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 19.0062X**	Page 1 of 4	<u>Certificate history:</u> Issue 0 (2019-11-28)
Status:	**Current**	Issue No: 1	
Date of Issue:	2020-08-12		

Applicant: **i.safe MOBILE GmbH**
i_Park Tauberfranken 10
97922 Lauda-Koenigshofen
Germany

Equipment: **IS530.M1 Intrinsically safe and multifunctional industrial smartphone**

Optional accessory:

Type of Protection: **intrinsic safety "i"**

Marking: Ex ia I Ma IP64

Approved for issue on behalf of the IECEx
Certification Body:

Position:

Signature:
(for printed version)

Date:

Holger Schaffer

Certification Manager

12.08.2020

1. This certificate and schedule may only be reproduced in full.
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

IECEx Certificate
of Conformity

Date of issue: 2020-08-12

Manufacturer:

i.safe MOBILE GmbH
i_Park Tauberfranken 10
97922 Lauda-Koenigshofen
Germany

Additional
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 60079-11:2011
Edition:6.0

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/ExTR19.0059/01

Quality Assessment Report:

DE/EPS/QAR12.0003/08

IECEx Certificate of Conformity

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

The intrinsically safe, multifunctional and rugged industrial smartphone IS530.M1 has been designed for use in mines susceptible to firedamp. It provides numerous technologies like 4G (LTE), NFC, GPS, Wi-Fi and Bluetooth LE. The IS530.M1 is equipped with an Android operating system, large internal memory, amplified loudspeaker, replaceable battery pack and functional 13-pin ISM interface.

Electrical data:

Powersupply:
The smartphone may only be used with the approved, intrinsically safe battery pack BPIS530.M1 made by i.safe MOBILE GmbH.
LiPo battery U_o = 3.8 V (U_o_max = 4.35 V) / 3.6 Ah / 13.68 Wh

It is permissible to charge the battery pack alone outside the device via an approved charging adapter.

Interfaces:
The device has a lateral magnetic charging port with which it can 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 interface (type C) for charging and data transmission outside hazardous areas. It is not permitted to open the USB interface cover in hazardous areas.

The ISM interface of the IS530.M1 can be used within hazardous areas with approved headsets, Remote Speaker Microphones (RSM) and add-ons, making the smartphone a multifunctional equipment for industrial applications. For ISM interface use, the i.safe MOBILE headset IS-HS1.1 or approved, intrinsically safe accessories may be used, which comply with the entity parameters of the ISM interface according to document 1029AD04. If the ISM interface is not used, it must be securely closed by the cover provided for this purpose.

The SD cards IS-SD164.1 and IS-SD1128.1 may be used in the corresponding slot in the hazardous area.
Alternatively, the SD card port has the following intrinsic safety entity parameters:

U_o = 4.35 V
P_o = 1.081 W
C_o = 97 µF
L_o = 2 µH

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

The permitted ambient temperature range is -20 °C to +60 °C.

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Parameters for SD card added.