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 EPS 23.0069X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2024-06-21)
Date of Issue:	2025-03-04		
Applicant:	**i.safe Mobile GmbH** i_Park Tauberfranken 10 97922 Lauda-Koenigshofen **Germany**		
Equipment:	**IS440.1, EdgeOne 5G Radio**		
Optional accessory:			
Type of Protection:	**Intrinsic safety "i"**		
Marking:	Ex ib IIC T4 Gb Ex ib IIIC T135°C Db		

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature:
(for printed version)

Date:
(for printed version)

Ulrich Feike

Head of Certification

2025-03-04

ZERTIFIZIERUNGSSTELLE BUREAU VERITAS 1828 Bureau Veritas CPS Germany GmbH

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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:

Bureau Veritas Consumer Products Services Germany GmbH
Businesspark A96
86842 Türkheim
Germany

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Certificate No.: **IECEx EPS 23.0069X**

Date of issue: 2025-03-04

Issue No: 1

Manufacturer: **i.safe Mobile GmbH**
i_Park Tauberfranken 10
97922 Lauda-Koenigshofen
Germany

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 Edition:7.0 — Explosive atmospheres - Part 0: Equipment - General requirements

IEC 60079-11:2023 Edition:7.0 — Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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 Report:

DE/EPS/ExTR23.0075/01

Quality Assessment Report:

DE/EPS/QAR12.0003/16

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

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 = 5.88 V.

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

Uo = 5.88 V
Co = 40 µF
Lo = 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.

SPECIFIC CONDITIONS OF USE: YES as shown below:

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.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

New type added.