



(1) **EC-Type Examination Certificate**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres –
Directive 94/9/EC

(3) EC Type Examination Certificate Number

EPS 14 ATEX 1 767 X

Revision 0

(4) Equipment: Intrinsically Safe Smartphones type: Ex-Handy 09 and Smart-Ex 01

(5) Manufacturer: ecom instruments GmbH

(6) Address: Industriestraße 2, 97959 Assamstadt, Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 1994, 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 report 14TH0379.

(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 schedule to this certificate.


(11) This EC-Type Examination Certificate relates only to the design and the construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.

(12) The marking of the equipment shall include the following:

Ex-Handy 09:

 II 2G Ex ib IIC T4 Gb IP64
II 2D Ex ib IIIC T135°C Db IP64

Smart-Ex 01:

 II 2G Ex ib IIC T4 Gb IP64
II 2D EX ib IIIC T135°C Db IP64

Certification department of explosion protection

Nürnberg, December 03, 2014



D. Zitzmann

(13)

Annexe

(14) **EC-Type Examination Certificate EPS 14 ATEX 1 767 X**

(15) Description of equipment:

The explosion protected Intrinsically Safe Smartphones of type Ex-Handy 09 and Smart-Ex 01 are communication devices via quad-band intended for use in hazardous areas of zones 1, 2, 21 and 22. They provide additional features such as cameras (only Smart-Ex 01), 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 -20°C to +55°C. The devices are equipped with a not 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 devices may only be charged outside explosive atmospheres. The wired data transfer is possible via the USB-connector.

Electrical data:

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

(16) Test report: 14TH0379

(17) Special conditions for safe use:

Ambient temperature range: $-20^{\circ}\text{C} \leq t_{\text{amb}} \leq +55^{\circ}\text{C}$

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 entry parameters for the audio jack as stated in document 500055EX05A.

(18) Essential health and safety requirements:

Met by standards

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Nürnberg, December 03, 2014



D. Zitzmann