



**BUREAU
VERITAS**



EU - Type Examination Certificate

- (1)
- (2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**
- (3) EU - Type Examination Certificate Number
- EPS 16 ATEX 1 098 X** **Revision 0**
- (4) Equipment: Intrinsically safe Smartphone type: Smart-Ex 01M
- (5) Manufacturer: ecom instruments GmbH
- (6) Address: Industriestraße 2
97959 Assamstadt
Germany
- (7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.
- (8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 16TH0228.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:
- EN 60079-0:2012+A11:2013** **EN 60079-11:2012**
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.
- (11) This EU - Type Examination Certificate relates only to the design and examination of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

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Certification department of explosion protection

Nuremberg, 2016-07-15


D. Zitzmann



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Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH. EPS 16 ATEX 1 098 X, Revision 0.



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(13)

Annex

(14) **EU - Type Examination Certificate EPS 16 ATEX 1 098 X**

Revision 0

(15) Description of equipment:

The intrinsically safe smartphone type Smart-Ex 01M is a GSM quad-band communication device intended for use in mines susceptible to firedamp. It provides additional features such as cameras, GPS, acceleration sensor, Bluetooth, vibration motor, headphone connector and flashlight. Different integrated antennas can be used for the usual cellular systems including LTE. The permissible ambient temperature range is 0°C to +50°C. The device is equipped with a non-exchangeable integrated Li-Ion battery unit. Charging is done via the "magnetic" USB-connector with the "Safety Box SB S01". The "magnetic" USB-connector is device specific and polarity reversal protected. The device may only be charged outside the hazardous area. The wired data transfer is possible via the USB-connector in non-hazardous areas only.

Electrical data:

Internal Li-Ion battery unit to be charged over the magnetic USB connector via the „Safety Box SB S01“.

(16) Reference number: 16TH0228

(17) Special conditions for safe use:

The battery pack is only allowed to be charged outside of the explosive hazardous area via the "Safety Box SB S01".

The device has to be protected against impacts with high impact energy.

Only accessories approved by ecom instruments GmbH may be used or intrinsically safe accessories applying to the relevant entity parameters for the audio jack as stated in ecom document 500055EX05A.

Before entering the hazardous location the ecom leather case type LC S01M shall be fitted to the Smart-Ex 01M.

The device shall be protected from the exposure of oils, greases and hydraulic fluids.

(18) Essential health and safety requirements:

Met by compliance with standards.

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