



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

Certificate No.: IECEX KTL 19.0018

Issue No: 0

Certificate history:

Issue No. 0 (2019-05-31)

Status: **Current**

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Date of Issue: **2019-05-31**

Applicant: **GASTRON Co., Ltd.**
23, Gunpocheomdansaneop 1-ro, Gunpo-si, Gyeonggi-do
Korea, Republic of

Equipment: **Portable Single Gas Detector, G-Finder Single GFS-100 Series**
Optional accessory:

Type of Protection: **Intrinsic Safety "I"**

Marking:
Ex ia IIC T4 Ga

Approved for issue on behalf of the IECEX
Certification Body:


Park Jong-koo

Position:

Certification Manager

Signature:
(for printed version)

Date:


2019-05-31

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

Certificate issued by:

Korea Testing Laboratory
87, Digital-ro, 28-gil, Guro-gu
Seoul
Korea, Republic of





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Manufacturer: **GASTRON Co., Ltd.**
23, Gunpocheomdansaneop 1-ro ,Gunpo-si, Gyeonggi-do
Korea, Republic of

Additional Manufacturing location(s):

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 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:

KR/KTL/ExTR19.0018/00

Quality Assessment Report:

NL/DEK/QAR19.0002/00



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The G-Finder Single GFS-100 series are hand-held, battery operated single gas detectors. The "G-Finder Single" is a brand name and the main model name is "GFS-100". The detector is a personal safety device designed to continuously monitor oxygen or toxic gases. The detector samples the atmosphere in diffusion mode using one electrochemical sensor for one of three gases; Oxygen (O₂), Carbon Monoxide (CO) or Hydrogen Sulfide (H₂S).

The detector alerts the user to potentially unsafe exposure with visual, vibrating and audible alarms when gas concentration exceeds alarm set points, and readings are displayed on a LCD. The detector has IR communications for changing the alarm set point, the calibration range and etc. The IR communications shall be only used in safe area.

The detector is comprised of a single printed circuit board with a LCD, a sensor and a battery, housed in a non-metallic enclosure which is constructed by double-shot injection molding with polycarbonate and thermoplastic elastomer alloy. A silicone O-ring is inserted between the front half (cover) and the back half (body) of the enclosure. The suspender clip is attached to the back half of the enclosure. The parts of the enclosure are secured by screws. The detector has no facilities for connection of external circuits.

Power is provided by one, non-user replaceable, Lithium/Thionyl chloride (Li/SOCl₂) battery containing one primary cell (Sunmoon, type ER14335 manufactured by Wuhan Voltec Energy Sources Co., Ltd., 2/3 AA size, Nominal 3.6 V, Peak 3.9 V, 1.65 Ah). The detector is intended to be a disposable unit. The ambient temperature range for the series is $-20\text{ }^{\circ}\text{C} \leq T_a \leq +50\text{ }^{\circ}\text{C}$.

The configuration for GFS-100 series is as follows;

GFS-100-X(-Y)

- GFS-100: Model name

- X: Gas type (O₂: O₂ Gas, CO: CO gas, H₂S: H₂S Gas)

- *Y: Housing body color (OG : orange, YE : yellow, GN : green, VT : violet, and etc.)

* : This option is not marked on the label and can be only used at an order if the user want special housing body color different with default. The option does not affect intrinsic safety.

For the detailed information, see the instruction manual.

SPECIFIC CONDITIONS OF USE: NO