



# Certificate of Compliance

**Certificate:** 70170800

**Master Contract:** 258554

**Project:** 80016232

**Date Issued:** 2019-09-19

**Issued To:** i.Safe MOBILE GmbH  
i Park Tauberfranken 10  
Lauda-Koenigshofen, Baden-Württemberg, 97922  
Germany

**Attention:** Dirk Amann

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.*

**Issued by:** *Sorin Tat*  
Sorin Tat



## **PRODUCTS**

CLASS - C225803 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non Incendive Systems - For Hazardous Locations

CLASS - C225883 - PROCESS CONTROL EQUIPMENT-Intrinsically Safe and Non-Incendive Systems-For Hazardous Locations-Certified to U.S. Standards

**Class I Division 1, Groups A, B, C, D**

**Class II Division 1, Groups E, F, G**

**Class III Division 1**

The HMT-1Z1 also marketed as RealWear HMT-1Z1 and i.safe MOBILE HMT-1Z1, is an intrinsically safe, rugged industrial head mounted tablet, powered by a rechargeable 3.6V 3480mAh battery pack (B1100S).

Temperature code T4. Ambient: -20°C to 60°C operational, 5°C to 40°C charging.



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**Conditions of Acceptability:**

- The battery shall only be charged outside hazardous areas, at an ambient between 5°C and 40°C.
- The battery shall only be charged using a suitably certified Class 2 power supply with the following output parameters:  $V = 5V_{DC}$   $I = 2000mA$
- The headphone port is the only port that can be used in hazardous locations, in conjunction with the approved headphone model H1100G, or a suitably certified headphone with the following entity parameters:  $V_O = 4.2V_{DC}$   $I_O = 249mA$

**Gas Groups A, B, C, D**

$L_O$ (mH)	0.5	0.2	0.1	0.05	0.02	0.01	0.005	0.002	0.001
$C_O$ (µF)	4.6	6.8	8.9	12	17	25	40	130	420

**Gas Groups C, D**

$L_O$ (mH)	2	1	0.5	0.2	0.1	0.05	0.02	0.01	0.005
$C_O$ (µF)	19	25	32	45	59	83	150	310	1000

By using gas group C, D parameters for the headphone, the gas group of the combination (HMT-1Z1 with headphone) is reduced to gas groups C, D.

- The device must be protected against: Impacts with high impact energy, excessive UV light emission, and high electrostatic charge processes.

**APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No. 60950-1-07	Information technology Equipment – Safety – Part1: General Requirements
CAN/CSA-C22.2 No. 60079-0:15	Explosive Atmospheres - Part 0: Equipment - General requirements
CAN/CSA-C22.2 No. 60079-11:14	Explosive Atmospheres – Part 11: Equipment protection by intrinsic safety "i"
ANSI/UL 60950-1-2014 Edition 2	Information technology Equipment – Safety – Part1: General Requirements
ANSI/UL 60079-0:13	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements
ANSI/UL 60079-11:13	Electrical apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety “i”
UL 913: 2018(8 <sup>th</sup> Edition)	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III Div.1 Hazardous(Classified) Locations



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## **MARKINGS**

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

In addition to the above markings, the label shall contain:

- The appropriate Hazardous Locations markings as shown below:
  - Class I Div. 1 Groups A, B, C, D
  - Class II Div. 1 Groups E, F, G
  - Class III Div. 1
- The words “Intrinsically Safe” in English and in French: “Securite Intrinseque”
- The appropriate temperature code: T4
- The ambient temperature range: -20°C to 60°C
- Manufacturer’s name: "i. Safe MOBILE GmbH", or CSA Master Contract Number “258554”, adjacent to the CSA Mark in lieu of manufacturer’s name.
- A serial number
- The certificate number “CSA18CA70170800”
- The following warnings in English and French:
  - “Warning: Read and understand the manual before operating!” and “Avertissement: Lisez et comprenez le manuel avant d'utiliser!”
  - “Warning: Do not charge or open in Ex-hazardous areas!” and “Avertissement: Ne chargez pas et n'ouvrez pas dans des zones dangereuses!”



## Supplement to Certificate of Compliance

Certificate: 70170800

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*The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.*

### Product Certification History

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Project	Date	Description
80016232	2019-09-19	Update to report 70170800 (last project 70188651) to revise the product listings section to add alternate product names (for marketing reasons) that are identical to the certified product.
000070188651	2018-06-22	Update certificate 70170800 (Report 70170800) to incorporate the following changes: 1. Update charging temperature to 0C to -40C 2. Add entity parameters for headphones other than model H1100G in the Conditions of Acceptability 3. Update markings to include equivalent Zone markings as per CSA/UL 60079-0. No additional technical evaluation necessary. 4. Remove Condition of Acceptability stating that port covers must be in place in a dust environment.(contingent on receiving acceptable test data from an accredited body in the correct format). Points 1, 2, and 3 are minor editorial changes, agreed upon prior to issuance of the quote.
000070170800	2018-06-07	Original CSA C-US certification of the HMT-Z1 head mounted tablet for the following markings: Class I Div 1 Groups A, B, C, D Class II Div 1 Groups E, F, G Class III Div 1 IECEX-TR and Descriptive Documents required by February 1. Product is assumed to meet the requirements for Zone 0 Group IIC. The product is assumed to be tested for IP6X requirements which are needed for Class II/III certifications. Original CSA C-US certification of the HMT-Z1 head mounted tablet for the following markings: Class I Div 1 Groups A, B, C, D Class II Div 1 Groups E, F, G Class III Div 1 IECEX-TR and Descriptive Documents required by February 1. Product is assumed to meet the requirements for Zone 0 Group IIC. The product is assumed to be tested for IP6X requirements which are needed for Class II/III certifications.