



1 **EU-TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **Sira 11ATEX2152X** Issue: **8**

4 Equipment: **Portable combustible and toxic gas detectors  
Model PGM62a0x, PGM62a6x, and PGM62a8x**

5 Applicant: **RAE Systems, Inc., A Honeywell Company** **Rae Systems (Shanghai)**

6 Address: 1349 Moffet Park Drive Sunnyvale CA 94089 USA No. 990 E. Huiwang Road JIADING DISTRICT Shanghai 201815 People's Republic of China

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

8 CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 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 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 60079-0:2012

EN 60079-11:2012

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-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:

**With RAE LEL sensor**



I M1  
Ex ia I Ma  
Ta = -20°C ≤ Tamb ≤ +50°C



II 1G  
Ex ia IIC T4 Ga  
Ta = -20°C ≤ Tamb ≤ +50°C

**With Dynament LEL sensor**



I M1  
Ex ia I Ma  
Ta = -20°C ≤ Tamb ≤ +50°C



II 2G  
Ex ia d IIC T4 Gb  
Ta = -20°C ≤ Tamb ≤ +50°C

Project Number 1003

Signed:

Title: Director of Operations

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## SCHEDULE

### EU-TYPE EXAMINATION CERTIFICATE

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#### 13 DESCRIPTION OF EQUIPMENT

The Model PGM62xxx is a handheld, battery powered, multiple Gas Detector for the continuous display of toxic or combustible gas concentrations. The Gas Detector is provided either with a pump to bring the air sample to the sensors or provided as a diffusion model (designated with the suffix D.) The Gas Detector is supplied by a rechargeable Battery Pack containing two or three, Li-ion battery cells connected in parallel. The Li-ion Battery Pack has two variations: one with four power outputs rated from 0.80 W to 1.82 W and the other with power outputs rated from 1.16 W to 1.82 W. The Battery Pack is fully encapsulated and contains safety circuits including infallible resistors and five fuses. An alternative Battery Adapter uses four replaceable AA alkaline batteries, Duracell MN1500 type only. The alkaline Battery Adapter also has two variations: one with four outputs rated from 0.78 W to 1.12 W and the other rated from 1.11 to 1.12 W. The alkaline Battery Adapter also contains safety circuits including infallible resistors and fuses. The fuses are encapsulated. Three push buttons facilitate the access to measured levels or alarms, and the mode button makes it possible to change preset limits and setting. Audible and visual alarm indicators are included. The visual alarm comprises a red LED bar visible from the top and the side. Two imbalanced motors produce a vibration alert when in alarm mode.

There are three variations of the Gas Detector with the following variations:

| Model     | Battery pack wattage | LEL Sensor (zone) | NDIR Sensors |
|-----------|----------------------|-------------------|--------------|
| PGM-62a0x | 1.2 W                | RAE (zone 0)      | No           |
| PGM-62a6x | 0.8 W                | RAE (zone 0)      | No           |
| PGM-62a8x | 0.8 W                | Dynament (zone 1) | Yes          |

The types of sensors are LEL (either catalytic bead or NDIR), electrochemical (EC), PID and Gamma. The Gas Detector has five sensor slots to accommodate sensors as follows;

| Sensor Type          | Slot 1 | Slot 2 | Slot 3 | Slot 4 | Slot 5 |
|----------------------|--------|--------|--------|--------|--------|
| PID                  |        |        |        |        | X      |
| LEL (catalytic bead) | X      |        |        |        |        |
| NDIR                 |        |        |        |        | X      |
| EC                   | X      | X      | X      | X      | X      |
| Dual EC              | X      |        | X      |        | X      |
| Gamma                |        |        |        | X      |        |

Note: NDIR includes CO<sub>2</sub>, methane LEL and methane VOL sensors

The various variations of the PGM-62a0x, PGM-62a6x and PGM-62a8x reflect sensor combinations that are unique to specific end-use applications as shown in the following table.



