

Certificate of Compliance

Certificate: 70024080 Master Contract: 248090

Project: 70091561 **Date Issued:** 2017-07-04

Issued to: ecom instruments GmbH

Industriestrasse 2

Assamstadt, Baden Wurttemburg 97959

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:

R Simmons

PRODUCTS

CLASS 9098-01 MISCELLANEOUS - For Hazardous Locations

Class I, Division 1, Groups B, C and D; T5 Class II, Division 1, Groups E, F and G Class III, Division 1

Model Tab-Ex 01 DZ1 Wifi (Equipped with Type 1 LCD Glass); Model Tab-Ex 01 DZ1 WWAN (Equipped with Type 1 LCD Glass); industrial portable 8 inch tablet computer, powered by a single internal 3.8Vdc, 4450mAh, 16.91Wh, Secondary Li-Ion battery, maximum charge voltage 4.35V. For use in an ambient temperature range of -20°C to +50°C.

Ex db ia IIC T5 Gb T_{amb} (-20° to +50°C) Ex tb IIIC T100°C Db

Model Tab-Ex 01 DZ1 Wifi (Equipped with Type 1 LCD Glass & Type 2 LCD Glass); Model Tab-Ex 01 DZ1 WWAN (Equipped with Type 1 LCD Glass & Type 2 LCD Glass); Model Tab-Ex 01 DZ1 SIM (Equipped with



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Type 1 LCD Glass & Type 2 LCD Glass); industrial portable 8 inch tablet computer, powered by a single internal 3.8Vdc, 4450mAh, 16.91Wh, Secondary Li-Ion battery, maximum charge voltage 4.35V. For use in an ambient temperature range of -20°C to +50°C.

CONDITIONS OF ACCEPTABILITY:

- 1. The model 'Tab-Ex 01 DZ1 SIM' shall only be opened for SIM Card access in the non-hazardous area as per the ecom guidance document 100016AL19A. All other equipment models shall not be opened by the end user for any reason; if either of the equipment's enclosures are opened or damaged, the following conditions shall apply:
 - a. The equipment shall be removed from the explosive atmosphere immediately and will not be suitable for re-use until it is repaired by the OEM.
 - b. If the outer enclosure is damaged precautions shall be taken to ensure that the internal flameproof enclosure is not subject to static charging.
 - c. If the inner flameproof enclosure is opened, the equipment shall never be used in an explosive atmosphere unless it has been repaired and re-sealed by the OEM.
- 2. Electrical connections to the equipment are not permitted in the hazardous area.
- 3. When the ambient temperature is greater than 45°C the integrated LED may only be used (powered) for individual periods of up to 10 minutes, with a total of no more than 1 hours use per day.
- 4. This investigation does not include the functionality, performance or mobile communication aspects of Samsung Tablet version, SM-T365 (with LTE/GSM).
- 5. Units are intended to be supplied by external approved power supply unit (not part of the investigation), provided with SELV and Limited Power Source output separated from the mains by double or reinforced insulation
- 6. The units are considered to be Class III (i.e. supplied from SELV, safety extra low voltage source).
- 7. The charging / abnormal discharging of the tablet shall be in an ambient less than 45 degree C.
- 8. The equipment shall only be used in areas with low risk of mechanical impact. (Zones only)
- 9. When fitted with Type 2 LCD glass and intended for use in Group IIC gases the equipment must therefore be subjected to routine overpressure testing by the manufacture at a pressure of 0.6 bar in accordance with CAN/CSA-C22.2 No. 60079-1:16 & ISA 60079-1:2009(R2013). The SIM card plug does not require overpressure testing. This is not applicable for Group IIB applications. (Zones only).

CLASS 9098-81 MISCELLANEOUS - For Hazardous Locations - CERTIFIED TO U.S. STANDARDS

Class I, Division 1, Groups A, B, C and D; T5 Class II, Division 1, Groups E, F and G Class III, Division 1 Class I, Zone 1 AEx db ia op is IIC T5 Gb $T_{amb}(-20^{\circ}\ to\ +50^{\circ}\ C)$ Zone 21 AEx tb IIIC T100°C Db

Model Tab-Ex 01 DZ1 Wifi (Equipped with Type 1 LCD Glass & Type 2 LCD Glass); Model Tab-Ex 01 DZ1 WWAN (Equipped with Type 1 LCD Glass & Type 2 LCD Glass); Model Tab-Ex 01 DZ1 SIM (Equipped with Type 1 LCD Glass & Type 2 LCD Glass); industrial portable 8 inch tablet computer models Tab-Ex 01 DZ1



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WWAN and Tab-Ex 01 DZ1 WiFi, powered by a single internal 3.8Vdc, 4450mAh, 16.91Wh, Secondary Li-Ion battery, maximum charge voltage 4.35V. For use in an ambient temperature range of -20°C to +50°C.

