



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 12ATEX2256** Issue: **2**

4 Equipment: **WiFi Access Point**

5 Applicant: **HMi Elements Ltd.**

6 Address: Units A & B Windmill Industrial Estate
Showfield Lane
Malton YO17 6BT
UK

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service, notified body number 0518 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

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, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

IEC 60079-0:2011 IEC 60079-11:2011

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II (2) G
[Ex ib Gb] IIB
Ta = 0°C to +50°C

Project Number 70173717

This certificate and its schedules may only be reproduced in its entirety and without change.

R A Craig
Certification Support Officer

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 12ATEX2256
Issue 2

13 DESCRIPTION OF EQUIPMENT

The WiFi Access Point is designed for installation in a non-hazardous area. It is mains-powered associated apparatus, $U_m = 250 \text{ Vac}$, 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

The entity parameters associated with the antenna output into the hazardous area are:

$U_o = 6.51 \text{ V}$
 $I_o = 1.032 \text{ A}$ (at 2.4 GHz)
 $P_o = 1.68 \text{ W}$ (at 2.4 GHz)
 $C_i = 10.5 \text{ pF}$
 $C_o = 1.8 \text{ }\mu\text{F}$
 $L_i = 0$
 $L_o = 9.6 \text{ }\mu\text{H}$
Cable nominal impedance: 50 Ω
Frequency of operation: 2.4 GHz

Variation 1 - This variation introduced the following changes:

- i. The Applicant's name was changed:

From:
iSiS-Ex Limited

To:
Smart-Ex Technology Limited

Variation 2 - This variation introduced the following changes:

- i. The Applicant's name was changed:

From:
Smart-Ex Technology Limited

To:
HMi Elements Ltd.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 12ATEX2256
Issue 2

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	22 October 2012	R26977A/00	The release of the prime certificate.
1	30 May 2017	R70075678A	This Issue covers the following changes: <ul style="list-style-type: none">• EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. (<i>In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.</i>)• The introduction of Variation 1.
2	05 April 2018	R70173717A	The introduction of Variation 2.

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

None

16 **ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II** (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 **CONDITIONS OF MANUFACTURE**

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

Certificate Annexe



Certificate Number: Sira 12ATEX2256
Equipment: WiFi Access Point
Applicant: HMi Elements Ltd.

Issue 0

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
D100057	1 of 1	A	11 Oct 12	Marking
D100058	1 of 1	A	11 Oct 12	Zener interface module assembly
D100059	1 to 3	A	11 Oct 12	General assembly and block diagram
D100073	1 of 1	A	11 Oct 12	Artwork – fuse board
D500004	1 of 1	B	11 Oct 12	Schematic – antenna interface
D500005	1 of 1	A	11 Oct 12	Artwork – antenna interface
IS943	1 of 1	A	11 Oct 12	Parts list – zener interface
IS943CCT	1 of 1	A	11 Oct 12	Schematic – zener interface
IS946	1 of 1	A	11 Oct 12	Parts list – earth braid
SA348	1 of 1	A	11 Oct 12	Parts list – fuse board & zener interface

Issue 1

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
D100057	1 of 1	C0	08 Feb 17	Wi-Fi Access Point instrument label

Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
D100057	1 of 1	D0	05 Mar 2018	Wi-Fi Access Point instrument label

This certificate and its schedules may only be reproduced in its entirety and without change.

Sira Certification Service

Unit 6 Hawarden Industrial Park,
Hawarden, CH5 3US, United Kingdom

Tel: +44 (0) 1244 670900
Fax: +44 (0) 1244 681330
Email: ukinfo@csagroup.org
Web: www.csagroupuk.org