

# **Certificate of Compliance**

Certificate: 70166734 Master Contract: 248090

**Project:** 70166734 **Date Issued:** July 16, 2018

**Issued to:** ecom instruments GmbH

Industriestrasse 2 D-97959 Assamstadt

**GERMANY** 

**Attention:** Kevin Spence

The products listed below 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 US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only



**Issued by:** 

B J Allen

## **PRODUCTS**

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

Class I, Division 2, Groups A, B, C and D; T5 Tamb=  $-20^{\circ}$ C to  $+55^{\circ}$ C

Non-Incendive Industrial Ruggedized Portable 8 Inch Tablet Computer Models Tab-Ex 02 (D2 or DZ2) WiFi and Tab Ex 02 (D2 or DZ2) WWAN, powered via a single internal 3.8Vdc, 4450mAh, 16.91Wh, Secondary Li-Ion battery, Type Samsung EB-BT365BB\*, maximum charge voltage 4.35V. The Tablet Computers have a Water and Dust proof IP68 (IP64 tested by European Notified Body) enclosure with a single external USB Type-C connection and external 7-Pin POGO pin connection that is not intended for use in the hazardous areas. The Tablet Computer is also fitted with a single 3.5mm Audio Jack Headphone connection that is intended for use within the hazardous areas with non-incendive field wiring parameters: -

Uo/Voc: 3.2 V, Io/Isc: 150 mA, Po: 100 mW, Ci =  $1.4 \mu$ F, Li =  $100 \mu$ H, Co/Ca:  $5\mu$ F and Lo/La:  $3.9 \mu$ H

Note: The only difference between the "D2" and "DZ2" versions of the Tab-Ex 02 is additional protection parts (to protect the front screen, rear camera and front push buttons) and antistatic coatings applied to the "DZ2" version. These additional protection parts and antistatic coatings are required for IEC Zone 2 approval in accordance with IEC 60079-0.



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## **Conditions of acceptability regarding ordinary locations:**

- (1) This investigation does not include the functionality, performance or mobile communication aspects of Samsung Tablet version, SM-T390, SM-T395 (with LTE/GSM) and SM-T397.
- (2) Units are intended to be supplied by external approved power supply unit (not part of the investigation), provided with SELV and Limited Power Source (LPS) output separated from the mains by double or reinforced insulation or from +5VDC Micro USB.
- (3) The units are considered to be Class III (i.e. supplied from SELV, safety extra low voltage source).
- (4) The Charger plug set provided with the equipment must be an approved type acceptable to the authorities in the country where the equipment is sold.

**CLASS 2258 82** – PROCESS CONTROL EQUIPMENT – For Hazardous Locations – Certified to U.S. Standards

Class I, Division 2, Groups A, B, C and D; T5 Tamb=  $-20^{\circ}$ C to  $+55^{\circ}$ C

Non-Incendive Industrial Ruggedized Portable 8 Inch Tablet Computer Models Tab-Ex 02 (D2 or DZ2) WiFi and Tab Ex 02 (D2 or DZ2) WWAN, powered via a single internal 3.8Vdc, 4450mAh, 16.91Wh, Secondary Li-Ion battery, Type Samsung EB-BT365BB\*, maximum charge voltage 4.35V. The onboard memory storage capacity is either 16GB, 32GB or 64GB. The Tablet Computers have a Water and Dust proof IP68 (IP64 tested by European Notified Body) enclosure with a single external USB Type-C connection and external 7-Pin POGO pin connection that is not intended for use in the hazardous areas. The Tablet Computer is also fitted with a single 3.5mm Audio Jack Headphone connection that is intended for use within the hazardous areas with non-incendive field wiring parameters: -

Uo/Voc: 3.2 V, Io/Isc: 150 mA, Po: 100 mW, Ci =  $1.4 \mu$ F, Li =  $100 \mu$ H, Co/Ca:  $5 \mu$ F and Lo/La: 3.9 mH

Note: The only difference between the "D2" and "DZ2" versions of the Tab-Ex 02 is additional protection parts (to protect the front screen, rear camera and front push buttons) and antistatic coatings applied to the "DZ2" version. These additional protection parts and antistatic coatings are required for IEC Zone 2 approval in accordance with IEC 60079-0.

## **Conditions of acceptability regarding ordinary locations:**

- (1) This investigation does not include the functionality, performance or mobile communication aspects of Samsung Tablet version, SM-T390, SM-T395 (with LTE/GSM) and SM-T397.
- (2) Units are intended to be supplied by external approved power supply unit (not part of the investigation), provided with SELV and Limited Power Source (LPS) output separated from the mains by double or reinforced insulation or from +5VDC Micro USB.
- (3) The units are considered to be Class III (i.e. supplied from SELV, safety extra low voltage source).
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## **APPLICABLE REQUIREMENTS**

ANSI/UL 60950-1-2014 2nd Ed

C22.2 No. 0-10 General Requirements

CAN/CSA-C22.2 No. 60950-1-07 2nd Ed Information Technology Equipment – Safety – Part 1: General

including A1: 2011, A2:2014 Requirements.

Non-incendive electrical equipment for use in Class I and II, CSA C22.2 No. 213-17:2017-00

Division 2 and Class III, Divisions 1 and 2 hazardous

(classified) locations (Binational standard with UL 121201) Information Technology Equipment – Safety – Part 1: General

Requirements

Standard for Safety for Non-incendive Electrical Equipment ANSI/UL 121201:2017

> for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations (Proposal dated

06-09-17)

#### **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.

The following markings are provided by laser engraving on the rubberized plastic external protective cover.

- Manufacturer's name: "ecom", or CSA Master Contract number "248090" adjacent to the CSA mark in lieu of manufacturer's name.
- Model number: As specified in the PRODUCTS section, above.
- 3. Electrical ratings: As specified in the PRODUCTS section, above.
- Manufacturing date in MMYY format, or serial number, traceable to year and month of manufacture.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- The CSA Mark with or without "C" and "US" indicators, as shown on the Certificate of
- 7. Temperature Code: As specified in the PRODUCTS section, above.
- Hazardous Location designation- "Class I, Division 2, Groups A, B, C and D" (may be abbreviated).
- Temperature Code "T5" (optional marking)
- 10. The following optional markings may be used: "Class I, Zone 2, Group IIC T5".
- 11. Reference to the control drawing: Device is safe when used per control drawing 300043FZ51A
- 12. The following warnings:



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WARNING - DO NOT CHARGE OR REPLACE THE BATTERY IN THE HAZARDOUS

LOCATION.

WARNING - NO ELECTRICAL CONNECTIONS ALLOWED TO THE USB PORT AND

**POGO PINS** 

AVERTISSEMENT - NE PAS CHARGER OU REMPLACER LA BATTERIE DANS UNE ZONE DANGEREUSE!

AVERTISSEMENT – AUCUNE CONNEXION ÉLECTRIQUE AU PORT USB OU À LA PRISE POGO AUTORISÉE DANS LES ZONES DANGEREUSES!

<u>Note</u>: Some jurisdictions in Canada require Cautions and Warnings to also be in French. It is the responsibility of the manufacturer to provide bilingual marking, where applicable, in accordance with the requirements of the local regulatory authorities. It is the responsibility of the manufacturer to determine this requirement and have bilingual wording added to the "Markings".