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| Model no. | Marking  | PID      | Gamma    | RAE LEL  | Dynamment NDIR | EC       |
|-----------|--|----------|----------|----------|----------------|----------|
| PGM-62a0x | I M1, Ex ia I Ma<br>II 1G, Ex ia IIC T4 Ga     | Optional | Optional | Optional | No             | Optional |
| PGM-62a6x | I M1, Ex ia I Ma<br>II 1G, Ex ia IIC T4 Ga     | Optional | Optional | Optional | No             | Optional |
| PGM-62a8x | I M1, Ex ia d I Ma<br>II 2G, Ex ia d IIC T4 Gb | Optional | Optional | Optional | Optional       | Optional |

Notes: Where a = 0, 2, 4, 6, 8 or 9 to show type  
The model no. may contain following suffixes:

- T to denote a unit without any combustible sensors.
- D to denote a diffusion unit with RAE LEL sensor (PGM-62a0, PGM-62a6 and PGM-62a8) or Dynamment LEL sensor( PGM-62a8)
- TD to denote a diffusion unit without any combustible sensors.

**Variation 1** - This variation introduced the following changes:

- The manufacturing location in China was changed from No. 788 Zhaoxian Road, Jia Ding District, Shanghai 201821 to that currently shown.
- The revision status of drawing number C03-1008-000 was corrected and drawing C03-1113-S00 is removed

**Variation 2** - This variation introduced the following changes:

- It was recognised that:
  - the pump model has one buzzer.
  - the diffusion model has one additional buzzer actuated by an associated Diffusion Board.
- An alternative construction of the EC Sensor Board was acknowledged.

**Variation 3** - This variation introduced the following changes:

- The products were allowed to be used for mining purposes, additional marking was introduced for these applications, the table showing the model numbers was amended accordingly.

**Variation 4** - This variation introduced the following changes:

- The metal panel on the enclosure was allowed to be made to an alternative design.
- The use of alternative O2 Sensors was recognised.
- The equipment may now be used with an alternative battery pack, this has an additional cell (making a total of three cells); the Description of Equipment and Special Conditions For Safe Use were amended accordingly.
- An alternative construction of the Main Board was acknowledged.

**Variation 5** - This variation introduced the following changes:

- The introduction of the following alternative items:
  - Gamma Sensor assembly.
  - Main board.
  - Pump motor board.
  - NDIR-D sensor board (digital NDIR sensors).
  - Temperature sensor board.
  - Diffusion temp board.
  - Combustible gas sensor.
  - Mining rating update
- Following appropriate assessment to demonstrate compliance with the requirements of the latest technical knowledge, EN 60079-0:2006 EN 60079-0:2009 and EN 60079-11:2007 were replaced by EN 60079-0:2012 and EN 60079-11:2012.

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**Variation 6** - This variation introduced the following changes:

- i. The introduction of an alternative pump motor 13T-000L was recognised.
- ii. Three toxic gas electrochemical sensors, not used for the detection of explosive gases, were introduced.
- iii. The Notified body responsible for approving the quality was changed from 0575 to 2460.
- iv. Standard EN 60079-26 has been removed from the assessment standards because the requirements are incorporated in the latest editions of either EN 60079-0 or EN 60079-11.

**Variation 7** - This variation introduced the following changes:

- i. The change of company name and address from RAE Systems, Inc. 3775 North First Street, San Jose, CA 95134, USA, to RAE Systems, Inc., A Honeywell Company, 1349 Moffet Park Drive, Sunnyvale, CA 94089, USA.
- ii. The introduction of an additional manufacturing location, RAE Systems, A Honeywell Company, 12220, Rojas Drive, El Paso, TX 79936, USA was recognised.
- iii. The Notified Body issuing the Quality Assessment Notification was changed from DNV (0575) to DNV GL Nemko Presafe AS (2460), the label marking being updated accordingly

#### 14 DESCRIPTIVE DOCUMENTS

##### 14.1 Drawings

Refer to Certificate Annexe.

