



## 1 EC TYPE-EXAMINATION CERTIFICATE

- 2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC
- 3 Certificate Number: Sira 08ATEX1095

Issue: 4

4 Equipment: Model IR4000\* Multi-Point Monitors

5 Applicant: General Monitors Ireland General Monitors Inc.

6	Address:	Ballybrit Business Park	26776 Simpatica Circle
		Galway	Lake Forest
		Ireland	California
			CA 92630

- 7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- 8 Sira Certification Service, notified body number 0518 in accordance with Article 9 of Directive 94/9/EC of 23 March 1994, 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 the confidential reports listed in Section 14.2.

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

EN 60079-0:2009

EN 60079-1:2007

EN 60079-31:2009

The above list of documents may detail standards that do not appear on the UKAS Scope of Accreditation, but have been added through Sira's flexible scope of accreditation, which is available on request.

- 10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- 11 This EC type-examination certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:

11 2 G D Ex d IIB+H2 T5 Gb (Ta -60°C to +75°C) Ex t IIIC T100°C Db

Project Number 29095

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C Ellaby Deputy Certification Manager

# **Sira Certification Service**

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## SCHEDULE

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### 13 DESCRIPTION OF EQUIPMENT

The Model IR4000\* Multi-Point Monitors, as detailed in Figure 1, 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 No. Sira 07ATEX1253. The main enclosure consists of a base, with mounting lugs on its two longer sides, and a flanged cover, it 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  $\frac{3}{4}$ "-14 NPT cable entry holes tapped into its side walls; the  $\frac{3}{4}$ "-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 EN 60529 to meet IP X6, hence having an overall rating of IP 66.



Figure 1 – Model IR4000\* Multi-Point Monitor

Variation 1 - This variation introduced the following change:

i. To allow the extension of the lower ambient temperature limit from -40°C to -60°C, the marking at section 12 is amended accordingly.

Variation 2 - This variation introduced the following change:

- i. The weight of the product in its different material of manufacture options, aluminium and stainless steel, was recognised.
- ii. Following appropriate re-assessment to demonstrate compliance with the requirements of the latest standards, EN 61241-0:2006 and EN 61241-1:2004 was replaced by EN 60079-31:2009.
- iii. The removal of the Special Condition For Safe Use.
- iv. The associated IECEx certification was included on the label for General Monitors Inc.

Variation 3 - This variation introduced the following changes:

- i. Following appropriate re-assessment to demonstrate compliance with the requirements of the latest EN 60079 series of standards, the document previously listed in section 9, EN 60079-0:2006, was replaced by that currently listed, the markings in section 12 were updated accordingly.
- ii. The introduction of the IR4000S CO<sub>2</sub> model was added to the range.
- iii. Minor drawing modifications to the border and weight of the stainless steel version, none of which affect the explosion proof properties of the equipment.

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SCHEDULE

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Variation 4 - This variation introduced the following changes:

- i. The product description was to be modified to include a statement about Ingress Protection.
- ii. The marking was amended to correct a typographical error.
- iii. The recognition of minor drawing modifications; display to be added to the label; this amendment is administrative or involves a change to the design that does not affect the aspects of the product that are relevant to explosion safety.

## 14 DESCRIPTIVE DOCUMENTS

### 14.1 Drawings

Refer to Certificate Annexe.

### 14.2 Associated Sira Reports and Certificate History

Issue	Date	Report No.	Comment
0	7 August 2008	R51A18062A	The release of the prime certificate.
1	20 October 2009	R51L19790A	The introduction of Variation 1.
2	17 November 2010	R22737A/00	The introduction of Variation 2.
		R22772A/00	
3	01 November 2011	R25870A/00	The introduction of Variation 3
4	21 January 2013	R29095A/00	The introduction of Variation 4

#### 15 SPECIAL CONDITIONS FOR SAFE USE (denoted by X after the certificate number)

None

#### 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

#### 17 CONDITIONS OF CERTIFICATION

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.
- 17.2 Holders of EC type-examination certificates are required to comply with the production control requirements defined in Article 8 of directive 94/9/EC.

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