



**BUREAU
VERITAS**



(1) **Certificate of Conformity**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 2014/34/EU**

(3) Certificate Number:

EPS 19 ATEX 1 069 X

Revision 0

(4) Equipment: Intrinsically Safe Smartphone - Smart-Ex 02 *** DZ2

(5) Manufacturer: Pepperl+Fuchs AG

(6) Address: Lilienthalstrasse 200
68307 Mannheim
Germany

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

(8) Bureau Veritas Consumer Products Services Germany GmbH certifies based on a voluntary assessment 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 2014/34/EU. The examination and test results are recorded in the confidential documentation under the reference number 18TH0343.

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

EN 60079-0:2018

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 Certificate of Conformity relates only to the design and the construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture and supply of this equipment. Those requirements are not covered by this certificate.

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

 II 3G Ex ic IIC T4 Gc IP64

 II 3D Ex ic IIIC T120°C Dc



Certification department of explosion protection

Hamburg, 2019-07-22

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(13)

Annexe

(14) **Certificate of Conformity EPS 19 ATEX 1 069 X**

Revision 0

(15) Description of equipment:

The intrinsically safe Smartphone of type Smart-Ex 02 *** DZ2 is communication device intended for use in hazardous areas of zones 2 and 22. The device provide additional features such as camera, GPS, NFC, acceleration sensor, WiFi, Bluetooth, vibration motor, headphone connector, magnetic sensor and flash-light. Different integrated antennas can be used for the usual cellular systems. The device is equipped with an exchangeable Li-Ion battery unit. Charging and wired data transfer is done via the magnetic USB-connector in ordinary locations only.

Electrical data:

Supply:

Two rechargeable built-in Li-Ion batteries in parallel
Battery pack Ex-BP S02 nominal data: 3.7 V, 4400 mAh, 16.28 Wh or
Battery pack Ex-BP S02C nominal data: 3.7 V, 3920 mAh, 14.5 Wh

Charging and
Wired data transfer:

Um = 6 V, outside of classified hazardous locations only

(16) Reference number: 18TH0343

(17) Schedule of Limitations:

Ambient temperature range: $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

The battery pack is only allowed to be charged and replaced outside of the classified hazardous location.

It must be ensured that the power supply for charging fulfills the requirements for SELV or PELV and $U_m = 6\text{V}$.

The Battery-Cover for SIM/SD card and battery-pack access must be mounted and screwed tight before entering the hazardous location.

The device has to be protected against high energy impacts.

The device shall not be used in close proximity to processes producing high electrostatic charges.

The device shall not be repaired or dismantled (except the Battery-Cover in ordinary locations).

It is allowed to use the 3.5 mm Audio Plug in the hazardous locations for connections to certified accessory meeting the following entity parameters:

$U_i = 4.2\text{ V} / I_i = 50\text{ mA} / P_i = 100\text{ mW} / C_o = 5.6\text{ }\mu\text{F} / L_o = 680\text{ }\mu\text{H}$

(18) Essential health and safety requirements:

Met by standards.

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