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 12.0109

Status: **Current**

Date of Issue: **2018-04-05**

Applicant: **HMi Elements Ltd.**
Units A & B Windmill Industrial Estate
Showfield Lane
Malton YO17 6BT
United Kingdom

Equipment: **WiFi Access Point**
Optional accessory:

Type of Protection: **Intrinsically Safe**

Marking:
[Ex ib Gb] IIB
Ta = 0 ° C to +50 ° C

Issue No: 2

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Certificate history:
Issue No. 2 (2018-04-05)
Issue No. 1 (2017-05-30)
Issue No. 0 (2012-10-22)

Approved for issue on behalf of the IECEx Certification Body: R A Craig

Position: Certification Support Officer

Signature:
(for printed version)

Date: 2018-04-05

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:

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

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Manufacturer:	**HMi Elements Ltd.** Units A & B Windmill Industrial Estate Showfield Lane Malton YO17 6BT **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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: 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/SIR/ExTR12.0257/00 GB/SIR/ExTR17.0024/00 GB/SIR/ExTR18.0052/00

Quality Assessment Report:

NO/DNV/QAR09.0001/02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The WiFi Access Point is designed for installation in a non-hazardous area. It is mains-powered associated apparatus, Um = 250 Vac, with an intrinsically safe output at the antenna connector that supplies a separate antenna, which is not covered by this certificate.
The equipment comprises the following sub-assemblies in a metallic enclosure:
•a.c. mains filter module with double fusing.
•universal input power supply with 5 Vdc/3 A output.
•shunt zener diode interface supplying one of the copper-to-fibre converter modules.
•shunt zener diode interface supplying the WiFi module.
•copper-to-fibre converter module (non-intrinsically safe) supplying an Ethernet port.
•copper-to-fibre converter module (intrinsically safe) supplying the WiFi module.
•WiFi module supplying the antenna (all intrinsically safe), with, typically, up to 9 m of cable.
•Antenna interface, connected to the antenna output port.
Refer to EQUIPMENT (continued) for the entity parameters.

SPECIFIC CONDITIONS OF USE: NO

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EQUIPMENT (continued):

The entity parameters associated with the antenna output into the hazardous area are:
Uo = 6.51 V
Io = 1.032 A (at 2.4 GHz)
Po = 1.68 W (at 2.4 GHz)
Ci = 10.5 pF
Co = 1.8 µF
Li = 0
Lo = 9.6 µH
Cable nominal impedance: 50 Ω
Frequency of operation: 2.4 GHz

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

This issue, issue 2, recognises the following change; refer to the certificate annex to view a comprehensive history:

1. The Applicant's and Manufacturer's name was changed, from **Smart-Ex Technology Limited** to **HMi Elements Ltd.**

Annex:

IECEx SIR 12.0109 Annexe Issue 2.pdf

Annexe to:	**IECEx SIR 12.0109 Issue 2**
Applicant:	**HMi Elements Ltd.**
Apparatus:	**WiFi Access Point**

Full certificate change history

Issue 1 – this Issue introduced the following change:

1 The Applicant's and Manufacturer's name was changed:

From:	To
iSiS-Ex Limited	**Smart-Ex Technology Limited**

Issue 2 – this Issue introduced the following change:

1 The Applicant's and Manufacturer's name was changed:

From:	To
Smart-Ex Technology Limited	**HMi Elements Ltd.**

Date: 05 April 2018

Form 9530 Issue 1

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