

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **DEKRA 19ATEX0132 X** Issue Number: **0**

(4) Product: **Portable Multi Gas Detector, G-Finder Multi GFM-400 Series**

(5) Manufacturer: **GASTRON Co., Ltd.**

(6) Address: **23, Gunpocheomdansaneop 1-ro, Gunpo-si, Gyeonggi-do, 15881, Republic of Korea**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number 510041000, issue 0.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0 : 2018

EN 60079-11 : 2012

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



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Date of certification: 31 January 2020

DEKRA Certification B.V.

L.G. van Schie
Certification Manager



(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 19ATEX0132 X**

Issue No. 0

(15) **Description**

The G-Finder Multi GFM-400 series are hand-held, battery operated multi gas detectors. The “G-Finder Multi” is a brand name and the main model name is “GFM-400”. The detector is a personal safety device designed to continuously monitor oxygen (O₂), Carbon Monoxide (CO), Hydrogen Sulfide (H₂S) and one of methane (CH₄) or propane (C₃H₈). The detector samples the atmosphere in diffusion mode using an electrochemical sensor for O₂, a dual toxic electrochemical sensor for CO and H₂S, and an IECEx certified NDIR sensor for CH₄ or C₃H₈.

The detector alerts the user to potentially unsafe exposure with visual, vibrating and audible alarms when gas concentration exceeds user configurable 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 only be used in safe area.

Power is provided by non-user replaceable, two Lithium/Thionyl chloride (Li/SOCl₂) batteries connected in parallel. The detector is intended to be a disposable unit.

The examination of the Gas Detector does not include a judgment of the functional performance of the equipment.

The ambient temperature range for the series is $-20\text{ °C} \leq T_a \leq +50\text{ °C}$.

Nomenclature:

GFM-400(-X)(-Y)

- GFM-400: Model name

- X*: Flammable gas type (blank (default sensor), MM2.5, MM100, MP1.5, MP2.5 PP1.5, PP2.5)

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

*: This option can be selected only if the user require a particular target gas, a particular calibration gas and a particular measurement range different from the default sensor to detect a flammable gas (CH₄ or C₃H₈).

** : This option does not affect intrinsic safety.

Installation instructions

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. 510041000, Issue 0.

(17) **Specific conditions of use**

The G-Finder Multi GFM-400 is provided with the anti-static coating film covering over the LCD window to avoid danger of ignition due to electrostatic charge. Periodic inspection of this coating film is required to ensure no degradation, delamination, abrasions or other deformities to this surface. Care must be taken to avoid exposure to excessive heat, harsh chemicals or solvents, sharp edges and abrasive surfaces. The equipment shall only be cleaned with a damp cloth.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate DEKRA 19ATEX0132 X**

Issue No. 0

(19) **Test documentation**

As listed in Report No. 510041000, Issue 0.

(20) **Certificate history**

Issue 0 - project no. 510041000 initial certificate