



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 ExTC 18.0031X** Page 1 of 4 [Certificate history:](#)
Issue 0 (2019-08-22)

Status: **Current** Issue No: 1

Date of Issue: 2019-10-17

Applicant: **Trolex Nome Limited**
Unit 10a Newby Road
Hazel Grove Stockport SK7 5DY
United Kingdom

Equipment: **TX5003 RockMonitor XR Reader**

Optional accessory:

Type of Protection: **Intrinsic Safety 'i'**

Marking: Ex ia I Ma
-20°C ≤ Tamb ≤ 50°C

Approved for issue on behalf of the IECEx
Certification Body:

Justin Gavranich

Position:

Certification Authority

Signature:
(for printed version)

Date:

2019-10-17

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

Ex Testing and Certification Pty Ltd
1/30 Kennington Drive
Tomago NSW 2322
Australia



TESTING & CERTIFICATION



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Date of issue: 2019-10-17

Issue No: 1

Manufacturer: **Trolex Limited**
10a Newby Road
Hazel Grove Stockport SK7 5DY
United Kingdom

Additional
manufacturing
locations:

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 Reports:

[AU/EXTC/ExTR18.0039/00](#)

[AU/ExTC/ExTR19.0035/00](#)

Quality Assessment Report:

[GB/SIR/QAR07.0017/07](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The TX5003 RockMonitor XR Reader is a battery powered device that powers and receives signals from up to 300 TX5001 RockMonitor XR Telltale units connected. The equipment provides a user interface via a keypad and LCD screen on the face of the enclosure.

The electronics and battery pack are housed in a painted steel enclosure with plastic end caps approximately 200mm x 120mm x 55mm and provides three cable connectors on the top cap for external connection. The **TellTale** connector is used for connection to the TX5001 RockMonitor XR Telltale units. The battery pack is integral to the equipment and is charged, in a safe area only, via the **Charge** connector on the top cap. The third cable connector is **USB** connector which can also only be used in a safe area for accessing data logged by the equipment. The equipment is required to be used in the provided leather carry pouch which provides access to the **Telltale** connector and a clear viewing window on the front of the pouch.

SPECIFIC CONDITIONS OF USE: YES as shown below:

Refer to Annexe for details



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Minor modifications to MCU and Memory Boards

Annex:

[Certificate Annex IECEx ExTC 18.0031X-1 Final.pdf](#)

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Annexe



Annexe for Certificate No.:

IECEX ExTC 18.0031X

Issue No.:

1

Conditions of Use pertaining to Issue 0 of this Certificate:

1. The following parameters must be observed when connecting the equipment:

| Telltale cable connector | |
|--------------------------|----------------------|
| Uo | 17.64 V |
| Io | 2.03 A |
| Po | 4.16 W |
| Co | 10.64 μ F |
| Lo | 83 μ H |
| Lo/Ro | 48 μ H/ Ω |

Charge cable connector

Um = 26.66V

USB cable connector

Um = 8V

The Charge and USB connectors are only used when the equipment is in a non-hazardous area.

2. The TX5003 RockMonitor XR Reader shall only be used when in the leather pouch provided.

Drawing list pertaining to Issue 0 of this Certificate:

| Manufacturer's Documents | | | | |
|--|-------------------|-------|-------------|------------|
| Title: | Drawing No.: | Pages | Rev. Level: | Date: |
| MCU Schematic (Various Titles) | P5625.05.IECEX | 6 | A | 2019-03-19 |
| MCU PCB Layout | P5625.06.IECEX | 9 | A | 2019-02-20 |
| Telltale Driver Schematic (Various Titles) | P5625.09.03.IECEX | 7 | A | 2019-07-17 |
| Telltale Driver PCB Layout | P5625.10.IECEX | 8 | A | 2019-02-20 |
| Memory Module (Schematics) (Various Titles) | P5625.13.IECEX | 3 | A | 2018-12-17 |
| Memory Module PCB Layout | P5625.14.IECEX | 7 | A | 2018-12-17 |
| LCD Schematic (Various Titles) | P5625.17.IECEX | 3 | A | 2018-12-17 |
| LCD IECEX PCB Layout | P5625.18.IECEX | 7 | A | 2019-02-27 |
| Battery Protection | P5625.61.IECEX | 1 | A | 2019-07-03 |