##### 14.2 Associated Sira Reports and Certificate History

| Issue | Date             | Report number | Comment   |
|-------|------------------|---------------|---|
| 0     | 24 June 2011     | R24989A/00    | The release of the prime certificate.   |
| 1     | 28 July 2011     | R24989B/00    | The introduction of Variation 1.  |
| 2     | 08 February 2012 | R26601A/00    | The introduction of Variation 2.  |
| 3     | 20 March 2012    | R26844A/00    | The introduction of Variation 3.  |
| 4     | 13 July 2012     | R28024A/00    | The introduction of Variation 4.  |
| 5     | 25 June 2014     | R70004789A    | The introduction of Variation 5.  |
| 6     | 02 March 2017    | R70083685A    | This Issue covers the following changes: <ul style="list-style-type: none"><li>• EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. (In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</li><li>• The introduction of Variation 6.</li></ul> |
| 7     | 03 December 2018 | R70181537A    | The introduction of Variation 7.  |
| 8     | 15 October 2019  | 1003          | <ul style="list-style-type: none"><li>• Transfer of certificate Sira 11ATEX2152X from Sira Certification Service to CSA Group Netherlands B.V..</li></ul>   |

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- 15 **SPECIFIC CONDITIONS OF USE** (denoted by X after the certificate number)
- 15.1 The PGM62xxx shall only be fitted with RAE Systems Battery Pack types: M01-3051-000, M01-3053-000, M01-3055-000 or M01-3056-000 or Battery Adapter M01-3052-000 or M01-3054-000 fitted with Duracell MN1500 batteries.
- 15.2 The PGM62xxx shall only be charged outside the hazardous area.
- 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.

