



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx VTT 16.0004X

Issue No: 3

Certificate history:

Status: **Current**

Issue No. 3 (2017-08-15)

Issue No. 2 (2016-10-05)

Date of Issue: **2017-08-15**

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Issue No. 1 (2016-07-01)

Issue No. 0 (2016-04-25)

Applicant: **Savox Communications Oy Ab**  
Sinikalliontie 3  
FI-02630  
Espoo  
**Finland**

Equipment: **Com-Control units C-C440/MTP850Ex, C-C440/DP4000X, C-C440/Waris Ex, C-C440/Sailor Ex, C-C440/PD79aEx, C-C440/E-TEch Ex and C-C440/TK2260 Ex**

Optional accessory: *See additional information*

Type of Protection: **Intrinsically safe**

Marking:

Ex ib IIC T4 Gb

Ex ib III C T110 °C Db

Approved for issue on behalf of the IECEx  
Certification Body:

Martti Siirola

Position:

Senior Expert

Signature:

(for printed version)

Date:

2017-08-15

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

**VTT Expert Services Ltd.**  
Kivimiehentie 4, Espoo  
P.O.Box 1001  
FI-02044 VTT  
Finland



**VTT EXPERT SERVICES LTD**



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Manufacturer: **Savox Communications Oy Ab**  
Laitaatsillantie 3  
FI-57170 Savonlinna  
Finland

Additional Manufacturing location(s):

**Savox Communications (Shenzen) Co. Ltd**  
7th Floor, Building #2, Hong Hui Industrial Park, Li Xian 2nd Road, 68th Subdistrict, Baoan, Shenzen  
China

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

**IEC 60079-0 : 2011** Explosive atmospheres - Part 0: General requirements  
Edition:6.0

**IEC 60079-11 : 2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

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

#### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

##### Test Report:

FI/VTT/ExTR16.0003/02

##### Quality Assessment Report:

FI/VTT/QAR08.0001/06      FI/VTT/QAR10.0003/04



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The SAVOX C-C440/MTP850Ex, C-C440/Sailor Ex, C-C440/DP4000X, C-C440/Waris Ex, C-C440/PD79aEx, C-C440/E-Tech Ex and C-C440/TK2260 Ex Com-Control Units are to be used with intrinsically safe radio types according to unit type marking. Com-Control unit type C-C440/PD79aEx is also compatible with certified PD71aEx, HD795Ex, PT790Ex and PT710Ex radios. The unit consist of permanent cable, IP5X (according to EN 60079-0 and -11) enclosure with integrated PTT (Push-To-Talk) button and an electronics board. The plastic material of the enclosure is conductive.

### Electrical data

The maximum input values of types C-C440/MTP850Ex, C-C440/Sailor Ex, C-C440/Waris Ex, C-C440/PD79aEx and C-C440/TK2260 Ex:

$U_i = 9\text{ V}$   $I_i = 3\text{ A}$   $P_i = 6.75\text{ W}$   $C_i = 0.1\text{ }\mu\text{F}$   $L_i = 10\text{ }\mu\text{H}$

The maximum input values of type C-C440/DP4000X are:

$U_i = 9\text{ V}$   $I_i = 75\text{ mA}$   $P_i = 314\text{ mW}$   $C_i = 0.1\text{ }\mu\text{F}$   $L_i = 2\text{ mH}$

The maximum input values of type C-C440/E-Tech Ex are:

$U_i = 9\text{ V}$   $I_i = 3\text{ A}$   $P_i = 6.75\text{ W}$   $C_i = 0.1\text{ }\mu\text{F}$   $L_i = 5\text{ }\mu\text{H}$

### SPECIFIC CONDITIONS OF USE: YES as shown below:

Allowed ambient temperature range is  $T_{amb} -20\text{ }^\circ\text{C}$  to  $+55\text{ }^\circ\text{C}$

When used with allowed plug-in accessories inside hazardous areas, the limited conditions shall be observed.

Connection of SAVOX C-C440 Com-Control Units shall be done according to radio manufacturer's instructions.

Impact test was made according to low risk of mechanical danger. The device shall be protected from high level impacts.



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Addition of FPS-COM 7000 plug-in accessory.



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## Additional information:

### Allowed plug-in accessories:

1. SAVOX TC-1 Ex or POA61-Ex
2. SAVOX MP-H ATEX or POA104-Ex
3. SAVOX IS-Com ATEX
4. SAVOX MS-Com ATEX
5. SAVOX HC-1 ATEX or POA34-Ex
6. SAVOX HC-2 ATEX or POA100-Ex
7. SAVOX HC-E ATEX or POA101- Ex
8. SAVOX L-H Ex or POA65-Ex
9. SAVOX N-H Ex or POA62-Ex
10. Con-space Facemask Com/ Sabrecom 2
11. Peltor Adapter Cable Ex
12. Holmco HL-09, HL-19
13. Invisio H-M3x-2-xxxX-xxx
14. FRR Ele. Mic Ex QR4
15. FPS-COM-PLUS VA R-C (Ref. IECEX ITS 11.0030X)
16. FPS-COM 5000 (Ref. IECEX ITS 16.0023X)
17. FPS-COM 7000 (Ref. IECEX ITS 15.0051X)
18. SAVOX N-C ATEX or POA102-Ex (Limited condition: Gas Group IIC T4 only, Dust excluded)
19. MT7H79F-50, MT7H79B-50, MT7H79P3E-50 (Limited condition: Gas Group IIC T4 only, Dust excluded. Allowed ambient temperature range is Tamb -20 °C to +50 °C)

The accessory documents are listed in the document "Headset documents in PTT Ex certificates". Doc.nr. D22115. Rev.N. Date: 25.8.2016.

SAVOX C-C440/MTP850Ex complies with the Documentation Manual for Motorola ATEX, UC connector interface mentioned in Motorola documents:

- Accessory Interface Definition, Document 6866546D07\_02\_06, Rev B, date 27-Jun-08
- Specification of External Loudspeaker used at Accessory Interface, Document 6866546D07\_02\_07, Rev B, date 27-Jun-08

Instructions for safe use:

Declaration of conformity and safety guide D23328, Rev. H, date: 2017-03-17.