

Certificate of Conformity

Ex EQUIPMENT

Certificate No.: ANZEx 20.2001X	Current Issue: 1	Date of Issue: 2021-07-09
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Applicant: i.safe MOBILE GmbH
i_Park Tauberfranken 10
97922 Lauda-Koenigshofen
GERMANY

Equipment: IS930.M1 Intrinsically safe industrial tablet

Type of Explosion Protection: Intrinsic Safety "i"

Explosion Protection Marking: Ex ia I Ma IP64
Ex ib IIC T4 Gb
Ex ib IIIC T135°C Db IP6X
-20 °C ≤ Ta ≤ +60 °C

*This certificate is granted subject to the requirements as set out in
Joint Accreditation System of Australia and New Zealand Publications
ANZEx System Rules 2020 & ANZEx Certified Equipment Scheme Rules 2021*

Signed for and on behalf of issuing body

Name & Position


Geoff Barnier
Principal Engineer - Certification

This certificate is not transferable and remains the property of the issuing body.

The status of this certificate can be confirmed through the database located at www.anzex.com.au

Certificate issued by:

Safety in Mines, Testing and Research Station
2 Robert Smith Street, REDBANK QLD 4301

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Manufacturer : **i.safe MOBILE GmbH**
i_Park Tauberfranken 10
97922 Lauda-Koenigshofen
GERMANY

**Additional
Manufacturing
Location(s):** None

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 Ed 7.0 Explosive atmospheres Part 0: Equipment—General requirements

IEC 60079-11:2011 Ed 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.

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Schedule

Equipment Description:

The intrinsically safe and rugged industrial tablet IS930.M1 has been designed for use in mines susceptible to firedamp. The IS930.M1 provides numerous technologies like 4G (LTE), NFC, GPS, Wi-Fi and Bluetooth LE. Equipped with an Android operating system, amplified loudspeaker and option keys, which allows the allocation of user specific functions or applications.

Electrical Ratings/Parameters

Battery charging: $U_m = 5.88 \text{ V}$

SD Card Port entity parameters:

U_o (V)	I_o (A)	P_o (W)	C_o (μF)	L_o (μH)
4.2	4.72	1.101	117	2

SIM Card Port entity parameters:

U_o (V)	I_o (A)	P_o (W)	C_o (μF)	L_o (μH)
4.2	4.72	2.142	118	2

Specific Conditions of Use:

The battery shall be charged in a safe area only.

No connections are allowed in an explosive atmosphere.

The interface covers shall not be opened in an explosive atmosphere.

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

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

Conditions of Certification:

None

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Additional Information:

The following accessories may be used:

- SD cards type IS-SD164.1 and IS-SD1128.1 or alternatively those SD Cards which comply with the stated intrinsic safety entity parameters
- SIM cards which comply with the stated intrinsic safety entity parameters

No other accessories are included in this certification.

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Register of Issues and Variations

includes the current issue

Issue 0 dated 2020-08-31

Standards relevant for this issue:

IEC 60079-0:2017 Ed 7.0 Explosive atmospheres Part 0: Equipment—General requirements

IEC 60079-11:2011 Ed 6.0 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: DE/EPS/ExTR19.0060/00, DE/EPS/ExTR19.0060/01; Bureau Veritas

QAR No. & Issuing CB: DE/EPS/QAR12.0003/07; Bureau Veritas

File Reference: 20/0021

Manufacturer's Documents/Drawings associated with this issue:

Document Number	Pages / Sheets	Document Title	Revision	Date
1030TR01	5	IS930.M1 SD card Entity Parameters	00	2020-07-27
1030AD02	43	Description IS930.1	00	2019-09-19
1030AD05	3	IS930.M1 ATEX+IECEX Description	00	2019-12-11
1030AD13	6	IS930.M1 Safety Instructions	02	2020-08-28
		PCB Data:		
1030BP07	17	BOM Mainboard, LCD and Battery Board	00	2019-09-20
		Battery Board:		
1016PD01	3	Functional description of the Battery Board	01	2019-09-12
1016BS01	1	Battery Board Schematic	04	2019-09-11
1016BN01	4	Battery Board Layout	02	2018-04-05
1016BR01	1	Battery Board Assembly Bottom	02	2018-04-05
		Sub-board PCB:		
1030BS04	1	Subboard IS930.1 Schematics	00	2019-09-16
1030BN04	4	IS930.1 Subboard PCB	00	2019-09-16
1030BR04	1	IS930.1 Subboard PCB Assembly	00	2019-09-16
		LCD PCB:		
1030BS05	1	IS930.1 LCD	00	2019-09-17
1030BN05	4	IS930.1 LCD PCB	00	2019-09-17
1030BR05	1	IS930.1 LCD Assembly	00	2019-09-17
		MIC-FPC:		
1030BS06	1	IS930.1 MIC-FPC	00	2019-06-16

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Document Number	Pages / Sheets	Document Title	Revision	Date
1030BN06	2	IS930.1 MIC-FPC	00	2019-09-16
1030BR06	1	IS930.1 MIC-FPC Assembly	00	2019-09-16
Main Board:				
1030BS07	42	IS930.1 Mainboard	00	2019-09-02
FR4	10	IS930.1 MB PCB Layout	1.00	20190918
1030BT07	1	IS930.1 Mainboard Stackup	00	2019-07-30
1030BR07	2	IS930.1 Mainboard Assembly	00	2019-09-17
LCD Backlight:				
1030BN09	1	IS930.1 LCD Backlight Layouts	00	2019-09-08
Mechanical Data:				
1030DG01	6	Parts and Materials IS930.1	00	2019-09-18
1030DG03	4	IS930.1 Stackup LCD	00	2019-09-18
ANZEx Labels:				
1030DM235	1	IS930.M1 Back Label Mining ANZEx	00	2020-08-19

Issue 1 dated 2021-07-09

Variations Permitted by this Issue

- Parameters for Sim card added.
- Gas and Dust Group added, label amended.
- Corrected SD card entity output parameter (Po) from 1.101 mW to 1.101 W.
- Corrected inductance entity parameter heading in table from Li to Lo.

Test & Assessment Reports relevant for this issue:

TR No. & Issuing CBs: DE/EPS/ExTR19.0060/02; Bureau Veritas
 QAR No. & Issuing CB: 17/DE/EPS/QAR12.0003/12; Bureau Veritas
 File Reference: 210006 Cert

Manufacturer's Documents/Drawings associated with this issue:

Document Number	Pages / Sheets	Document Title	Revision	Date
1030AD05	3	IS930.M1 ATEX+IECEX Description	01	2021-05-26
1030AD13	6	IS930.M1 Safety Instructions	03	2021-04-29
1030DM23	1	IS930.M1 Back Label Mining ANZEx	01	2021-07-02