CONDITIONS OF ACCEPTABILITY:

- 1. The model 'Tab-Ex 01 DZ1 SIM' shall only be opened for SIM Card access in the non-hazardous area as per the ecom guidance document 100016AL19A. All other equipment models shall not be opened by the end user for any reason; if either of the equipment's enclosures are opened or damaged, the following conditions shall apply:
 - a. The equipment shall be removed from the explosive atmosphere immediately and will not be suitable for re-use until it is repaired by the OEM.
 - b. If the outer enclosure is damaged precautions shall be taken to ensure that the internal flameproof enclosure is not subject to static charging.
 - c. If the inner flameproof enclosure is opened, the equipment shall never be used in an explosive atmosphere unless it has been repaired and re-sealed by the OEM.
- 2. Electrical connections to the equipment are not permitted in the hazardous area.
- 3. When the ambient temperature is greater than 45°C the integrated LED may only be used (powered) for individual periods of up to 10 minutes, with a total of no more than 1 hours use per day.
- 4. This investigation does not include the functionality, performance or mobile communication aspects of Samsung Tablet version, SM-T365 (with LTE/GSM).
- 5. Units are intended to be supplied by external approved power supply unit (not part of the investigation), provided with SELV and Limited Power Source output separated from the mains by double or reinforced insulation
- 6. The units are considered to be Class III (i.e. supplied from SELV, safety extra low voltage source).
- 7. The charging / abnormal discharging of the tablet shall be in an ambient less than 45 degree C.
- 8. The equipment shall only be used in areas with low risk of mechanical impact. (Zones only)
- 9. When fitted with Type 2 LCD glass and intended for use in Group IIC gases the equipment must therefore be subjected to routine overpressure testing by the manufacture at a pressure of 0.6 bar in accordance with CAN/CSA-C22.2 No. 60079-1:16 & ISA 60079-1:2009(R2013). The SIM card plug does not require overpressure testing. This is not applicable for Group IIB applications. (Zones only)



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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 0-10 (R2015) CAN/CSA-C22.2 No. 25-1966 (R2014)	General Requirements – Canadian Electrical Code, Part II Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
CAN/CSA-C22.2 No. 30-M1986 CAN/CSA-C22.2 No. 60950-1-07	Explosion-Proof Enclosures for Use in Class I Hazardous Locations Information Technology Equipment – Safety – Part 1: General Requirements
CAN/CSA-C22.2 No. 60079-0:15	Explosive atmospheres – Part 0: Equipment – General Requirements
CAN/CSA-C22.2 No. 60079-1:16	Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures 'd'
CAN/CSA-C22.2 No. 60079-11:14	Explosive atmospheres – Part 11: Equipment protection by intrinsic safety 'i'
CAN/CSA-C22.2 No. 60079-31:15	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
FM 3600 (Dec 2011)	Electrical Equipment for Use in Hazardous (Classified) Locations – General Requirements
FM 3615 (Aug 2006)	Explosionproof Electrical Equipment General Requirements
FM 3616 (Dec 2011)	Dust-Ignitionproof Electrical Equipment General Requirements
UL913:2013, 8th Edition	Intrinsically safe apparatus and associated apparatus for use in Class I, II and III, Div 1 hazardous (classified) locations.
ANSI/ISA TR12.21.01 (Sep 2013) ANSI/UL 60950-1-2014 2nd Ed	Use of Fiber Optic Systems in Class I Hazardous (Classified) Locations Information Technology Equipment – Safety – Part 1: General
	Requirements
ISA 60079-0:2009	Explosive atmospheres – Part 0: Equipment – General Requirements
ISA 60079-1:2009 (R2013)	Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures 'd'
ISA 60079-11:2014	Explosive atmospheres – Part 11: Equipment protection by intrinsic safety 'i'
ISA 60079-28:2013	Explosive atmospheres – Part 28: Protection of equipment and transmission systems using optical radiation
ISA 60079-31:2015	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'



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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.

Nameplate adhesive label material approval information:

All marking is laser etched onto polymeric labels of types:

- CILS-8100S
- THERMLfilm ADVANTAGE Superb Satin White (UL listing MH16635)
- Schreiner 1010-2 (UL Listing MH25118)

The following markings are provided on polymeric labels affixed to the outer enclosure with adhesive.

- 1. Manufacturer's name: "ecom instruments GmbH".
- 2. Model designation: As specified in the PRODUCTS section of this report.
- 3. Electrical ratings: As specified in the PRODUCTS section of this report.
- 4. Manufacturing date in YYWW format, or serial number, traceable to year and month of manufacture.
- 5. Ambient temperature rating: As specified in the PRODUCTS section, above.
- 6. The CSA Mark with or without "US" indicators, as shown on the Certificate of Conformity.
- 7. Temperature Code: As specified in the PRODUCTS section, above.
- 8. Hazardous Location designation Canada: (see product listing) may also be marked IIB for Gas Groups
- 9. Hazardous Location designation US: (see product listing) may also be marked IIB for Gas Groups
- 10. Certificate No.: CSA 16.70024080
- 11. The following warnings:

WARNING – NO ELECTRICAL CONNECTIONS TO THE EQUIPMENT IS PERMITTED IN HAZARDOUS LOCATIONS. SIM CARD ACCESS ONLY PER ECOM GUIDANCE DOCUMENT 100016AL19A

AVERTISSMENT – AUCUNE CONNEXION ELECTRIQUE A CET EQUIPEMENT N'EST AUTORISEE DANS LES EMPLACEMENTS DANGEREUX. ACCESS A LA CARTE SIM UNIQUEMENT PAR LE DOCUMENT D'ORIENTATION ECOM 100016AL19A. DEVICE IS SAFE WHEN USED PER CONTROL DRAWING 100016AL07A SECURITE CONFORME AU SCHEMA DE CONTROLE