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 17.0057X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2018-02-09)
Date of Issue:	2021-07-09		
Applicant:	**TELEDYNE OLDHAM SIMTRONICS SAS** Rue Orfila, ZI EST ARRAS Cedex F-62027 **France**		
Equipment:	**Laser Gas Detector**		
Optional accessory:			
Type of Protection:	**Ex db, op is**		
Marking:	Ex db [op is] IIC T6/T5 Gb, -55°C ≤ Ta ≤ +65/75°C		

Approved for issue on behalf of the IECEx Certification Body: **Kenneth Narvestad**

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 www.iecex.com or use of this QR Code.

Certificate issued by:

DNV Product Assurance AS
Veritasveien 3
Hovik 1363
Norway

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Certificate No.: **IECEx PRE 17.0057X**

Date of issue: 2021-07-09 Issue No: 1

Manufacturer: **TELEDYNE OLDHAM SIMTRONICS SAS**
Rue Orfila, ZI EST
ARRAS Cedex F-62027
France

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 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

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/DNV/ExTR10.0001/00
NO/DNV/ExTR10.0001/01
NO/DNV/ExTR10.0001/02
NO/PRE/ExTR15.0075/00
NO/PRE/ExTR17.0064/00
NO/PRE/ExTR17.0064/01

Quality Assessment Report:

FR/INE/QAR06.0006/11

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The Laser Gas detector 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] beam.

Both transmitter and receiver enclosures are fitted with glass lens cemented in the lid. 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 delivers 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. 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.

Type designation: GD1

Electrical Data:
Voltage: 18-32 VDC
Power: 10 W

Degrees of protection (IP Code) IP66/67

Routine tests
The routine overpressure test has to be performed on the lid of the receiver unit (18.5 bar acc. Cl. 16 of IEC 60079-1:2014).

Title:	Drawing No.:	Rev. Level:	Date:
Technical Documents			
836-816961	Gas Detector Certification Drawing GD1	R4	2017-11-29
836-816962	Gas Detector System Overview Drawing GD1 System	R4	2017-12-07
590-817035	Plate ident GD1	R3	2020-06-29

SPECIFIC CONDITIONS OF USE: YES as shown below:
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.

The fasteners used on the Ex-d enclosure must be the type specified by the manufacturer M6x10, yield stress min. 500MPa

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.

The measuring function of the apparatus is not covered by this type examination. It shall comply with the requirements from the relevant standards which provide guidance on the performance of gas detection equipment and safety devices.

The threaded joints may be lubricated to maintain flameproof protection. Only non-hardening lubricants or non-corrosive agents having no volatile solvents may be used.

For use in explosive atmosphere, cable glands and blanking plugs shall be IECEx certified « db".

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Products ownership has been transferred from SIMTRONICS AS to Teledyne Oldham Simtronics SAS. Re-issued to have new name and address.

Updated to latest harmonised standard for IEC 60079-0:2017.