

1 EU-TYPE EXAMINATION CERTIFICATE



2 Equipment or Protective systems intended for use in Potentially
Explosive Atmospheres - Directive 2014/34/EU

3 EU-Type Examination Certificate No: FM21ATEX0014

4 Equipment or protective system: FGard Sim Flame Simulator
(Type Reference and Name)

5 Name of Applicant: Crowcon Detection Instruments Ltd

6 Address of Applicant: 172 Brook Drive,
Milton Park,
Abingdon, Oxfordshire OX14 4SD
United Kingdom

7 This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and documents therein referred to.

8 FM Approvals Europe Ltd, notified body number 2809 in accordance with Article 17 of Directive 2014/34/EU of 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report number:

PR459719 dated 01st September 2021

9 Compliance with the Essential Health and Safety Requirements, with the exception of those identified in item 15 of the schedule to this certificate, has been assessed by compliance with the following documents:

EN IEC 60079-0:2018, EN 60079-1:2014, EN 60079-28:2015, and EN 60529:1991+A1:2000

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

11 This EU-Type Examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

12 The marking of the equipment or protective system shall include:



II 2 (2) G Ex db (op is T6 Gb) IIC T6 Gb Ta = -10°C to +50°C



Richard Zammitt
Certification Manager, FM Approvals Europe Ltd.

Issue date: 14th September 2021

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

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F ATEX 020 (Dec/2020)



SCHEDULE



Member of the FM Global Group

to EU-Type Examination Certificate No. FM21ATEX0014

13 **Description of Equipment or Protective System:**

The FGard Sim Flame Simulator is used to test the correct operation of the Crowcon's FGard IR3 Flame Detector.

The equipment is a portable/ hand held aluminium alloy assembly consisting of a threaded enclosure body, a threaded back cover and a threaded window cover. An O-ring seal is provided at each end between the enclosure body and the back cover / window cover respectively in order to prevent the ingress of dust and water. A push button is fitted to enable the internal electronics to be activated.

The internal equipment comprises an electronics which drives an array of leds to provide a light pattern which will be detected by a Crowcon FGard IR3 Flame Detector.

The FGard SIM is battery operated by four Nickel Metal Hydride, 1.8Ah, rechargeable batteries. The rear cover of the FGard SIM has to be removed to gain access to the charging socket. Recharging must only be carried out in a non-hazardous area.

The equipment enclosure has an ingress protection rating of IP66.

14 **Specific Conditions of Use:**

None

15 **Essential Health and Safety Requirements:**

The relevant EHSRs that have not been addressed by the standards listed in this certificate have been identified and assessed in the confidential report identified in item 8.

16 **Test and Assessment Procedure and Conditions:**

This EU-Type Examination Certificate is the result of testing of a sample of the product submitted, in accordance with the provisions of the relevant specific standard(s), and assessment of supporting documentation. It does not imply an assessment of the whole production.

Whilst this certificate may be used in support of a manufacturer's claim for CE Marking, FM Approvals Europe Ltd accepts no responsibility for the compliance of the equipment against all applicable Directives in all applications.

This Certificate has been issued in accordance with FM Approvals Europe Ltd's ATEX Certification Scheme.

17 **Schedule Drawings**

A list of the significant parts of the technical documentation is annexed to this certificate and a copy has been kept by the Notified Body maintained under project 3034158.

18 **Certificate History**

Details of the supplements to this certificate are described below:

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Date	Description
14 th September 2021	Original Issue.

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Blueprint Report

Micropack Engineering Ltd (1000009409)

Class No 3615

Certificate I.D. FM2IATEX0014

<u>Drawing No.</u>	<u>Revision Level</u>	<u>Drawing Title</u>	<u>Last Report</u>
2301.7046.01	1.1	FGard SIM – Rating Label	PR459719
3302.3014.01	1.0	MICROPACK FDS303/Crowcon FGard SIM GENERAL ASSEMBLY	PR459719
FD-AC-08	March 21	FGard SIM – Installation, Operating and Maintenance Instructions	PR459719