

IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX QPS 21.0006X** Page 1 of 5

Issue No: 1 Status: Current

Date of Issue: 2024-06-03

Applicant: Special Electronics & Designs Inc.

214 Bruce Avenue Kincardine, Ont. N2Z 2P3

Canada

Equipment: Intrinsically Safe Hardline Communication System

Optional accessory: Refer to Equipment Section below

Type of Protection:

Marking:

IECEX QPS 21.0006X

Ex ia IIC T3 Ga; Ex ia I T151°C Ma

Approved for issue on behalf of the IECEx Certification Body:

D. Adams, P. Eng.

Position: Manager, Hazardous Locations (Ex Equipment) Deptment

Signature:

(for printed version)

(for printed version)

- This certificate and schedule may only be reproduced in full.
- This certificate is not transferable and remains the property of the issuing body.
 The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate history: Issue 0 (2021-11-05)

Certificate issued by:

QPS Evaluation Services Inc. 81 Kelfield St Unit 8

Toronto, Ontario M9W 5A3

Canada





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Special Electronics & Designs Inc. Manufacturer:

214 Bruce Avenue Kincardine, Ont. N2Z 2P3

Canada

Manufacturing locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

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

Edition:6.0

This Certificate does not indicate compliance with 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 Reports:

CA/QPS/ExTR21.0004/00 CA/QPS/ExTR21.0004/01

Quality Assessment Report:

CA/QPS/QAR22.0001/00



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Product: Intrinsically Safe Hardline Communication System

Model: RESCOM Elite

SPECIFIC CONDITIONS OF USE: YES as shown below:

- System is intrinsically safe when connected per User's Manual 901127.

- Use only Alkaline size "AA" Duracell MN1500, Procell PC1500 or Energizer E91, rated 1.50V nominal.
- System must not be powered by more than one Model DMI-E (master) unit.
- The number of Model DSI-E amplifier (slave) units, inclusive of Models DSI-EAC and DSI-EVM, can be connected to the Model DMI-E (master) must not exceed nine units in total.
- Only one Model DSI-EVM shall be connected to the system in lieu of one DSI-E (slave unit).



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Equipment (continued):

Model RESCOM Elite Intrinsically Safe Hardline Communication System consists of the following:

- 1 x DMI-E Master communication module/belt assembly (amplifier + power source);
- Up to 9 x DSI-E Slave Communication Interface modules/belt assemblies (amplifier module only) that can be connected to the DMI-E;
- 1 x of the following passive headsets for each communication module DSI-E or DMI-E:
 - DQ70-206, DQ70-208, DQ73-206 or DQ73-208; or
 - 198920, 198921, 198922, 198923, 198925; 198933, 198934, 198935 or 198936
 - HH-*** speaker and microphone assembly for customized helmet where suffixes *** denotes mechanical and appearance variations
 only, such as shape, size and colours.
- · Acoustic Coupler Model DSI-EAC/S24;
- Model DSI-EVC, which is electrically equivalent to one Model DSI-E. It's a simple series volume control contained in an enclosed housing
 of the same type as the DMI-E/DSI-E units. A transistor is biased via a volume control to reduce or increase the voltage on the line to the
 V-Mic microphone. Connectors allow the DSI-EVC to connect to a DMI-E or DSI-E and a cable or rope from the DSI-EVC to the V-Mic;
- Model DSI-EVM, which is electrically equivalent to 1 x DSI-E slave communication module. It is made up of Model DSI-EVC together with a remote wired V-Mic PN 047010;

Accessories:

- Cable Reel Model RCC-03/450 and RCC-04/900 Stainless steel cable reel, with incorporated two slip-rings and 3F connectors, allows
 continuous use of communication equipment while deploying or reeling in cable (up to 450 m or 900 m) or rope (up to 150 m or 300 m);
- · Plastic Junction Boxes for star/series connection configuration:
 - · JBI-4HC, JBI-6HC, JBI-8HC portable with handles and up to 8 brass circular connectors;
 - JBI-1TC, JBI-2TC, JBI-3TC with integral tabs for fixed/wall mount and with 1, 2 or 3 brass connectors;
 - · JBI-3WC, JBI-4WC, JBI-5WC wall mount with 3, 4 or 5 brass circular connectors
- · Interconnection Devices Various
- Push-to-Mute Switch 040901-05(N);
- Push-to-Unmute Switch 040901-06(N):
- · T-Connector (C09);
- Bulkhead Pass Through (C11);
- Coupler Joiner (C32B, C32D);
- Extension Cords
 - · *EC2MMD02; and
 - *EC2MMB02
- · Safety/Communication Ropes
 - SCR2N*/#



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1. Clarification on enclosure materials that require ESD coatings.

- 2. Correction of enclosure material RTP Imagineering Plastics from P/N RTP2099 x 134682 to P/N RTP2599 x 133889 (SED P/N 500514-SD) that was previously tested.
- Updated label drawings to include optional color print marking label, aside from silver/black label.
 Cable reel marking label drawing is updated to cover correction to cable reel part numbers referenced in P/N Table.
- 5. Updated drawing to cover correction to combined communication/safety cable part numbers.