

[1]

TYPE EXAMINATION CERTIFICATE



[2]

Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3]

Type Examination Certificate Number: **UL 21 ATEX 2614X Rev. 0**

[4]

Product: **LoRaWAN Smart Vibration Sensor**

[5]

Manufacturer: **Advantech Co., Ltd.**

[6]

Address: **1 Aly 20 Ln 26 Rueiguang Rd Neihu District, Taipei, 114 Taiwan**

[7]

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

[8]

UL International Demko A/S certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. **US/UL/ExTR21.0057/00 and US/UL/ExTR21.0057/01.**

[9]

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0:2018
EN 60079-11:2012**

EN IEC 60079-7: 2015 +A1:2018

except in respect of those requirements listed at item 18 of the Schedule.

[10]

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

[11]

This Type examination certificate relates only to the design of the specified product, and not to specific items of product subsequently manufactured.

[12]

The marking of the product shall include the following:

 **II 3 G Ex ic ec IIC T6 Gc**

Certification Manager
Jan-Erik Storgaard

This is to certify that the sample(s) of the Product described herein ("Certified Product") has been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the ATEX Product Certification Program Requirements. This certificate and test results obtained apply only to the product sample(s) submitted by the Manufacturer. UL did not select the sample(s) or determine whether the sample(s) provided were representative of other manufactured product. UL has not established Follow-Up Service or other surveillance of the product. The Manufacturer is solely and fully responsible for conformity of all product to all applicable Standards, specifications, requirements or Directives. The test results may not be used, in whole or in part, in any other document without UL's prior written approval.

Date of issue: 2022-03-29

Certification Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
Tel. +45 44 85 65 65, info.dk@ul.com, www.ul.com

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[14]

Schedule

TYPE EXAMINATION CERTIFICATE No.

UL 21 ATEX 2614X Rev. 0

[15]

Description of Product:

Model WISE-2410X-A02 is battery powered LoRaWAN Smart Vibration Sensor, built-in 3 axis vibration sensor, temperature sensor and antenna to support LoRaWAN for transmitting sensor data via wireless communication. Model WISE-2410X-A02 is protected by “ec” and “ic” at power button for Zone 2 environment.

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015.

Temperature range:

The relation between ambient temperature and the assigned temperature class is as follows:

Ambient temperature range	Temperature class
0°C to +70 °C	T6

Electrical data:

3.6 VDC, 0.9A

Routine tests

N/A

[16]

Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this Type Examination Certificate.

[17]

Specific conditions of use:

- Rated ambient temperature range $0\text{ }^{\circ}\text{C} \leq T_{amb} \leq +70\text{ }^{\circ}\text{C}$
- Do not remove stainless buckle in hazardous location.
- Do not change battery in hazardous location. Battery use only two Vitzrocell Co., Ltd., type SB-AA11, Li - SOCl₂, 3.6V, 2.5 Ah or two TADIRAN BATTERIES, type TL-5903, Li - SOCl₂, 3.6V, 2.4Ah.
- No user serviceable part inside. Refer servicing to qualified personal.
- The equipment shall be adequately protected from direct light when installed indoor or outdoor.
- Operators should wear electrostatic wrist or heel straps when they touch the equipment.
- The two fasteners (M3x0.5) between Cover-top & BKT-Bottom metal enclosure shall only be replaced with M3x0.5 14 mm long screws with the head of the screw in accordance with DIN 7991.
- Equipment was submitted to tests corresponding to the low risk of mechanical danger.
- The equipment shall only be used in an area of at least pollution degree 2, as defined in EN 60664-1.


[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The WISE-2410X-A02 has in addition passed the tests for Ingress Protection to IP65 in accordance with EN60529:1991+A1:2000+A2:2013.

The trademark  will be used as the company identifier on the marking label.

