

# Certificate of Conformity

## Ex EQUIPMENT

Certificate No.:	<b>ANZEx 20.2002X</b>	Current Issue:	1	Date of Issue:	2021-07-09
------------------	-----------------------	----------------	---	----------------	------------

**Applicant:** i.safe MOBILE GmbH  
i\_Park Tauberfranken 10  
97922 Lauda-Koenigshofen  
GERMANY

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


**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](http://www.anzex.com.au)*

Certificate issued by:

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

# Certificate of Conformity

## Ex EQUIPMENT

Certificate No.:	<b>ANZEx 20.2002X</b>	Current Issue:	1	Date of Issue:	2021-07-09
------------------	-----------------------	----------------	---	----------------	------------

**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.*

# Certificate of Conformity

## Ex EQUIPMENT

Certificate No.: **ANZEx 20.2002X**

Current Issue: 1

Date of Issue: 2021-07-09

### Schedule

#### Equipment Description:

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 Ratings/Parameters

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

SD Card Port entity parameters:

$U_o$ (V)	$I_o$ (A)	$P_o$ (W)	$C_o$ ( $\mu\text{F}$ )	$L_o$ ( $\mu\text{H}$ )
4.35	4.89	1.081	97	2

SIM Card Port entity parameters:

$U_o$ (V)	$I_o$ (A)	$P_o$ (W)	$C_o$ ( $\mu\text{F}$ )	$L_o$ ( $\mu\text{H}$ )
4.35	4.89	2.135	98	2

#### Specific Conditions of Use:

The smartphone shall only be used with the type BPIS530.M1 battery pack.

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

# Certificate of Conformity

## Ex EQUIPMENT

Certificate No.: **ANZEx 20.2002X**

Current Issue: 1

Date of Issue: 2021-07-09

**Additional Information:**

The following accessories may be used:

- Headset Type IS-HS1.1
- 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.

# Certificate of Conformity

## Ex EQUIPMENT

Certificate No.: **ANZEx 20.2002X**      Current Issue: 1      Date of Issue: 2021-07-09

### 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/ExTR19.0059/00, DE/EPS/ExTR19.0059/01; 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
1029AD05	4	IS530.M1 ATEX+IECEx Description	00	2019-07-31
1029AD13	6	IS530.M1 Safety instructions	02	2020-08-28
1029TR02	5	IS530.M1 SD card Entity Parameters	00	2020-07-27
1029AD02	44	IS530.1 ATEX + IECEx Description	01	2019-07-26
1029AD03	6	IS530.1 Safety Instructions	00	2019-05-14
1029AD04	7	IS530.1 Entity parameters ISM interface	01	2019-07-25
1029BP07	13	BOM Mainboard Keypad LCD and Battery Board	01	2019-07-26
		<b>Battery Board:</b>		
1015PD01	3	Functional description of the Battery Board	00	2017-08-28
1015BS01	1	Battery Board Schematic	01	2017-08-22
1015BN01	4	Battery Board Layout	01	2017-09-06
1015BQ01	1	Battery Board Assembly Top	01	2017-09-06
		<b>LCD-VAR1</b>		
1029BS05	1	IS530.1 LCD-VAR1 Schematics	00	2019-05-23
1029BN05	2	IS530.1 LCD-VAR1 Layout	00	2019-05-23
1029BR05	2	IS530.1 LCD-VAR1 Assembly	00	2019-05-23
		<b>LCD-VAR2</b>		
1029BN06	2	IS530.1 LCD-VAR2 Layout	00	2019-05-23
1029BR06	1	IS530.1 LCD-VAR2 Assembly	00	2019-05-23
		<b>Mainboard PCB</b>		
1029BS07	36	IS530.1 Mainboard	00	2019-04-25

# Certificate of Conformity

## Ex EQUIPMENT

Certificate No.: **ANZEx 20.2002X**      Current Issue: 1      Date of Issue: 2021-07-09

Document Number	Pages / Sheets	Document Title	Revision	Date
1029BN07	10	IS530.1 Mainboard Layout	00	2019-05-23
1029BT07	2	IS530.1 Mainboard	00	2019-05-21
1029BR07	2	IS530.1 LCD-VAR2 Assembly	00	2019-05-23
		<b>LCD – VAR1 Backlight</b>		
1029BN09	1	IS530.1 LCD-VAR1_Backlight Layout	00	2019-05-23
		<b>LCD – VAR2 Backlight</b>		
1029BN10	1	IS530.1 LCD-VAR2_Backlight Layout	01	2019-07-26
		<b>Mechanical Data</b>		
1029DG01	6	IS530.1 Parts and Materials	00	2019-05-06
		<b>ANZEx Labels:</b>		
1029DM238	1	IS530.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/ExTR19.0059/02; 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
1029AD05	4	IS530.M1 ATEX+IECEx Description	01	2021-05-25
1029AD13	6	IS530.M1 Safety instructions	03	2021-04-29
1029DM28	1	IS530.M1 Back Label Mining ANZEx	01	2021-07-02