

Certificate of Compliance

Certificate: 2517686 Master Contract: 248090

Project: 2689105 **Date Issued:** March 18, 2014

Issued to: Ecom Instruments GmbH

Industriestrasse 2

Assamstadt, Baden-Wurttemberg 97959

Germany

Attention: William (Bill) Stewart

The products listed below are eligible to bear the CSA Mark shown with adjacent indicator 'US'



John Yam

Issued by: John Yam

PRODUCTS

CLASS 2258 83 - PROCESS CONTROL EQUIPMENT-Intrinsically Safe and Non-

Incendive - Systems-For Hazardous Locations-Certified to U.S. Standards

Class I, Zone 1; AEx ib IIC T4

Zone 21 AEx ibD T96°C; -20°C <= Ta <= +55°C

Digital TETRA Radio, Model THR9 Ex; Li-ion 3.7V battery powered, 2000mAh Type BLN Ex-2 or 1280mAh Type BLN Ex-4, intrinsically safe with the following Entity Parameters as per drawing 500022EX13A02G;

Vmax = 4.2V; Imax = 1.114A; Ci = 410uF; Li = 1 uH

Notes:

i. Battery: Only the certified battery module "BLN Ex-2" or "BLN Ex-4" shall be used

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ii. Battery Exchange: The battery module can be changed inside hazardous gas-explosive locations Zone 1 and 2. During battery change it must be assured that the connections are free from dust or dirt. In hazardous dust explosive locations the battery module shall not be exchanged.

- iii. Battery storage: Reserve battery modules shall be carried only inside the safety-bag "SBC-Ex". For interchanging the modules shall be extracted only for a short time and the changed module must be immediately returned into the safety-bag
- iv. Battery charging: The battery shall be charged only outside hazardous locations. For charging the module itself or within the electrical equipment only the following approved charging devices shall be used: DKC-6 Multi-charger for Terminal, DKC-6 Multi-charger for Battery, ACP-12*, LCH-12, DKC-1
- v. Accessories: Inside hazardous locations, only accessories that connect to the Top-connector are allowed. The accessory must fulfill the requirements given in the user's manual and in the interface description 500022EX05A02G or 500022EX05A03G.

Note: There may be older accessories that meet the requirements of 500022EX05A02G. This access is suitable for usage.

- vi. Dust Ex location: If there is no approved accessory connected to the Top-Connector the interface must be covered with the "SCL" cover.
- vii. Bottom connector: The plug interface "Bottom Connector" shall not be used in hazardous locations.

APPLICABLE REQUIREMENTS

UL Standard 508, Seventeenth Edition - Electric Industrial Control Equipment

UL Standard 913, Seventh Edition - Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II and III, Div. 1, Hazardous (Classified) Locations

UL 60079-0, Fifth Edition - Electrical Apparatus for Explosive Gas Atmospheres – Part 0: General Requirements

UL 60079-11, Fifth Edition - Equipment Protection by Intrinsic Safety "i"

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ANSI/ISA-61241-11 (R2011) - Electrical Apparatus for Use in Zone 20, Zone 21 and Zone 22 Hazardous (Classified) Locations – Protection by Intrinsic Safety "iD"

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