# Certificate Annexe



**Certificate Number:** Sira 11ATEX2152X

**Equipment:** Portable combustible and toxic gas detectors  
Model PGM62a0x, PGM62a6x, and PGM62a8x

**Applicant:** RAE Systems, Inc., A Honeywell Company **Rae Systems (Shanghai)**

## Issue 0

| Drawing No.      | Sheets  | Rev. | Date (Sira Stamp) | Title  |
|------------------|---------|------|-------------------|--|
| 310-0131-000-SCH | 1 of 1  | 3    | 21 Jun 11         | FSTN LCD Protection Board                      |
| 904-E300-011.05  | 1 of 1  | 1    | 21 Jun 11         | PGM62XX Internal Wiring List                   |
| C03-0903-ASY-CSA | 1 of 1  | 1    | 21 Jun 11         | 4R+EC, Sensor Module [Schedule]                |
| C03-0910-ASY     | 1 of 1  | 3    | 21 Jun 11         | Gamma Sensor, 4R+, Sensor Module               |
| C03-0911-ASY-CSA | 1 of 1  | 3    | 21 Jun 11         | LEL Sensor, 4R+, Sensor Module                 |
| C03-0913-ASY     | 1 of 1  | 2    | 21 Jun 11         | Dual Gas EC Sensor, 4R+, Sensor Module, H2S/CO |
| C03-1002-000     | 1 to 7  | A    | 11 Aug 10         | PID Sensor Board1, layout                      |
| C03-1003-000     | 1 to 7  | A    | 11 Aug 10         | PID Sensor Board2, layout                      |
| C03-1004-000     | 1 to 7  | A    | 21 Jun 11         | LEL/TC Sensor Board, layout                    |
| C03-1008-000     | 1 to 13 | C    | 21 Jun 11         | Analog, Smart EC Board, layout                 |
| C03-1009-000     | 1 to 12 | B    | 21 Jun 11         | Gamma Preamplifier Board, layout               |
| C03-1012-BOM-CSA | 1 of 1  | 6    | 21 Jun 11         | PID Sensor Board1, BOM [Schedule]              |
| C03-1012-SCH-CSA | 1 of 1  | 7    | 21 Jun 11         | PID Sensor Board1, Schematic [Schedule]        |
| C03-1013-BOM-CSA | 1 of 1  | 1    | 21 Jun 11         | PIC Sensor Board 2, BOM [Schedule]             |
| C03-1013-SCH-CSA | 1 of 1  | 7    | 21 Jun 11         | 4R+ PID Sensor SCH2, Schematic                 |
| C03-1014-BOM     | 1 to 2  | 1    | 21 Jun 11         | LEL/TC Sensor Board, BOM [Schedule]            |
| C03-1014-SCH     | 1 of 1  | 4    | 21 Jun 11         | LEL/TC Sensor Board, Schematic [Schedule]      |
| C03-1018-BOM-CSA | 1 of 1  | 4    | 21 Jun 11         | EC Sensor Board, BOM [Schedule]                |
| C03-1018-SCH-CSA | 1 of 1  | 5    | 21 Jun 11         | Analog Board, Schematic [Schedule]             |
| C03-1019-BOM     | 1 to 2  | 1.0  | 21 Jun 11         | Gamma Preamplifier Board, BOM [Schedule]       |
| C03-1019-SCH     | 1 of 1  | 4    | 21 Jun 11         | Gamma Preamplifier Board, Schematic [Schedule] |
| C03-1101-000     | 1 to 10 | C    | 21 Jun 11         | Gamma Amplifier Board, layout                  |
| C03-1102-000     | 1 to 11 | A    | 21 Jun 11         | Bias Board                                     |
| C03-1103-000     | 1 to 13 | B    | 21 Jun 11         | Amplify Board, layout                          |
| C03-1107-000     | 1 to 11 | B    | 21 Jun 11         | Connect Board, layout                          |
| C03-1111-BOM     | 1 to 2  | 1.0  | 21 Jun 11         | Gamma Amplifier Board, BOM [Schedule]          |
| C03-1111-SCH     | 1 of 1  | 5    | 21 Jun 11         | Gamma Amplifier Board, Schematic [Schedule]    |
| C03-1112-BOM     | 1 to 2  | 1    | 21 Jun 11         | Bias Board, BOM [Schedule]                     |
| C03-1112-SCH     | 1 of 1  | 3    | 21 Jun 11         | Bias Board, Schematic [Schedule]               |
| C03-1113-BOM     | 1 to 2  | 2    | 21 Jun 11         | Dual EC Amplifier Board, BOM [Schedule]        |
| C03-1113-SCH     | 1 of 1  | 3    | 21 Jun 11         | Dual EC Amplifier Board, Schematic [Schedule]  |
| C03-1117-BOM     | 1 of 1  | 1    | 21 Jun 11         | Connect Board, BOM [Schedule]                  |
| C03-1117-SCH     | 1 of 1  | 1    | 21 Jun 11         | Connect Board, Schematic [Schedule]            |
| M01-0901-ASY     | 1 of 1  | 4    | 21 Jun 11         | PGM-62X0 MultiRAE Unit Assembly (pump)         |
| M01-0911-ASY     | 1 of 1  | 1    | 21 Jun 11         | PGM-62X0D MultiRAE Unit Assembly (diffusion)   |
| M01-1000-000     | 1 to 15 | B    | 21 Jun 11         | Main Board, layout                             |
| M01-1002-000     | 1 to 11 | A    | 21 Jun 11         | Li-ion Battery Pack, layout                    |
| M01-1003-000     | 1 to 11 | B    | 21 Jun 11         | Alkaline Battery Pack, layout                  |
| M01-1010-BOM     | 1 to 3  | 8    | 21 Jun 11         | Main Board, BOM [Schedule]                     |
| M01-1010-SCH     | 1 to 6  | 8    | 21 Jun 11         | Main Board, Schematic [Schedule]               |
| M01-1012-BOM-1   | 1 of 1  | 1    | 21 Jun 11         | Li-ion Battery Board, 1.2 W, BOM [Schedule]    |

