



1 **TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres 2014/34/EU

3 Certificate Number: **Sira 17ATEX4052X** Issue: **0**

4 Equipment: **S5000 Transmitter and Junction Box**

5 Applicant: **General Monitors Inc**

6 Address: 26776 Simpatica Circle, Lake Forest, CA 92630, USA

7 This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

8 Sira Certification Service certifies that this equipment has been found to comply with the Essential Health and Safety Requirements that relate to the design of Category 3 equipment, which is intended for use in potentially explosive atmospheres. These Essential Health and Safety Requirements are given in Annex II to European Union Directive 2014/34/EU of the European Parliament and of the Council, 26 February 2014.

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 of this certificate, has been assessed by reference to:

EN 60079-0:2012/A11:2013 EN 60079-15:2010

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 Specific Conditions of Use specified in the schedule to this certificate.

11 This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured.

12 The marking of the equipment shall include the following:

**S5000 Transmitter:**

**Cemented and Flanged Joint versions:**



II 3G  
Ex nA nC IIC T4 Gc  
-55°C ≤ Ta ≤ +75°C

**S5000 Junction Box:**

**Cemented and Flanged Joint versions:**



II 3G  
Ex nA IIC T6 Gc  
-55°C ≤ Ta ≤ +75°C

Project Number 70141952

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N Jones  
Certification Manager

**Sira Certification Service**

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**SCHEDULE**

**TYPE EXAMINATION CERTIFICATE**

**Sira 17ATEX4052X  
Issue 0**

**13 DESCRIPTION OF EQUIPMENT**

The S5000 Transmitter is the control unit of the S5000 Gas Monitor fixed gas detection system and is designed for Non-Sparking/ Protected Sparking (Ex nA nC) protection. The enclosure is provided with 3/4" NPT or M25 threaded entries which can be fitted with the sensors described below or suitably certified cable entry devices or blanking plugs.

The S5000 Junction Box is the remote mounting unit of the S5000 Gas Monitor fixed gas detection system and is designed for Non-Sparking (Ex nA) protection. The enclosure is provided with 3/4" NPT or M25 threaded entries which can be fitted with the sensors described below or suitably certified cable entry devices or blanking plugs.

The product model code options of the S5000 Transmitter and S5000 Junction Box are shown below.

**Model Code Options:**

**The S5000 Transmitter:**

Model coding appearing on the transmitter enclosure are shown below:

S5000 transmitter (equipment)		
Model reference	Description	Coding
S5000-0bcdeffggg	S5000 transmitter, Aluminum (flanged/non-cemented)	Ex nA nC IIC T4 Gc Tamb: -55°C ≤ Ta ≤ +75°C
S5000-1bcdeffggg	S5000 transmitter, Aluminum (cemented)	
S5000-2bcdeffggg	S5000 transmitter, Stainless Steel (flanged/non-cemented)	
S5000-3bcdeffggg	S5000 transmitter, Stainless Steel (cemented)	

**The S5000 Junction Box:**

Model coding appearing on the Junction Box are shown below:

S5000 Junction Box (equipment)		
Model reference	Description	Coding
324240-1	S5000 Junction Box; Stainless Steel, (flanged/non-cemented)	Ex nA IIC T6 Gc Tamb: -55°C ≤ Ta ≤ +75°C
324240-2	S5000 Junction Box; Aluminium, (flanged/non-cemented)	
324240-3	S5000 Junction Box; Stainless Steel, (cemented)	
324240-4	S5000 Junction Box; Aluminium, (cemented)	

**14 DESCRIPTIVE DOCUMENTS**

**14.1 Drawings**

Refer to Certificate Annexe.

**14.2 Associated Sira Reports and Certificate History**

Issue	Date	Report number	Comment
0	08 January 2018	R70141952A	The release of the prime certificate.

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## SCHEDULE

### TYPE EXAMINATION CERTIFICATE

**Sira 17ATEX4052X**  
**Issue 0**

#### 15 SPECIFIC CONDITIONS OF USE

##### 15.1 S5000 transmitter:

15.1.1 Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.

##### 15.2 S5000 Junction Box:

15.2.1 Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall only be cleaned with a damp cloth.

#### 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 reports listed in Section 14.2.

#### 17 CONDITIONS OF MANUFACTURE

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of Sira Certificates.

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

17.3 The manufacturer is responsible for and shall include in the instruction manual the minimum particulars of all applicable instructional information required for the equipment by clause 30 of EN/ IEC 60079-0 — i.e., the certificates.

17.4 Dielectric Voltage Withstand Test (per IEC 60079-15, clause 23.2.1)

At the end of manufacture, each S5000 transmitter shall be subjected to an electric strength test using a test voltage of 1500 Vac or 2100 Vdc applied between the following test locations for a minimum of 60 seconds. Alternatively, a voltage of 1800 Vac or 2520 Vdc may be applied for 0.1 second. There shall be no evidence of breakdown.

- a. Between the input terminals and the relay terminals.
- b. Between the metallic enclosure and the relay terminals.

# Certificate Annexe



**Certificate Number:** Sira 17ATEX4052X  
**Equipment:** S5000 Transmitter and Junction Box  
**Applicant:** General Monitors Inc

## Issue 0

Drawing no.	Sheets	Rev.	Date(Sira stamp)	Description	Model
324140	1 of 1	0	23 Nov 17	S5000 Relay Board, Schematic	transmitter only
324141	1 of 1	0	23 Nov 17	S5000 Relay Board, Circuit Card Assembly	transmitter only
324141-1	1 of 1	1	23 Nov 17	S5000 Relay Board, BOM	transmitter only
324130	1 to 9	2	23 Nov 17	S5000 Control Board, Schematic	transmitter only
324131	1 of 1	1	23 Nov 17	S5000 Control Board, Circuit Card Assembly	transmitter only
324131-1	1 to 2	0	23 Nov 17	S5000 Control Board, BOM	transmitter only
324120	1 of 1	2	23 Nov 17	S5000 User Interface Board, Schematic	transmitter only
324121	1 of 1	0	23 Nov 17	S5000 User Interface Board, Circuit Card Assembly	transmitter only
324121-1	1 of 1	3	23 Nov 17	S5000 User Interface Board BOM	transmitter only
324101	1 to 3	1	12 Dec 17	S5000 Explosion-Proof Enclosure Design	Transmitter & Junction Box
324200	1 of 1	1	23 Nov 17	S5000 Junction Box Board, Schematic	Junction Box only
324201	1 of 1	1	23 Nov 17	S5000 Junction Box Board, Circuit Card Assembly	Junction Box only
324201-1	1 of 1	1	23 Nov 17	S5000 Junction Box Board, BOM	Junction Box only
324240	1 of 1	0	23 Nov 17	Junction Box Assembly	Junction Box only
324114	1 of 1	0	23 Nov 17	S5000 Transmitter and Junction Box electronics assembly	transmitter & Junction Box
MANS5000	1 of 63	01	23 Nov 17	Operating Manual General Monitors S5000 Gas Monitor	Transmitter & Junction Box
324247-1	1 of 1	1	23 Nov 17	Label Artwork S5000 Junction Box IIB+H2	Junction Box only
324247-2	1 of 1	1	23 Nov 17	Label Artwork S5000 Junction Box IIC	Junction Box only
932-002	1 of 1	C	12 Dec 17	Conformal coating specification list	transmitter & Junction Box

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