

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

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IECEx SIR 08.0033

issue No.:4

Certificate history: Issue No. 4 (2013-2-7) Issue No. 3 (2011-11-

10) Issue No. 2 (2010-12-2) Issue No. 1 (2009-10-

20) Issue No. 0 (2008-8-21)

Status:

Current

Date of Issue:

2013-02-07

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Applicant:

**General Monitors Ireland Limited** 

Ballybrit Business Park

Galway Ireland

**Electrical Apparatus:** 

Model IR4000\* Multi-Point Monitors

Optional accessory:

Type of Protection:

Flameproof and Dust by Enclosure

Marking:

Ex d IIB+H2 T5 Gb (Ta -60°C to +75°C)

Ex t IIIC T100°C Db

Approved for issue on behalf of the IECEx

Certification Body:

C Ellaby

Position:

Deputy Certification Manager

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

3. The Status and authenticity of this certificate may be verified by visiting the OfficiaLIECEX Website.

Certificate issued by:

SIRA Certification Service Rake Lane Eccleston Chester CH4 9JN United Kingdom





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Manufacturer:

**General Monitors Ireland Limited** 

Ballybrit Business Park

Galway Ireland

Additional Manufacturing location(s):

General Monitors Inc. 26776 Simpatica Circle Lake Forest California 92630

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 electrical 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: 2007-10

Explosive atmospheres - Part 0:Equipment - General requirements

Edition: 5

IEC 60079-1: 2007-04

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition: 6

IEC 60079-31: 2008

Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'

Edition: 1

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:

GB/SIR/ExTR08.0098/00 GB/SIR/ExTR10.0281/00 GB/SIR/ExTR09.0165/00 GB/SIR/ExTR11.0267/00 GB/SIR/ExTR10.0268/00 GB/SIR/ExTR13.0020/00

Quality Assessment Report:

GB/SIR/QAR07.0014/00 GB/SIR/QAR07.0014/03 GB/SIR/QAR07.0014/01 US/UL/QAR10.0004/00 GB/SIR/QAR07.0014/02 US/UL/QAR10.0004/01



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### Schedule

### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

IEC 60529 to meet IP X6, hence having an overall rating of IP 66.

The Model IR4000\* Multi-Point Monitors are optical gas detectors intended to detect the presence of combustible gases or CO2 in air. They comprise a two-part rectangular enclosure and an IR400 or IR700 Gas Detector as detailed in Certificate Nos. IECEx SIR 07.0080 and Sira 07ATEX1253. The main enclosure is manufactured from cast aluminium alloy or stainless steel and consists of a base, with mounting lugs on its two longer sides, and a flanged cover. The main enclosure contains the equipment electronics and a seven-segment display. The cover is attached to the base by four M6 recessed socket head cap screws (grade 4.6) and contains a glass window to allow the display to be viewed. The base has four female ¾"-14 NPT cable entry holes tapped into its side walls; the ¾"-14 NPT containing the IR400 or IR700 Gas Detector.

All variants of the Model IR4000\* Multi-Point Monitor have the electrical parameters: 24 V dc 2 W. The enclosures meet IP 6X ingress protection and have been additionally tested according to the requirements of

CONDITIONS OF CERTIFICATION: NO



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### DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue	- this Issue introduced the following change:
1	To allow the extension of the lower ambient temperature limit from -40°C to -60°C, the marking is
	amended accordingly.
Issue 2	2 - this Issue introduced the following changes:
1	The introduction of General Monitors Inc. as an additional manufacturer.
2	The weight of the product in its different material of manufacture options, aluminium and stainless steel, was recognised.
3	Following appropriate re-assessment to demonstrate compliance with the requirements of the latest standards, IEC 61241-0:2004 and IEC 61241-1:2004 was replaced by IEC 60079-31:2008.
4	The removal of the Special Condition For Safe Use.
Issue 3	3 – this Issue introduced the following changes:
1	The introduction of the IR4000S C0 <sub>2</sub> model to the range was approved.
2	Minor drawing modifications to the border and weight of the stainless steel version, none of which affect the explosion proof properties of the equipment
Issue 4	- this Issue introduced the following changes:
1.	The product description was to be modified to include a statement about Ingress Protection."