



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX SIR 13.0159** issue No.:2

Status: **Current**

Date of Issue: **2016-10-13** Page 1 of 5

Certificate history:
Issue No. 2 (2016-10-13)
Issue No. 1 (2015-3-16)
Issue No. 0 (2014-3-10)

Applicant: **Gill Instruments Ltd**
Saltmarsh Park
67 Gosport Street
Lymington
Hampshire SO41 9EG
United Kingdom

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

Type of Protection: **Intrinsically Safe**

Marking: [Ex ia Ga] IIC
[Ex ia Da] IIIC
Ta = -30°C to +60°C

Approved for issue on behalf of the IECEx Certification Body: **N Jones**

Position: **Certification Manager**

Signature:
(for printed version)

Handwritten signature and date
2016-10-13

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom





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Certificate No.: IECEx SIR 13.0159

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Page 2 of 5

Manufacturer: **Gill Instruments Ltd**
Saltmarsh Park
67 Gosport Street
Lymington
Hampshire SO41 9EG
United Kingdom

Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011 Explosive atmospheres - Part 0: General requirements

Edition: 6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition: 6.0

*This Certificate **does not** indicate compliance with electrical 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 Report:

[GB/SIR/ExTR14.0054/00](#)

[GB/SIR/ExTR15.0071/00](#)

[GB/SIR/ExTR16.0260/00](#)

Quality Assessment Report:

[GB/SIR/QAR10.0007/02](#)



IECEx Certificate of Conformity

Certificate No.: IECEx SIR 13.0159

Date of Issue: 2016-10-13

Issue No.: 2

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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

$U_m = 250 \text{ V}$.

The hazardous area side terminals includes 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)

$U_o = 11.55 \text{ V}$	$I_o = 122 \text{ mA}$	$P_o = 352 \text{ mW}$	$C_o = 1.59 \mu\text{F}$	$L_o = 2.38 \text{ mH}$
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Comms Connectors J5 (1 to 6)

$U_o = 6.51 \text{ V}$	$I_o = 29 \text{ mA}$	$P_o = 47 \text{ mW}$	$C_o = 22 \mu\text{F}$	$L_o = 42.8 \text{ mH}$
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CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx SIR 13.0159

Date of Issue: 2016-10-13

Issue No.: 2

Page 4 of 5

EQUIPMENT(continued):

Conditions of manufacture

The Manufacturer shall comply with the following:

1. In accordance with IEC 60079-11:2011 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 1500 Vac applied between the input and output windings for 60s. Alternatively, a voltage of 20% higher may be applied for 1 s. There shall be no evidence of flashover or breakdown and the maximum current flowing shall not exceed 5 mA.



IECEX Certificate of Conformity

Certificate No.: IECEX SIR 13.0159

Date of Issue: **2016-10-13**

Issue No.: 2

Page 5 of 5

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1 – this Issue introduced the following changes:

1. 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 (IECEX SIR 13.0157) or IS II Anemometer Part 1360-00-097 (IECEX SIR 15.0013).
2. 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.

Issue 2 – this Issue introduced the following changes:

1. Upgrade the upper ambient certified temperature from $+40^{\circ}\text{C}$ to $+60^{\circ}\text{C}$. No changes have been made to the products.
2. IEC 60079-26:2006 was removed as all requirements are covered in IEC 60079-0:2011 for Ex ia Ga.