

Megaton Systems (Pty) Ltd T/A
MTEx Laboratories
Unit 1 Wierda Place, 17 Hilda Avenue, Centurion.
Postnet #89
Privatebag X1028
Dorinkloof
0140



Ontploffing Beskermingsdienste
Explosion Prevention Services

Reg No.: 2012/055110/07; VAT No.: 4830273027

ACCREDITED TEST LABORATORY

IN TERMS OF THE ARP 0108: "REGULATORY REQUIREMENTS FOR EXPLOSION PROTECTED APPARATUS"

INSPECTION AUTHORITY CERTIFICATE

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

Issued: 2020/02/03
Expire: 2023/02/03
Revision: 0

Equipment: Intrinsically safe and industrial tablet.
Manufacturer: i.safe MOBILE GmbH
Address: i_Park Tauberfranken 10, 97922 Lauda-Koenigshofen
Model/Type: IS930.M1
Serial No.: All units imported between Issued and Expiry dates.

Applicant:
i.safe MOBILE GmbH

Inspection Authority Number: **MTEx-M/20.0014 X**

MTEx Record Number: **MTEx 0901/20.0014**

Ex Rating: **Ex ia I Ma IP64**

Standards used:

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

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

Hazardous Area: Zone 0
Occurrence: Continuous, Intermittent and abnormal conditions
Hazardous Group: I
Permitted Temperature: 150°C

Equipment Protection level (EPL):

EPL		Definition
Gas	Dust	
Ma		Equipment for installation in a mine susceptible to firedamp, having a "very high" level of protection, which has sufficient security that it is unlikely to become an ignition source in normal operation, during expected malfunctions or during rare malfunctions, even when left energized in the presence of an outbreak of gas.
Mb		Equipment for installation in a mine susceptible to firedamp, having a "high" level of protection, which has sufficient security that it is unlikely to become a source of ignition in normal operation or during expected malfunctions in the time span between there being an outbreak of gas and the equipment being de-energized.

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 tested.

1. OVERVIEW

Equipment and systems covered by this Certificate are as follows:

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.

2. ELECTRICAL/ AND SAFETY PARAMETERS

Supply: The tablet IS930.M1 has a fixed installed rechargeable Li-Ion battery $U_0 = 3.8 \text{ V}$ ($U_{0_max} = 4.2 \text{ V}$).

Interfaces: The opening of the interface covers in explosive atmospheres is not permitted.

Wired data connection and charging is only allowed outside ex-hazardous areas.

$U_m = 5.88 \text{ V}$, this is ensured by using the Docking Station DS930.1, the i.safe PROTECTOR cables or other accessories specified by i.safe MOBILE GmbH. A list of approved accessories can be found at www.isafe-mobile.com.

A commercially available SD card may be used in the corresponding slot in the hazardous area. The internal electrical capacity of the SD card is negligible

3. REASON FOR REVIEW

- ARP 0108: 2014 Requirement.

4. DOCUMENTATION PROVIDED

- IECEX Quality Assessment Report (DE/EPS/QAR12.0003/07)
- IECEX Certificate of Conformity (IECEX EPS 19.0063 X)

5. SPECIAL CONDITIONS OF USE (X)

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

6. MARKING

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

Manufacturer: i.safe MOBILE GmbH
Supplier: i.safe MOBILE GmbH
Equipment: Intrinsically safe industrial tablet.
Model/Type: IS930.M1
IA Number: MTEEx-M/20.0014 X
Ex Rating: Ex ia I Ma IP64
Serial No.: All units imported between Issued and Expiry dates.

Note 1: It is the responsibility of the supplier to ensure that the marking label complies with the ARP 0108: 2014.

Certificate Issued by:



D. Young, Testing Officer.

Authorized by:



H. De Wet, Editor.

MTEEx Laboratories

Note: This document may not be reproduced except in full.

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