



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 21UKEX2363** Issue: **0**

4 Product: **I.S Low Voltage Power Supply and Communications Interface (LV PCI)  
Unit 1954-00-002**

5 Manufacturer: **Gill Instruments Limited**

6 Address: **Saltmarsh Park  
67 Gosport Street  
Lymington  
Hampshire SO41 9EG  
UK**

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 (1) GD  
[Ex ia Ga] IIC  
[Ex ia Da] IIIC  
Ta = -30°C to +60°C

Name: J A May  
Title: Director of Operations



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CSA Group Testing UK Ltd., Unit 6 Hawarden Industrial Park, Hawarden, CH5 3US, UK  
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**SCHEDULE**

**UK TYPE EXAMINATION CERTIFICATE**

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**13 DESCRIPTION OF PRODUCT**

The LVPCI Model 1954 is a galvanically-isolated power supply and communications interface between non- intrinsically safe equipment sited in non-hazardous and intrinsically safe equipment sited in hazardous environments. The LVPCI comprises an electronic circuit mounted on a printed circuit board which is housed in a plastic enclosure.

The safe area side terminals include J1 which is the DC input, J2 & J3 which are the RS 232 connectors, J4 which is an RS 422 connector.

**At Connector J1, J2, J3 and J4**

Um = 250 V.

The hazardous area side terminals include the J5(7 & 8) which connects to the Anemometer and J5 (1 to 6) which are the comms connectors. The terminals are marked up on the lid of the enclosure to help the user to make correct connections.

**Anemometer supply out terminals J5(7 & 8)**

Uo = 11.55 V Io = 122 mA Po = 352 mW Co = 1.59 µF Lo = 2.38 mH

**Comms Connectors J5 (1 to 6)**

Uo = 6.51 V Io = 29 mA Po = 47 mW Co = 22 µF Lo = 42.8 mH

The product description includes the following applicable amendments, only amendments directly applicable to UKCA certification have been included in this list.

The amendments are numbered to include a reference to the previous ATEX variation at which these were introduced.

- 1a The IS Low Power Supply and Comms. Interface (LV PCI) unit 1954-00-002 is allowed to be used with either the Model 1360 IS Anemometer (Sira 00ATEX 2218) or IS II Anemometer Part 1360-00- 097 (Sira 15ATEX2014).
- 1b A typographical correction was made to the Lo electrical parameters (µH changed to mH) of the IS Low Power Supply and Comms. Interface (LV PCI) unit 1954-00-002
- 2a Upgrade the upper certified ambient temperature from +40°C to +60°C. No changes have been made to the products

**14 DESCRIPTIVE DOCUMENTS**

**14.1 Drawings**

Refer to Certificate Annexe.

**14.2 Associated Reports and Certificate History**

Issue	Date	Report number	Comment
0	16 December 2021	R80087600A	The release of the prime certificate.

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

None



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### 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

17.2 In accordance with EN 60079-11:2012 clause 10.3, the power supply transformer of each manufactured sample of the equipment shall be subjected to an electric strength test using a test voltage of 1500Vac applied between the input and output windings for 60s. Alternatively, a voltage of 20% higher may be applied for 1s. There shall be no evidence of flashover or breakdown and the maximum current flowing shall not exceed 5mA.



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## Certificate Annexe

Certificate Number: CSAE 21UKEX2363

Product: I.S Low Voltage Power Supply and Communications Interface (LV PCI)  
Unit 1954-00-002

Manufacturer: Gill Instruments Limited

### Issue 0

Drawing	Sheets	Rev.	Date (Stamp)	Title
1954-C-001	1 of 1	5	24 Feb 14	Intrinsically safe low voltage power and communications interface (LV PCI) Circuit diagram
1954-00-002	1 & 2	1	24 Feb 14	LVPCI Final General Assembly
1954-00-002 BOM	1 & 2	2	05 Mar 14	LVPCI BOM
1954-10-001	1 to 5	5B	03 Oct 16	LVPCI PCB Bill of Material
1954-001 PCBSPC	1 of 1	5	24 Feb 14	PCB Specification
1954-30-023	1 of 1	2	24 Feb 14	LVPCI Internal Lid Label
1954-30-024	1 of 1	1	24 Feb 14	IS Transformer Assembly
1954-I-001	1 & 2	5	24 Feb 14	LV PCI PCB Top and Bottom Ident
1954-30-025	1 of 1	4	15 Sep 21	External Lid Engraving



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