



# 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](http://www.iecex.com)

Certificate No.: **IECEX CSA 18.0001X** Page 1 of 4 [Certificate history:](#)  
Status: **Current** Issue No: 2 [Issue 1 \(2018-11-13\)](#)  
[Issue 0 \(2018-01-29\)](#)  
Date of Issue: 2019-10-08  
Applicant: **Senko Co., Ltd**  
73, Oesammi-ro 15beon-gil, Osan-si, Gyeonggi-do, 18111, Korea  
**Korea, Republic of**  
Equipment: **Multi-gas detectors models SP-MGT-N and SP-MGT-P**  
Optional accessory:  
Type of Protection: **Ex da, Ex ia**  
Marking: Ex ia IIC T4 Ga (SP-MGT-N)  
Ex da ia IIC T4 Ga (SP-MGT-P)

Approved for issue on behalf of the IECEx  
Certification Body:

**Dorin Stochitoiu**

Position:

**Technical Advisor**

Signature:  
(for printed version)

Date:

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.
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**CSA Group**  
178 Rexdale Boulevard  
Toronto, Ontario M9W 1R3  
Canada





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Page 2 of 4

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Manufacturer: **Senko Co., Ltd**  
73, Oesammi-ro 15beon-gil, Osan-si, Gyeonggi-do, 18111, Korea  
**Korea, Republic of**

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

**IEC 60079-1:2014-06** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

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

**IEC 60079-26:2014-10** Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga  
Edition:3.0

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/CSA/ExTR18.0002/00](#)

[CA/CSA/ExTR18.0002/01](#)

[CA/CSA/ExTR18.0002/02](#)

Quality Assessment Report:

[KR/KTL/QAR14.0003/03](#)



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Certificate No.: **IECEx CSA 18.0001X**

Page 3 of 4

Date of issue: 2019-10-08

Issue No: 2

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The SP-MGT series are portable, hand-held, multi-gas detectors, designed to continuously monitor and detect oxygen, carbon monoxide, hydrogen sulphide, and combustible hydrocarbons. The equipment has not been evaluated to the requirements of the IEC 60079-29 series of standards, therefore, "LEL" and "combustible gas detector performance" are not the subject of this test report. The instrument samples the atmosphere in diffusion mode using an O<sub>2</sub> and a dual CO/H<sub>2</sub>S electrochemical sensors. Combustible hydrocarbons are detected through the use of one of two available sensors, which define the model nomenclature and Ex marking of the equipment as follows:

Model SP-MGT-N marked Ex ia IIC T4 Ga (when using combustibles sensor MIPEX-02-1-II-1.1 A) Model SP-MGT-P marked Ex da ia IIC T4 Ga (when using combustibles sensor KGS 701)

The instruments provide IR communications for changing alarm set points, calibration range, display configuration and download of accumulated internal data. The IR communications shall only be used in an area known to be non-hazardous.

The SP-MGT series provide audible, visual, and vibration alarms when measured concentrations of gases approach pre-set alarm values. The LCD display panel on the front of the instrument displays selected functions and sensor readings in real time. The instrument is powered by an integral battery pack containing a single lithium-ion cell. The battery pack circuitry is encapsulated and limits the battery pack output to intrinsically safe levels. The battery pack is rechargeable, but not replaceable by the end-user.

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

1. The equipment shall be carried at the body while in the hazardous location, and must not be laid down unattended.
2. The equipment shall only be cleaned with a damp cloth.
3. If a charge-generating mechanism is present, the exposed metallic part on the enclosure is capable of storing a level of electrostatic charge that could become incendive for IIC gases. Therefore, the user / installer shall implement precautions, for example, those listed above, to prevent the build-up of electrostatic charge. This is particularly important if the equipment is brought into a Zone 0 location.
4. The equipment shall only be charged while in the non-hazardous area, using a charger specifically supplied for use with the unit (for example part number ICP12-060-1200D, manufactured by Shenzhen Shi Ying Yuan Electronics Co, LTD), approved as SELV or Class 2 equipment against IEC 60950, IEC 61010-1 or an equivalent IEC standard. The maximum voltage and current from the charger shall not exceed 6.3 Vdc plus tolerances and 1.2 A respectively, and shall be further limited by the charging system to  $U_m = 6.3$  Vdc. The ambient temperature during charging shall be in the range 0 °C to 45 °C.
5. The IR Communications feature of the product shall only be used in a non-hazardous area.



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Certificate No.: **IECEx CSA 18.0001X**

Page 4 of 4

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

Issue 1: Covers changes to the equipment and changes and corrections to the original report.

Issue 2: Assessment of the equipment to the additional requirements of IEC 60079-26:2014 Edition 3.