



UNITED KINGDOM CONFORMITY ASSESSMENT

1 **UK TYPE EXAMINATION CERTIFICATE**

2 Equipment Intended for use in Potentially Explosive Atmospheres

UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

3 Certificate Number: **CSAE 24UKEX1062X** Issue: **0**

4 Product: **LIDoTT Sensor**

5 Manufacturer: **Detectronic Limited**

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

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

8 CSA Group Testing UK Limited, Approved Body number 0518, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Schedule 1 of the Regulations. 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 has been assured by compliance with:

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

Except in respect of those requirements listed at Section 16 of the schedule to this certificate. The above standards may not appear on the UKAS Scope of Accreditation, but have been added through flexible scope of accreditation, which is available on request.

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

11 This UK TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Regulations apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of this product shall be in accordance with Regulation 41 and include the following:



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

Name: M Halliwell
Title: Senior Director of Operations



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13 DESCRIPTION OF PRODUCT

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

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.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS (REGULATIONS SCHEDULE 1)

In addition to the Essential Health and Safety Requirements covered by the standards listed in Section 9, all other requirements are demonstrated in the relevant reports.

17 PRODUCTION CONTROL

17.1 Holders of this certificate are required to comply with production control requirements defined in Schedule 3A, as applicable, and CSA Group Testing UK Regulations for Certificate Holders



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- 17.2 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.
- 17.3 The LIDoTT Sensor is designed in accordance with general electrical safety standards e.g. IEC 60950 or IEC 61010-1.





Certificate Annexe

Certificate Number: CSAE 24UKEX1062X
Product: LIDoTT Sensor
Manufacturer: 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