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# Certificate Annexe



**Certificate Number:** Sira 11ATEX2152X

**Equipment:** Portable combustible and toxic gas detectors  
Model PGM62a0x, PGM62a6x, and PGM62a8x

**Applicant:** RAE Systems, Inc., A Honeywell Company **Rae Systems (Shanghai)**

| Drawing No.        | Sheets  | Rev. | Date (Sira Stamp) | Title   |
|--------------------|---------|------|-------------------|---|
| M01-1012-SCH       | 1 of 1  | 4    | 21 Jun 11         | Li-ion Battery Board, 1.2 W, Schematic [Schedule]   |
| M01-1013-BOM-1     | 1 of 1  | 1    | 21 Jun 11         | Alkaline Battery Board, 1.2 W, BOM [Schedule]       |
| M01-1013-SCH       | 1 of 1  | 2    | 21 Jun 11         | Alkaline Battery Board, 1.2 W, Schematic [Schedule] |
| M01-1016-000-SCH   | 1 of 1  | 1    | 21 Jun 11         | LCD Module Protect Board, Schematic                 |
| M01-1101-000       | 1 to 11 | A    | 21 Jun 11         | France HTP PCB, layout                              |
| M01-1111-BOM       | 1 of 1  | 1    | 21 Jun 11         | France HTP Board, BOM [Schedule]                    |
| M01-1111-SCH       | 1 of 1  | 1    | 21 Jun 11         | France HTP Board, Schematic [Schedule]              |
| M01-1112-BOM-1     | 1 of 1  | 1    | 21 Jun 11         | Li-ion Battery Board, 0.8 W, BOM [Schedule]         |
| M01-1112-SCH       | 1 of 1  | 2    | 21 Jun 11         | Li-ion Battery Board, 0.8 W, Schematic [Schedule]   |
| M01-1113-BOM-1     | 1 of 1  | 1    | 21 Jun 11         | Alkaline Battery Board, 0.8 W, BOM [Schedule]       |
| M01-1113-SCH       | 1 of 1  | 2    | 21 Jun 11         | Alkaline Battery Board, 0.8 W, Schematic [Schedule] |
| M01-3051-CSA-1     | 1 of 1  | 1    | 23 Jun 11         | Li-ion Battery Pack Assembly                        |
| M01-3052-CSA       | 1 of 1  | 3    | 21 Jun 11         | Alkaline Battery Adapter Assembly                   |
| M01-3053-CSA-1     | 1 of 1  | 1    | 23 Jun 11         | Li-ion Battery Pack Assembly                        |
| M01-3054-CSA       | 1 of 1  | 2    | 21 Jun 11         | Alkaline Battery Adapter Assembly                   |
| M01-4001-LBL-DIF-1 | 1 of 1  | 4    | 21 Jun 11         | Label, Diffusion, PGM 62xx                          |
| M01-4002-LBL-PMP-1 | 1 of 1  | 2    | 21 Jun 11         | Label, Pump, PGM 62xx                               |
| M01-4003-CTL-1     | 1 to 11 | A    | 21 Jun 11         | Controlled Portion of the MultiRAE User's Manual    |
| M01-4006-LBL       | 1 of 1  | 1    | 21 Jun 11         | Label, Li-Ion Battery Pack                          |
| M01-4007-LBL       | 1 of 1  | 3    | 21 Jun 11         | Label, Alkaline Battery Adapter                     |
| M01-4008-LBL       | 1 of 1  | 1    | 21 Jun 11         | Label, Li-Ion Battery Pack                          |
| M01-4009-LBL       | 1 of 1  | 2    | 21 Jun 11         | Label, Alkaline Battery Adapter                     |
| M01-SEN1-CSA       | 1 to 4  | A5   | 21 Jun 11         | List of Electrochemical Sensors for MultiRAE2       |

## Issue 1

| Drawing No.  | Sheets  | Rev. | Date (Sira Stamp) | Title                          |
|--------------|---------|------|-------------------|--------------------------------|
| C03-1008-000 | 1 to 13 | C    | 11 Nov 10*        | Analog, Smart EC Board, layout |

\*this is the date originally stamped the Revision 'B' status was correctly stamped with a later date.

The following drawing is removed: -

| Drawing No.  | Sheets | Rev. | Date (Stamp) | Title              |
|--------------|--------|------|--------------|--------------------|
| C03-1113-S00 | 1 to 2 | 3    | 21 Jun 11    | EC Amplifier Board |

## Issue 2

| Drawing No.      | Sheets  | Rev. | Date (Sira stamp) | Title                                     |
|------------------|---------|------|-------------------|---|
| C03-1008-000     | 1 to 14 | E    | 18 Jan 12         | Analog, Smart EC Board, layout            |
| C03-1018-SCH-CSA | 1 of 1  | 6    | 18 Jan 12         | Analog Board, Schematic [Schedule]        |
| M01-0911-ASY-IEC | 1 of 1  | 1    | 18 Jan 12         | PGM-62X0 MultiRAE Diffusion Unit Assembly |
| M01-1004-000     | 1 to 11 | A    | 18 Jan 12         | Diffusion Board                           |
| M01-1014-BOM     | 1 of 1  | 1    | 18 Jan 12         | Diffusion PCB BOM                         |
| M01-1014-SCH     | 1 of 1  | 1    | 18 Jan 12         | Diffusion Board, Schematic                |

