

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

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

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Certificate No.: **IECEx BAS 07.0035X** Page 1 of 4

Issue No: 8 Status: Current

2025-08-29 Date of Issue:

Applicant: **Hansford Sensors Ltd**

Artisan

Hillbottom Road Sands Industrial Estate

Bucks HP12 4HJ **United Kingdom**

Equipment: **HS-100 Series Accelerometer**

Optional accessory:

Intrinsic safety, gas and dust Type of Protection:

Ex ia IIC T4 Ga (-55°C ≤ Ta ≤ +110°C) Marking:

Ex ia IIIC T₂₀₀200°C IP65 Da (-55°C ≤ Ta ≤ +110°C)

Ex ia IIC T6 Ga (-55°C ≤ Ta ≤ +60°C)

Ex ia IIIC $T_{200}150^{\circ}$ C IP65 Da (-55°C \leq Ta \leq +60°C)

Approved for issue on behalf of the IECEx

Certification Body:

Engineering Manager Position:

Signature:

(for printed version)

29/8/2025 (for printed version)

This certificate and schedule may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing body.
The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate history: Issue 7 (2017-10-05)

Issue 6 (2016-03-22) Issue 5 (2015-01-09)

Issue 4 (2013-05-08) Issue 3 (2012-10-12)

Issue 2 (2011-03-11)

Issue 1 (2009-11-30)

Issue 0 (2007-07-16)

Certificate issued by:

SGS UK Limited Rockhead Business Park Staden Lane **Buxton, Derbyshire SK17 9RZ United Kingdom**





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Manufacturer: Hansford Sensors Ltd

Artisan

Hillbottom Road

Sands Industrial Estate

Bucks HP12 4HJ United Kingdom

Manufacturing locations:

Hansford Sensors Ltd

Artisan

Hillbottom Road Sands Industrial Estate

Bucks HP12 4HJ United Kingdom

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

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

Edition:6.0

This Certificate **does not** indicate compliance with 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 Reports:

GB/BAS/ExTR07.0076/00 GB/BAS/ExTR11.0045/00 GB/BAS/ExTR12.0254/00 GB/BAS/ExTR13.0101/00 GB/BAS/ExTR16.0097/00 GB/BAS/ExTR17.0267/00 GB/SGS/ExTR25.0102/00

Quality Assessment Report:

GB/BAS/QAR07.0040/12



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The HS-100 Series Accelerometer is designed to measure acceleration, shock or vibration by converting the signal generated by the compression of a Piezo Electric Crystal by a given seismic mass and outputting a broadband ac signal to the monitoring equipment.

The accelerometer comprises a piezo electric crystal connected to a signal conditioning board all contained within a stainless steel enclosure of various shapes measuring approximately 25cm³. The enclosure is a fully welded construction.

Electrical connections are made to the apparatus either via an IP65 rated connector or via an integral cable which is encapsulated in the end of the apparatus.

The apparatus has the following terminal parameters:

Connector only		10m of Cable				92m of Cable	
Ui =	28V	Ui =	28V			Ui =	28V
li =	93mA	li =	93mA			li =	93mA
Pi =	0.65W	Pi =	0.65W			Pi =	0.65W
Ci =	1.0nF	Ci =	9.9nF			Ci =	83nF
Li =	zero	Li =	7μH	or Li/Ri =	15.4μH/Ω	Li/Ri =	15.4μH/Ω

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The free end of the cable on the integral cable version of the apparatus must be terminated in an appropriately certified dust proof enclosure when dust protection is required.

2. The Ci of the equipment when fitted with 92m of cable has been increased from 41nF to 83nF.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 8.1

To confirm compliance of the equipment with the requirements of IEC 60079-0:2017 Ed. 7.

Variation 8.2

To permit marking update on Label for addition of 200mm dust layer and Notified Body number.

EXTR: GB/SGS/ExTR25.0102/00 File Reference: 25/0451