



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 FMG 21.0020X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 2	Issue 1 (2024-07-16) Issue 0 (2024-01-17)
Date of Issue:	2025-05-30		
Applicant:	General Monitors Inc 16782 Von Karman Ave. Unit 14 Irvine, CA 92606 United States of America		
Equipment:	FL5000 Multi-Spectrum Infrared Flame Detector		
Optional accessory:			
Type of Protection:	Ex db, Ex tb		
Marking:	Ex db IIC T4 Gb Ex tb IIIC T135°C Db Ta = -55°C ≤ Ta ≤ +80°C IP66/67 IECEX FMG 21.0020X		

Approved for issue on behalf of the IECEx
Certification Body:

J. E. Marquedant

Position:

VP, Manager - Electrical Systems

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

FM Approvals LLC
One Technology Way
Norwood MA 02062
United States of America

FM Approvals



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Manufacturer: **General Monitors (Ireland) Limited**
Ballybrit Business Park
Galway
Ireland
Ireland

Manufacturing locations: **MSA Innovation, LLC**
1000 Cranberry Woods Drive
Cranberry Township, PA 16066
United States of America

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 60079-1:2014](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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:

[US/FMG/ExTR17.0036/00](#)
[US/FMG/ExTR17.0036/03](#)

[US/FMG/ExTR17.0036/01](#)

[US/FMG/ExTR17.0036/02](#)

Quality Assessment Reports:

[FR/INE/QAR08.0011/14](#)

[GB/CML/QAR22.0009/01](#)

[US/UL/QAR10.0004/12](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

General:

The FL5000 is a multi-spectrum infra-red flame detector designed to detect fires of several fuel sources and reject false alarm sources such as those caused by lightening, arc welding, hot objects or other sources of radiation. The electronics are housed in a stainless steel explosion-proof and dust-ignitionproof enclosure and has a 4-20 mA output, HART, Bluetooth and dual modbus communications and warning alarm and fault relays.

Construction:

The FL5000 Flame detector utilizes the same enclosure base as the FL4000H Flame Detector. The enclosure housing and base are constructed of 316 stainless steel. The housing consists of an enclosure cover with a display window and enclosure base containing two $\frac{3}{4}$ inch NPT threaded entries. The enclosure cover is fastened to the base via 5 stainless steel M6 x 1 mm x 25 mm hexagon socket cap screws. The FL5000 Flame Detector is available with a mounting bracket.

Operation Temperature Ranges:

The ambient operating temperature range of the FL5000 Flame Detector is -55°C to +80°C.

Electrical data:

The FL5000 Flame Detector has the following electrical ratings:

Supply voltage range 32VDC, 9.7W max (w/ heater) and 6.2W max (w/o heater) with an output signal range of 0 to 20 mA

Model number:

The FL5000 Flame Detectors part number is 10225125.

Firmware

SK3608-1181 (Rev. 1.02.0168)

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The flamepaths of the equipment are not intended to be repaired. Consult the manufacturer if repair of the flamepath joints is necessary.
2. Refer to the manufacturer's instructions to reduce the potential of an electrostatic charging hazard on the equipment enclosure.
3. Consult the manufacturer for genuine replacement housing to base fasteners. M6x1x25mm Hexagonal Socket head fasteners with a minimum of ISO 4762 Grade A4 Class 70 are acceptable alternatives.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Minor, non-safety related updates to the operating manual