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# Certificate Annexe



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**Equipment:** Portable combustible and toxic gas detectors  
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**Applicant:** RAE Systems, Inc., A Honeywell Company **Rae Systems (Shanghai)**

## Issue 3

| Drawing No.        | Sheets | Rev. | Date (Sira stamp)         | Title                      |
|--------------------|--------|------|---------------------------|----------------------------|
| M01-4001-LBL-DIF-1 | 1 of 1 | 6    | 19 <sup>th</sup> March 12 | Label, Diffusion, PGM 62xx |
| M01-4002-LBL-PMP-1 | 1 of 1 | 4    | 19 <sup>th</sup> March 12 | Label, Pump, PGM 62xx      |

## Issue 4

| Drawing            | Sheets  | Rev. | Date (Sira stamp) | Title   |
|--------------------|---------|------|-------------------|---|
| M01-0901-ASY       | 1 to 2  | 5    | 2 Jul 12          | PGM-62xx MultiRAE2 Unit Assembly (pump)       |
| M01-0911-ASY       | 1 to 2  | 2    | 2 Jul 12          | PGM-62xx MultiRAE2 Unit Assembly (diffusion)  |
| M01-1000-000       | 1 to 15 | D    | 2 Jul 12          | Main Board, layout                            |
| M01-1010-SCH       | 1 to 6  | 9    | 2 Jul 12          | Main Board, Schematic [Schedule]              |
| M01-3055-CSA       | 1 of 1  | 2    | 2 Jul 12          | 0.8 W Li-Ion Battery Pack, Extended Duration  |
| M01-3056-CSA       | 1 of 1  | 2    | 2 Jul 12          | 1.2 W Li-Ion Battery Pack, Extended Duration  |
| M01-4001-LBL-DIF-1 | 1 of 1  | 7    | 3 Jul 12          | Label, Diffusion, PGM 62xx                    |
| M01-4002-LBL-PMP-1 | 1 of 1  | 5    | 2 Jul 12          | Label Pump, PGM 62xx                          |
| M01-4019-LBL       | 1 of 1  | 1    | 2 Jul 12          | Label 0.8 W Li-Ion Battery Pack, Ext'd Dur'n  |
| M01-4020-LBL       | 1 of 1  | 1    | 2 Jul 12          | Label 1.2 W Li-Ion Battery Pack, Ext'd Dur'n  |
| M01-SEN1-CSA       | 1 to 4  | A6   | 2 Jul 12          | List of Electrochemical Sensors for MultiRAE2 |

Note, label drawing changes have been introduced to allow for marking of the alternative battery pack.

