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 BAS 18.0095X

Issue No: 0

Certificate history:
Issue No. 0 (2018-12-10)

Status: **Current**

Date of Issue: **2018-12-10**

Applicant: **Hansford Sensors Limited**
Artisan
Hillbottom Road
Sands Industrial Estate
Bucks
HP12 4HJ
United Kingdom

Equipment: **HS-104I Series Accelerometers**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking:
Ex ia IIC T6...T4 Ga

Approved for issue on behalf of the IECEx Certification Body: R. Sinclair

Position: Technical Manager

Signature:
(for printed version)

Date: 11-12-18

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.

Certificate issued by:

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

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Manufacturer:	**Hansford Sensors Limited.** Artisan Hillbottom Road Sands Industrial Estate Bucks HP12 4HJ **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 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 : 2017 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*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/BAS/ExTR18.0297/00

Quality Assessment Report:

GB/BAS/QAR07.0040/07

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The HS-104I Series Accelerometers are designed to measure acceleration 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 of a piezo electric crystal connected to a signal conditioning board, all contained within a fully welded steel enclosure. Electrical connections are made via a connector or integral cable.

The equipment carries the following marking:

Ex ia IIC T6...T4 Ga

The has the following temperature parameters:

Temperature Class	Ambient temperature range
T6	-55°C ≤ Ta ≤ +66°C
T4	-55°C ≤ Ta ≤ +116°C

The equipment has the following terminal parameters:

Connector Only	92m of cable
Ui = 12V	Ui = 12V
Ii = 160mA	Ii = 160mA
Pi = 0.48W	Pi = 0.48W
Ci = 494nF	Ci = 529nF
Li = 0	Li = 66µH

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Where the sensor is supplied with an integral cable, this must be terminated in an enclosure providing at least degree of protection IP20.
2. The equipment is marked with reduced certification marking. Refer to Certificate Schedule for full certification markings & applicable temperature classification and associated ambient temperature range.