IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:	IECEx CSA 13.0029X	Issue No: 1	Certificate history:
			Issue No. 1 (2015-03-27)
Status:	**Current**	Page 1 of 5	Issue No. 0 (2014-03-04)
Date of Issue:	**2015-03-27**		
Applicant:	**RAE Systems Inc** 3775 North First Street, San Jose, CA 95134 **United States of America**		
Electrical Apparatus:	**Portable Multiple Gas Detector Model PGM-25xxx**		
Optional accessory:			
Type of Protection:	**Ex ia**		
Marking:	Ex ia IIC T4 Ga -20°C ≤ Ta ≤ +50°C		

Approved for issue on behalf of the IECEx Certification Body: Dorin Stochitoiu

Position: Techncial Advisor

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 Official IECEx Website.

Certificate issued by:

IECEx Certificate of Conformity

Certificate No: IECEx CSA 13.0029X Issue No: 1

Date of Issue: **2015-03-27** Page 2 of 5

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W IR3
Canada
and
1707 - 94th Street
Edmonton, AB T6N 1E6
and
8503 East Pleasant Valley Road,
Independence, Ohio, USA
44131-5516
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IECEx Certificate of Conformity

Certificate No:	IECEx CSA 13.0029X	Issue No: 1
Date of Issue:	**2015-03-27**	Page 3 of 5
Manufacturer:	**RAE Systems Inc** 3775 North First Street, San Jose, CA 95134 **United States of America**	

Additional Manufacturing location(s):

RAE Systems (Shanghai) Inc.
No. 990 East HuiWang Road
JiaDing District
Shanghai, 201815
China

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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*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:

CA/CSA/ExTR13.0041/00 CA/CSA/ExTR13.0041/01

Quality Assessment Report:

NO/DNV/QAR06.0003/05 NO/DNV/QAR06.0004/05

IECEx Certificate of Conformity

Certificate No:	IECEx CSA 13.0029X	Issue No: 1
Date of Issue:	2015-03-27	Page 4 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Model PGM-25xxx is a multi-sensor gas detector designed to provide continuous exposure monitoring of gases such as CO, H_2S, O_2, LEL gases for workers in hazardous environments. The gas detector gives real time gas measurements and provides an audible and visual alarm when gas levels exceed the preset limits. The visual alarm comprises a Red LED bar visual from the top. Additionally, an imbalanced motor produces a vibration alert when in alarm mode.

The first and second "x" are either 00 (original model) or 60 (new model with slight changes to the analogue board). Either model number reflects any approved combination of sensors used. The third "x" is either blank (for pump model) or a "D" (for diffusion model). Two push buttons facilitate the access to measured levels or alarms, and the mode button allows changing preset limits. A wireless modem is provided as an option.

The physical dimensions are 152 mm x 83 mm x 43.5 mm (PGM-25xx) and 141 mm x 83mm x 38.5mm (PGM-25xxD). The weight is about 414 g (PGM-25xx) and 365 g (PGM-25xxD).

There are no external connectors except for the charging and PC communication contacts. The unit is powered by a 3.7 V Li-Ion Battery Pack. The Battery Pack is replaced by removing a cover that is retained by fasteners.

CONDITIONS OF CERTIFICATION: YES as shown below:

The PGM-25xx and PGM-25xxD shall only be fitted with RAE Systems Battery Pack G02-3004 000.

The PGM-25xx and PGM-25xxD shall only be charged outside hazardous area.

The PGM-25xxx shall only be charged with a RAE Barrier (p/n M02-3011-000) that limits Uo to 20V.

No precautions against electrostatic discharge are necessary for portable equipment that has an enclosure made of plastic, metal or a combination of the two, except where a significant static generating mechanism has been identified. Activities such as placing the item in a pocket or on a belt, operating a keypad or cleaning with a damp cloth, do not present a significant electrostatic risk. However, where a static-generating mechanism is identified, such as repeated brushing against clothing, then suitable precautions shall be taken, e.g. the use of anti-static footwear.

IECEx Certificate of Conformity

Certificate No:	IECEx CSA 13.0029X	Issue No: 1
Date of Issue:	**2015-03-27**	Page 5 of 5

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

Issue 1:

This report variation covers the following modifications: The nomenclature for model PGM-25xx has been replaced with PGM-2500, and PGM25xxD with PGM2500D. No changes to the construction or performance have been made to these models. Models PGM2560 and PGM 2560D have been added, denoting alternate construction of the analogue board. The following coding remains valid for all models: Ex ia IIC T4 Ga (with RAE LEL sensor Ex ia) Ta: -20°C to +50°C. Any reference to PGM-25xxx should be taken as a reference to the above models. The manufacturer changed the model numbers to remove the sensor combinations from the nomenclature. The PGM-2560 is identical to the PGM-2500, except it contains the alternate analogue board.