

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

Certificate No.: **IECEx CML 22.0093** Page 1 of 3 Certificate history:

Issue No: 0 Status: Current

2023-01-16 Date of Issue:

Applicant: **HMI Elements Limited**

Unit A & B

Windmill Industrial Estate, Showfield Lane Malton, North Yorkshire, YO17 6BT

United Kingdom

WiFi Access Point Equipment:

Optional accessory:

Type of Protection: Intrinsic safety

Marking: [Ex ib Gb] IIB

Tamb: 0°C to +50°C

Approved for issue on behalf of the IECEx

Certification Body:

Position:

Signature: (for printed version)

(for printed version)

A Snowdon

Certification Manager

Showldon

2023-01-16

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Certificate issued by:

Eurofins E&E CML Limited Unit 1, Newport Business Park New Port Road Ellesmere Port, CH65 4LZ **United Kingdom**







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Date of issue: 2023-01-16 Issue No: 0

Manufacturer: **HMI Elements Limited**

Unit A & B

Windmill Industrial Estate, Showfield Lane Malton, North Yorkshire, YO17 6BT

United Kingdom

HMI Elements Limited Manufacturing

locations: Unit A & B

Windmill Industrial Estate, Showfield

Malton, North Yorkshire, YO17 6BT

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

Edition:6.0

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

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 Report:

GB/CML/ExTR22.0235/00

Quality Assessment Report:

NO/DNV/QAR09.0001/09



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Certificate No.: IECEx CML 22.0093 Page 3 of 3

Date of issue: 2023-01-16 Issue No: 0

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.

See Annex for full description and conditions of manufacture.

SPECIFIC CONDITIONS OF USE: NO

Annex:

IECEx CML 22.0093 Annex Issue 0.pdf





Annexe to: IECEx CML 22.0093, Issue 0

Applicant: HMI Elements Ltd.

Apparatus: WiFi Access Point

Description

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.

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

 $Co = 1.8 \mu F$

Li = 0

 $Lo = 9.6 \mu H$

Cable nominal impedance: 50 Ω

Frequency of operation: 2.4 GHz

Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

i. Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

Eurofins E&E CML Limited Newport Business Park New Port Road Ellesmere Port CH65 4LZ

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Specific Conditions of Use

None.