



# 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](http://www.iecex.com)

Certificate No.: **IECEX CML 24.0085X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2024-09-13

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

Equipment: **1402-Z2 PC Workstation**

Optional accessory:

Type of Protection: **Increased safety Ex "ec", Intrinsic safety Ex "ic" and "[ic]" and Dust Protection by Enclosure Ex "tc"**

Marking: Ex ec ic {option} IIC T4 Gc,  
Ex ic {option} tc IIIC T135°C Dc  
IP66  
Ta= -40°C to +60°C  
  
{option} : [ic] if ISOLATE501 antenna barrier fitted

Approved for issue on behalf of the IECEx  
Certification Body:

**L A Brisk**

Position:

**Assistant Certification Manager**

Signature:  
(for printed version)

Date:  
(for printed version)

13 Sep 2024

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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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Manufacturer: **HMi Elements Limited**  
Units A & B Windmill Industrial Estate  
Showfield Lane  
Malton YO17 6BT  
**United Kingdom**

Manufacturing locations: **HMi Elements Limited**  
Units A & B Windmill Industrial Estate  
Showfield Lane  
Malton 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](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

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/ExTR24.0163/00](#)

Quality Assessment Report:

[NO/DNV/QAR09.0001/10](#)



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Certificate No.: **IECEX CML 24.0085X**

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**EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The 1402-Z2 is a 15.6" PC workstation that is designed for use in industrial conditions. The housing is fabricated from aluminium and provides an ingress protection of IP66. A touch screen is fitted within the glass window in the lid.

**See Annex for full description and conditions of manufacture.**

**SPECIFIC CONDITIONS OF USE: YES as shown below:**

**See Annex for specific conditions of use.**

**Annex:**

[IECEX CML 24.0085X Annex Issue 0.pdf](#)

**Annexe to:** IECEx CML 24.0085X, Issue0  
**Apparatus:** 1402-Z2 PC Workstation  
**Applicant:** HMI Elements Ltd.



## Description

The 1402-Z2 is a 15.6" PC workstation that is designed for use in industrial conditions. The housing is fabricated from aluminium and provides an ingress protection of IP66. A touch screen is fitted within the glass window in the lid.

The equipment is AC powered, capable of auto ranging between 100-240Vac (50 to 60 Hz). The power supply and the connection of peripheral equipment are achieved using connectors type PT02A and PT07A or certified cable glands that are fitted in the connection plate at the rear or underside of the unit.

The 1402-Z2 can contain the following components:

- AC power supply
- 15.6" standard or high bright, daylight readable LED backlit LCD panel
- Projected capacitive touchscreen (PCT)
- PC board including Intel 11th gen i7 core and two DDR4 slots to combine up to 64 GB of RAM
- Media Communication ports: ethernet, USB, HDMI, DP.
- Heater mat
- Dual or Tri-band Wi-Fi module.

The Dual or Tri-band Wi-Fi module could be connected to internal antennas or to external antennas. When connected to external antennas, the separately certified "ia" RF isolator type iSolate501 can be fitted in the equipment. When the equipment is fitted with one or two isolator(s), the making of the product is "Ex ec ic[ic]" or "Ex ic[ic] tc". Whether protected by the isolators or not, external antennas have not been evaluated and are excluded from the scope of the certification.

The equipment is fitted with an external membrane keypad at the side of the unit which is protected by an internal intrinsic safety barrier board.

The above components and all other not mentioned are listed on the GA, drawing D100493.

## 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.
- ii. The equipment shall be subjected to an electric strength test using a test voltage of 1500Vac applied between the input circuits and frame, for a period of 60 secs.

Alternatively, the test shall be carried out at 1,2 times the test voltage, but maintained for at least 100 ms.



Certificate Annex IECEx  
Version: 10.0 Approval: Approved



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

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## Specific Conditions of Use

The following conditions relate to safe installation and/or use of the equipment.

- i. The user/installer shall install the 1402-Z2 PC Workstation taking into account any restrictions or special conditions for safe use that are applicable to the previously certified devices that are fitted to the unit.
- ii. The 1402-Z2 PC Workstations shall be installed and used within the ambient temperature range that is marked on the product, however, when the products are being stored, the lower temperature remains the same, but the maximum temperature may be raised to 80°C.
- iii. The 1402-Z2 PC Workstations shall be used in an area of at least Pollution degree 2 as defined in IEC 60664-1.
- iv. Transient voltage protection shall be provided by the external circuits to ensure that transient over-voltages to the main supply terminals cannot exceed 140% of 285 V and to the Media Communication ports (ethernet, USB, HMDI, DP) cannot exceed 140% of 85V.
- v. The 1402-Z2 PC Workstations shall be located where there is a low risk of impact.
- vi. Due to the possibility of static build up the equipment shall only be cleaned with a damp cloth. Refer also to user manual.



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