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Annexe



Annexe for Certificate No.:

IECEX ExTC 18.0031X

Issue No.:

1

| Title: | Drawing No.: | Pages | Rev. Level: | Date: |
|---|----------------|----------|-------------|------------|
| Schematic | | | | |
| Battery Protection PCB | P5625.62.IECEX | 3 | A | 2019-06-28 |
| RockMonitor XR Reader Potted Battery Pack SA | P5625.69.IECEX | 1 | A | 2019-07-02 |
| Certification Information for User Manual | P5625.1802 | 1-2 of 3 | A | 2019-08-15 |
| RockMonitor XR Reader IECEX (Aus) certification label | P5625.2016 | 1 | A | 2019-07-02 |
| RockMonitor XR Reader General Arrangement | TX5003.IECEX | 1 | A | 2019-07-18 |

Variations permitted by Issue 1 of this certificate:

Minor trackwork changes to MCU and Memory Boards, component changes in MCU Board and revision of parameter table with the addition of U_i , C_i and L_i parameters for the Telltale connector.

Specific Conditions of Use pertaining to Issue 1 of this certificate:

1. The following parameters must be observed when connecting the equipment:

| Telltale cable connector | |
|--------------------------|----------------------|
| U_o | 17.64 V |
| I_o | 2.03 A |
| P_o | 4.16 W |
| C_o | 10.64 μ F |
| L_o | 83 μ H |
| L_o/R_o | 48 μ H/ Ω |
| U_i | 17.64 V |
| C_i | Negligible |
| L_i | 30 μ H |

Charge cable connector

$U_m = 26.66V$

USB cable connector

$U_m = 8.1V$

The Charge and USB connectors are only used when the equipment is in a non-hazardous area.

2. The TX5003 RockMonitor XR Reader shall only be used when in the leather pouch provided.

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Annexe



Annexe for Certificate No.:

IECEX ExTC 18.0031X

Issue No.:

1

Drawings Associated with the Issue 1 of this Certificate:

| Manufacturer's Documents | | | | |
|--|-------------------|-------|-------------|------------|
| Title: | Drawing No.: | Pages | Rev. Level: | Date: |
| *MCU Schematic (Various Titles) | P5625.05.IECEX | 6 | B | 2019-09-25 |
| *MCU PCB Layout | P5625.06.IECEX | 9 | B | 2019-09-25 |
| Telltale Driver Schematic (Various Titles) | P5625.09.03.IECEX | 7 | A | 2019-07-17 |
| Telltale Driver PCB Layout | P5625.10.IECEX | 8 | A | 2019-02-20 |
| *Memory Module (Schematics) (Various Titles) | P5625.13.IECEX | 3 | D | 2019-09-23 |
| *Memory Module PCB Layout | P5625.14.IECEX | 7 | D | 2019-09-23 |
| LCD Schematic (Various Titles) | P5625.17.IECEX | 3 | A | 2018-12-17 |
| LCD IECEX PCB Layout | P5625.18.IECEX | 7 | A | 2019-02-27 |
| Battery Protection Schematic | P5625.61.IECEX | 1 | A | 2019-07-03 |
| Battery Protection PCB | P5625.62.IECEX | 3 | A | 2019-06-28 |
| RockMonitor XR Reader Potted Battery Pack | P5625.69.IECEX | 1 | A | 2019-07-02 |
| *Certification Information for User Manual | P5625.1802 | 3 | B | 2019-10-11 |
| RockMonitor XR Reader IECEX (Aus) certification label | P5625.2016 | 1 | A | 2019-07-02 |
| RockMonitor XR Reader General Arrangement | TX5003.IECEX | 1 | A | 2019-07-18 |

*Note: An * is included before the title of documents that are new or revised.*