(1) # EU - Type Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**

(3) EU - Type Examination Certificate Number

EPS 23 ATEX 1 249 X **Revision 1**

(4) Equipment: IS440.1, EdgeOne 5G Radio

(5) Manufacturer: i.safe MOBILE GmbH

(6) Address: i_Park Tauberfranken 10
97922 Lauda-Koenigshofen
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 23TH0465.

(9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018 **EN 60079-11:2012** **IEC 60079-11:2023**

(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 construction 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:

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



Certification department of explosion protection

Ulrich Feike

Tuerkheim, 2025-03-04

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.

(13) # Annex

(14) **EU - Type Examination Certificate EPS 23 ATEX 1 249 X** **Revision 1**

(15) Description of equipment:

The intrinsically safe IS440.1 or EdgeOne 5G Radio for Zone 1/21 is equipped with a 2.4-inch display, supports multiple frequency bands and also NFC, Bluetooth 5.2 and Wi-Fi 6. The high-end Qualcomm chipset ensures fast data processing for the most demanding industrial applications such as predictive maintenance. The 8-pin ISM interface provides a secure connection for audio accessories or other add-ons. Other advantages include the 8 MP camera, an amplified loudspeaker, a replaceable battery (2400 mAh or 4800 mAh) and programmable buttons (for PoC / PTT / lone worker protection / SOS).

Electrical data:

Power supply: Li-Ion Polymer Battery

Interfaces:

The device has two charging contacts that allow the device to be charged outside hazardous areas via an approved charging adapter. The contacts are intrinsically safe for gas and dust.

Furthermore, the device has an USB-C interface for charging and data transmission outside hazardous areas. It is covered by an IP plugger and is not allowed to be opened in hazardous areas.

The ISM interface can be used within hazardous areas with approved headsets and add-ons, making the smartphone a multifunctional equipment for industrial applications. For ISM interface use, the i.safe MOBILE Headsets IS-HS3A.1, PTT Button IS-PTTB2A.1 and IS-HDHS1x.1, IS-HDHS2x.1 or approved, intrinsically safe accessories may be used, which comply with the connection parameters of the ISM interface according to document 1064AD04.

Headset variants IS-HDHSxx.1:

Name:	Variants:
IS-HDHSxA.1	Headband (stereo)
IS-HDHSxB.1	Neckband (stereo)
IS-HDHSxC.1	Helm Mounted (stereo)

For charging and wired data transmission only i.safe MOBILE approved accessories may be used. This ensures U_m = 5.88V.

Nano-SIM cards which comply with the following intrinsic safety entity parameters, may be used in the corresponding slots in the hazardous area:

U_o = 5.88 V
C_o = 40 µF
L_o = 1 µH

A commercially available nano-SIM card may be used in the corresponding slot in potentially explosive atmospheres. The internal electrical capacitance and inductance are negligible, respectively correspond to the intrinsically safe connection parameters.

EU - Type Examination Certificate EPS 23 ATEX 1 249 X **Revision 1**

(16) Reference number: 23TH0465

(17) Special conditions for safe use:

The battery may be charged and replaced outside explosion hazardous areas only.

The device must be protected from impacts with high impact energy, against excessive UV light emission and high electrostatic charge processes.

The cover for the USB-C interface must be securely closed inside explosion hazardous areas.

The permitted ambient temperature range is -20 °C to +55 °C.

(18) Essential health and safety requirements:

Met by compliance with standards.

Certification department of explosion protection

Tuerkheim, 2025-03-04

Ulrich Feike