



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **CSANe 24ATEX1274X** Issue: **0**

4 Equipment: **LIDoTT Sensor**

5 Applicant: **Detectronic Limited**

6 Address: **Ground Floor, 16 Lindred Road
Lomeshaye Industrial Estate
Nelson
Lancashire
BB9 5SR
United Kingdom**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-11:2012

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 1G
Ex ia IIB T4 Ga
-20 °C ≤ Tamb ≤ +60 °C

Signed:

M Halliwell

Title: Senior Director of Operations



Project Number 80224259

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CSA Group Netherlands B.V. Utrechtseweg 310, Building B42, 6812AR Arnhem, The Netherlands



SCHEDULE

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**CSANe 24ATEX1274X
Issue 0**

13 DESCRIPTION OF EQUIPMENT

The LIDoTT Sensor is a level (distance) measuring device for use within the sewer networks. It is housed in a custom plastic moulded case and designed for connection to suitable certified associated equipment. The LIDoTT Sensor will be fastened to the sewer wall by means of a bracket and bolts.

The device has three sensors (piezo, pressure and temperature) mounted in the base (transducer plate) of the case and the LIDoTT Sensor communicates and is powered by a connecting cable exiting from the top of the housing.

The LIDoTT contains, a Tadiran SL2780 or Tadiran SL2880 or Xeno XL-205F as an auxiliary supply, contained within the enclosure.

The equipment has the following safety description:

- Ui = 13.65V
- Ii = 150 mA
- Pi = 0.65W
- Ci = 0
- Li = 0

Incorporating the following changes:

- i. Addition of alternative safety components.
- ii. Addition of alternative non-safety components.
- iii. Removal of components erroneously identified as safety components.
- iv. Alternative potting compounds added.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	20 January 2024	R80224259A	The release of the prime certificate.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

15.1 Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth. This is particularly important if the equipment is installed in a Zone 0 location.

15.2 Only Tadiran SL2780, SL2880 or Xeno XL-205F batteries may be used as an auxiliary supply. This must only be changed when it can be proved that the local atmosphere contains no hazardous gas and must be changed by a suitably authorised person.



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16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF MANUFACTURE

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.
- 17.4 The LIDoTT Sensor is designed in accordance with general electrical safety standards e.g. IEC 60950 or IEC 61010-1.

Certificate Annexe



Certificate Number: CSANe 24ATEX1274X

Equipment: LIDoTT Sensor

Applicant: Detectronic Limited

Issue 0

Drawings to support issue 0

Drawing	Sheets	Rev.	Title
C103-1-DRW003-4	1 of 1	4	LIDoTT Sector Diagram
CR103-1-DRW001	1 of 1	1	LIDoTT Cased Assembly Drawing
CR103-1-DRW002	1 of 1	3	LIDoTT General Assembly
C103-PN001-7	1 to 3	1	LIDoTT Microcontroller Schematic
C103-PN001-7-BOM-3	1 to 4	/	LIDoTT PCB ATEX Certified BOM
CR103-1-DRW004	1 of 1	1	LIDoTT Front Face Label
C103-1-DRW002-4	1 of 1	4	LIDoTT General Assembly
C103-2-DRW001-1	1 of 1	1	LIDoTT Sensor V2 Cased Assembly Drawing
C103-2-PN001-2-SCH-1	1 to 6	1	LIDoTT Sensor V2 Schematic Diagram
C103-2-PN001-2-PCB-1	1 to 6	2	LIDoTT Sensor V2 PCB
C103-2-DRW002-1	1 of 1	1	LIDoTT Sensor V2 General Assembly
C103-2-PN001-2-BOM-1	1 to 3	1	LIDoTT Sensor V2 BOM
C103-2-DRW004-2	1 of 1	2	LIDoTT Sensor Front ATEX Label
C103-2-DRW003-2	1 of 1	2	LIDoTT Sensor V2 Sector Diagram

Drawings amended at issue 0

Drawing	Sheets	Rev.	Date (Stamp)	Title
P103-2-PN006-1-DWG-7	1 of 1	7	13 Jan 25	LIDoTT Sensor (Smart) V2 Label

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