## Issue 5

| Drawing         | Sheets  | Rev. | Date (Sira stamp) | Title   |
|-----------------|---------|------|-------------------|---|
| C03-0986-ASY    | 1 of 1  | 1    | 17 Jun 14         | Gamma, 4R+ Sensor II, Sensor Module                 |
| C03-1109-000    | 1 to 13 | A    | 17 Jun 14         | 4R+ NDIR-D Sensor PCB Main Layout                   |
| C03-1119-BOM    | 1 to 2  | 1    | 17 Jun 14         | 4R+ NDIR-D Sensor PCB Main BOM                      |
| C03-1119-SCH    | 1 of 1  | 4    | 17 Jun 14         | 4R+ NDIR-D Sensor PCB Main Schematic                |
| C03-1200-000    | 1 to 10 | A    | 17 Jun 14         | 4R+ Gamma Sensor II Separate board Layout           |
| C03-1201-000    | 1 to 12 | A    | 17 Jun 14         | 4R+ Gamma Sensor II, Preamplifier Layout            |
| C03-1202-000    | 1 to 12 | B    | 17 Jun 14         | 4R+ Gamma Sensor II, Filter and Amplifier Layout    |
| C03-1211-BOM    | 1 to 2  | 3    | 17 Jun 14         | 4R+ Gamma Sensor II Preamplifier BOM                |
| C03-1211-SCH    | 1 of 1  | 2    | 17 Jun 14         | 4R+ Gamma Sensor II, Preamplifier Schematic         |
| C03-1212-BOM    | 1 to 2  | 3    | 17 Jun 14         | 4R+ Gamma Sensor II Filter and Amplifier BOM        |
| C03-1212-SCH    | 1 of 1  | 3    | 17 Jun 14         | 4R+ Gamma Sensor II, Filter and Amplifier Schematic |
| M01-1000-001    | 1 to 15 | E    | 17 Jun 14         | MultiRAE II Main Board Layout                       |
| M01-1010-SCH-01 | 1 to 6  | 1    | 17 Jun 14         | MultiRAE II Main Board Schematic                    |
| M01-1203-000    | 1 to 9  | C    | 17 Jun 14         | MultiRAE II Pump Board Layout                       |
| M01-1204-000    | 1 to 11 | 1    | 17 Jun 14         | MultiRAE II Temp Board Layout                       |
| M01-1205-000    | 1 to 11 | 1    | 17 Jun 14         | MultiRAE II Diffusion Temp Board Layout             |
| M01-1213-BOM    | 1 of 1  | 1    | 17 Jun 14         | MultiRAE II Pump Board BOM                          |
| M01-1213-SCH    | 1 of 1  | 2    | 17 Jun 14         | MultiRAE II Pump Motor Board Schematic              |
| M01-1214-BOM    | 1 of 1  | 1    | 17 Jun 14         | MultiRAE II Temp Board BOM                          |
| M01-1214-SCH    | 1 of 1  | 1    | 17 Jun 14         | MultiRAE II Temp Board Schematic                    |
| M01-1215-BOM    | 1 of 1  | 1    | 17 Jun 14         | MultiRAE II Diffusion Temp Board BOM                |

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# Certificate Annexe



**Certificate Number:** Sira 11ATEX2152X

**Equipment:** Portable combustible and toxic gas detectors  
Model PGM62a0x, PGM62a6x, and PGM62a8x

**Applicant:** RAE Systems, Inc., A Honeywell Company **Rae Systems (Shanghai)**

| Drawing            | Sheets | Rev. | Date (Sira stamp) | Title  |
|--------------------|--------|------|-------------------|--|
| M01-1215-SCH       | 1 of 1 | 1    | 17 Jun 14         | MultiRAE II Diffusion Temp Board Schematic       |
| M01-3015-ASY       | 1 of 1 | 2    | 17 Jun 14         | Pump Motor Assembly                              |
| M01-SEN1-CSA       | 1 to 4 | A8   | 17 Jun 14         | Lists of Sensors for MultiRAE II family, PGM62xx |
| M01-4001-LBL-DLF-1 | 1 of 1 | 8    | 25 Jun 14         | Label Diffusion CSA ATEX IECEX PGM 62xx          |
| M01-4002-LBL-PMP-1 | 1 of 1 | 6    | 25 Jun 14         | Label Pump CSA ATEX IECEX PGM 62XX               |

## Issue 6

| Drawing        | Sheets  | Rev. | Date (Sira stamp) | Title  |
|----------------|---------|------|-------------------|--|
| M01-0901-ASY   | 1 of 1  | 6    | 17 Jan 17         | PGM-62XX MultiRAE2 Unit Assembly   |
| M01-SEN1-CSA   | 1 to 2  | A10  | 13 Feb 17         | List of Electrochemical Sensors for MultiRAE2 family PGM62xx                       |
| M01-4003-CTL-1 | 1 to 15 | A2   | 17 Jan 17         | Controlled Part of the MultiRAE Series instrument Family (PGM-62xxx) User's Manual |

## Issue 7

| Drawing            | Sheets | Rev. | Date (Sira stamp) | Title                                      |
|--------------------|--------|------|-------------------|--|
| M01-4001-LBL-DIF-1 | 1 of 1 | 9    | 23 Oct 18         | Label, Diffusion, CSA ATEX IECEX, PGM 62xx |
| M01-4002-PMP-1     | 1 of 1 | 7    | 23 Oct 18         | Label, Pump, CSA ATEX IECEX, PGM 62XX      |

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