



Ontploffingvoorkomingstechnologie  
Explosion Prevention Technologies

# MTEEx Laboratories

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## INSPECTION AUTHORITY (IA) CERTIFICATE

**i.safe MOBILE GmbH.**  
**i\_Park Tauberfranken 10**  
**97922 Lauda-Koenigshofen**  
**Germany**

**Issued:** 2023/02/10  
**Expire:** 2026/02/10  
**Revision:** 1  
**Job File Number:** 0901

Applicant:  
**i.safe MOBILE GmbH**

For validity purposes, the following marking must be added to all equipment covered by this certificate:

**IA Number:** MTEEx-S/20.0011 X  
**Manufacturer:** i.safe MOBILE GmbH  
**Supplier:** i.safe MOBILE GmbH  
**Equipment:** Intrinsically safe and multifunctional industrial smartphone  
**Model/Type:** IS530.1  
**Ex Rating:** Ex ib IIC T4 Gb  
Ex ib IIIC T135°C Db IP6X  
**Serial No.:** All units imported between the issue and expiry dates of this certificate.



### Standards used:

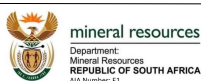
<b>SANS 60079-0: 2019 Ed.6</b> <b>IEC 60079-0: 2017 Ed.7</b>	<b>Explosive atmospheres – Part 0: General requirements.</b>
<b>SANS 60079-11: 2012 Ed.4</b> <b>IEC 60079-11: 2011 Ed.6</b>	<b>Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i".</b>

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

This certification indicates compliance with R10.1 of the Mines Health and Safety Act and/or EMR 8(1) of the Occupational Health and Safety Act, provided that the apparatus is used as prescribed in accordance with:

- 1) Any conditions set out in this Certificate.
- 2) This certificate only covers equipment imported between the "Issued" and "Expiry" dates.
- 3) When the supporting Q.A.N. (Quality Assurance Notification) of the equipment manufacturer expires, it is the responsibility of the applicant (as mentioned above) to submit a valid Q.A.N to MTEEx Laboratories.
- 4) The test results presented in this "Ex" Test Report relate only to the item or product testing.
- 5) Note: It is the responsibility of the supplier to ensure that the marking label complies with the ARP 0108.
- 6) This Certificate validates all units imported between Issued and Expiry dates.

Reviewed by + Signature (ExTL):	A. van Niekerk	
Approved by + Signature (ExCB): (MTEEx Laboratories Technical Signatory)	D. Young	



MTEEx Laboratories is an Accredited Test Laboratory (ATL) in terms of the ARP 0108: "Regulatory Requirements for Explosion-Protected Apparatus"

## 1. OVERVIEW

The intrinsically safe, multifunctional, and rugged industrial smartphone IS530.1 has been designed for use in explosion hazardous areas of zone 1 and 21. It provides numerous technologies like 4G (LTE), NFC, GPS, Wi-Fi and Bluetooth LE. The IS530.1 with an Android operating system, large internal memory, amplified loudspeaker, replaceable battery pack and functional 13-pin ISM interface.

## 2. REASON FOR REVIEW

Revision 0: ARP 0108 Requirement (Initial IA Certificate).

Revision 1: Renewal of IA Certificate including new template.

## 3. DOCUMENTATION PROVIDED

- IECEx Quality Assessment Report (IECEx EPS 19.0014 X Issue 0).
- IECEx Certificate of Conformity (DE/EPS/QAR12.0003/05).

## 4. ELECTRICAL / SAFETY PARAMETERS

### Power Supply:

The smartphone may only be used with the approved, intrinsically safe battery pack BPIS530.1 made by i.safe MOBILE GmbH.

LiPo battery  $U_o = 3.8 \text{ V}$  ( $U_o_{\text{max}} = 4.35\text{V}$ ) / 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 transmissions outside hazardous areas. It is not permitted to pen the USB interface cover in hazardous areas.

The ISM interface of the IS530.1 can be used within hazardous areas with approved headsets, Remote Speaker Microphones (RSM) and add-ons, marking the smartphone 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, it must be securely closed by the cover provided for this purpose.

## 5. INSTALLATION INSTRUCTIONS

None.

**6. CONDITIONS OF CERTIFICATE (X)**

- The battery may be charged outside explosion hazardous areas only.
- The device must be protected against excessive UV light emission and high electrostatic charge processes.
- The permitted ambient temperature range is -20°C to +60°.

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MTEEx Laboratories takes no responsibility for any non-conforming tests / assessments / results which is not in compliance with the relative Standards. By marking the equipment as mentioned in the documentation, the manufacturer takes full responsibility that the equipment has indeed complied with the original type assessment and has been subjected to any routine verification(s) / test(s) respectively.

**End of Certificate.**