacturer: M6x10 A4-80.
c) The Cable gland may not provide sufficient clamping. User shall provide additional clamping of the cable to ensure that pulling and twisting is not transmitted to the terminations.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

New cell models included.