



# 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 23.0078X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2023-07-06

Applicant: **AV Technology Limited T/A AVT Reliability**  
2 Easter Court  
Europa Boulevard  
Warrington  
Cheshire  
WA5 7ZB  
**United Kingdom**

Equipment: **Machine Sentry Mobile**

Optional accessory:

Type of Protection: **Intrinsic Safety Ex "ia"**

Marking: Ex ia IIC T4 Ga  
Ex ia IIIC T135°C Da

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)

06 July 2023

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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**





# IECEX Certificate of Conformity

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Manufacturer: **AV Technology Limited T/A AVT Reliability**  
2 Easter Court  
Europa Boulevard  
Warrington  
Cheshire  
WA5 7ZB  
**United Kingdom**

Manufacturing locations: **AV Technology Limited T/A AVT Reliability**  
2 Easter Court  
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Warrington  
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WA5 7ZB  
**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

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/ExTR23.0106/00](#)

Quality Assessment Report:

[GB/BAS/QAR17.0012/04](#)



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Certificate No.: **IECEX CML 23.0078X**

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Date of issue: 2023-07-06

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**EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Machine Sentry Mobile is a battery-powered measurement device to monitor the vibration of equipment located in a hazardous area.

**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:**

[Certificate Annex IECEx 23.0078X\\_1.pdf](#)

**Annexe to:** IECEx CML 23.0078X Issue 0  
**Applicant:** AV Technology Limited T/A AVT Reliability  
**Apparatus:** Machine Sentry Mobile

## Description

The Machine Sentry Mobile (MSM2) and Machine Sentry Fixed Pro (MSFP) are battery-powered measurement device to monitor the vibration of equipment located in a hazardous area. The apparatus is permanently fitted to the equipment using adhesive or a mounting stud. Alternatively, as a temporary fixing, a permanent magnet may be used.

Both of the models consist of a stainless-steel tube with a polycarbonate cap for wireless data transmission via Bluetooth. This is screwed onto the base unit that holds the potted circuit board and cell.

The Machine Sentry Mobile (MSM2) and Machine Sentry Fixed Pro (MSFP) are powered from a single EVE 26500 or Tadiran SL2770/TL2200/TL-5920 or a Saft M52EX primary cell. The cells are not intended to be replaced in the hazardous area.

Both models have a Limo connector for connection to hardwire sensors, with the following parameters:

It has the following safety parameters:

Uo: 23.1 V  
Io: 0.023 A  
Po: 0.135 W  
Co: 165nF  
Lo: 73 mH  
Ci: 0  
Li: 0

## Conditions of Manufacture

The following are conditions of manufacture

- 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.



Certificate Annex IECEx  
Version: 9.0 Approval: Approved

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Company Reg No. 8554022 VAT No. GB163023642



## Specific Conditions of Use

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

- i. **WARNING:** use only EVE ER26500, SAFT M32EX or Tadiran SL2770/TL2200/TL-5920 batteries
- ii. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.