1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 14ATEX2027X** Issue: **1**

4 Equipment: **Pressure Transducer Interface (PTI)**

5 Applicant: **Detectronic Limited**

6 Address: Regent Street
Whitewalls Industrial Estate
Colne
Lancashire BB8 8LJ
UK

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 60079-0:2012 EN 60079-11:2012 EN 60079-26:2006

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
Ta = -40°C to +60°C

Project Number 1944

Signed:

Title: Director of Operations

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

SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE **Sira 14ATEX2027X**
Issue 1

13 DESCRIPTION OF EQUIPMENT

The Pressure Transducer Interface (PTI) together with the pressure transducer allows the measurement of external pressures, pr ipally in the form of depths of dirty water. The Pressure Transducer Interface (PTI) is designed to be connected to the encoder type input on separate, external, intrinsically safe equipment. The electronic circuit is fully encapsulated within the enclosure, which is manufactured from thermoplastic polymers. The Pressure Transducer Interface (PTI) is permanently connected by an integral cable to one of the following types of separate, previously certified DRUCK pressure transducers:

Equipment		ATEX certificate
UNIK 5000 Pressure Sensor:	PMP version PDCR Version (Passive) PDCR Version (Linearised)	Baseefa 10ATEX0204X
Pressure Transducer PDCR IS-0069/B Pressure Transducer PDCR IS-0069/C		BAS 02ATEX1250X

The PTI has the following entity parameters at the input port J2:

Ui = 7.14 V Ii = 261 mA Pi = 291 mW Ci = 0 + 10.2 nF* Li = 0 + 51 µH*
* - maximum total capacitance (Cc) and inductance (Lc) of the integral cable.

The PTI has been additionally assessed and approved when supplied from the Port 8 (JP6, encoder input) of the Cello I.S. GSM Data Logger (approved under Sira 06ATEX2010X) with Io = 341.1 mA, taking into account the implied source resistance of 20.9 Ω for further current limitation.

The output parameters of the PTI have been assessed as compliant with the attached DRUCK pressure transducers listed above, including consideration of the cable capacitance and inductance. Therefore the output parameters of the PTI are not required, but are listed below for reference only (port J1):

Uo = 7.14 V Io = 261 mA Po = 291 mW Co = 239.6 µF Lo = 2 mH

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	11th March 2014	R31569B/00	The release of prime certificate.
1	15 October 2019	1944	• Transfer of certificate **Sira 14ATEX2027X** from Sira Certification Service to CSA Group Netherlands B.V.. • EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. *(In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)*

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SCHEDULE

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14.3 Certificate number Sira 14ATEX2026X Issue 0

15 **SPECIAL CONDITIONS FOR SAFE USE** (denoted by X after the certificate number)

15.1 The user/installer shall install the equipment taking into account any restrictions or special conditions for safe use/conditions for certification that are applicable to the previously certified pressure transducers. Advice about installation and copies of the relevant certification is available from the manufacturer of the PTI.

15.2 When supplied from the Port 8 (JP6, encoder input) of the Cello I.S. GSM Data Logger, the user/installer shall install the equipment taking into account any restrictions or special conditions for safe use/conditions for certification associated with Cello I.S. GSM Data Logger. Advice about installation and copies of the relevant certification is available from the manufacturer of the PTI.

15.3 Under certain extreme circumstances, exposed plastic parts of the enclosure may store an ignition-capable level of electrostatic charge. Therefore, the user/installer shall implement precautions to prevent the build up of electrostatic charge, e.g. locate the equipment where a charge-generating mechanism (such as wind-blown dust) is unlikely to be present and clean with a damp cloth.

15.4 The enclosure may have external fittings that are manufactured from light metal alloys including aluminium, magnesium, titanium and zirconium. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation.

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.

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

Certificate Annexe

Certificate Number: **Sira 14ATEX2027X**

Equipment: **Pressure Transducer Interface (PTI)**

Applicant: **Detectronic Limited**

Issue 0

Drawing	Sheets	Rev	Date (Sira stamp)	Title
2128TC5D01	1 of 1	A	18 Feb 14	Pressure Transducer Interface ('PTI') I.S. Marking (Detectronic) ATEX only
2128TC5D02	1 of 1	A	18 Feb 14	Pressure Transducer Interface ('PTI') I.S. Marking (Detectronic) ATEX & IECEx

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