



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 DNV 07.0004X Issue No: 1 Certificate history:
Status: **Current** Page 1 of 5 Issue No. 1 (2014-12-19)
Date of Issue: **2014-12-19** Issue No. 0 (2007-10-30)
Applicant: **Rae Systems**
3775 North First Street
San Jose CA95134
United States of America
Electrical Apparatus: **Personal Toxic Gas Monitor: ToxiRAE 3 model PGM-1700**
Optional accessory:
Type of Protection: **Ex Ia IIC T4 Ga**
Marking: Ex ia IIC T4 Ga
-20C ≤ Tamb ≤ +60C

Approved for issue on behalf of the IECEx
Certification Body:

Asle Kaastad

Position:

Certification Manager

Signature:
(for printed version)

Asle Kaastad

Date:

2014-12-19

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](http://www.iecex.com).

Certificate issued by:

DNV
Det Norske Veritas AS
Veritasveien 1
1322 Hovik
Norway





IECEX Certificate of Conformity

Certificate No: IECEX DNV 07.0004X

Issue No: 1

Date of Issue: 2014-12-19

Page 2 of 5

Manufacturer: **Rae Systems**
3775 North First Street
San Jose CA95134
United States of America

Additional Manufacturing
location(s):

RAE Systems (Shanghai) Inc
No. 788 Zhaoxian Road, JiaDing District,
Shanghai 201821
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 Explosive atmospheres - Part 0: General requirements
Edition:6.0

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

*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:

NO/DNV/ExTR07.0005/00 NO/DNV/ExTR07.0005/01

Quality Assessment Report:

NO/DNV/QAR06.0003/00 NO/DNV/QAR06.0003/05 NO/DNV/QAR06.0004/00
NO/DNV/QAR06.0004/05



IECEx Certificate of Conformity

Certificate No: IECEx DNV 07.0004X

Issue No: 1

Date of Issue: 2014-12-19

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

ToxiRAE 3 is a personal single gas monitor for continuously display of toxic gas concentrations, STEL, TWA and Peak values as well as high, low STEL and TWA alarms. The physical dimensions are 85mm x 54 x 20mm without clip. The weight is 100g. It is small handheld and battery powered, housed in a dark conductive plastic back, stainless steel/PC front partially covered with a soft thermoplastic electrically conductive material. Audible and visual alarm indicators are included. The visual alarm comprises an Red/Green LED bar visual from the top. An imbalanced motor produces a vibration alert when in alarm mode. An infrared communication port allows galvanic isolated data transfer between the handheld instrument and a PC.

CONDITIONS OF CERTIFICATION: YES as shown below:

It is a condition of safe use that the apparatus must be powered by non rechargeable cells of the following type only. EVE ER14335 Lithium-thionyl Chloride, Size 2/3AA, 3.6 Volts



IECEx Certificate of Conformity

Certificate No: IECEx DNV 07.0004X

Issue No: 1

Date of Issue: 2014-12-19

Page 4 of 5

EQUIPMENT (continued):

Nomenclature for ToxiRAE 3 type for each sensor type:

Sensor type	ToxiRAE 3 – Model No
CO	PGM1700 CO
H ₂ S	PGM1700 H2S
NH ₃	PGM1700 NH3
CO	PGM1700 CO2000
Cl ₂	PGM1700 CL2
ClO ₂	PGM1700 CL02
HCN	PGM1700 HCN
H ₂ S	PGM1700 H2S1000
NO	PGM1700 NO
NO ₂	PGM1700 NO2
O ₂	PGM1700 O2
PH ₃	PGM1700 PH3
SO ₂	PGM1700 SO2
HF	PGM1700 HF
HCl	PGM1700 HCL
CH ₃ SH	PGM1700 CH3SH
ETO	PGM1700 ETO
O ₃	PGM1700 O3



IECEX Certificate of Conformity

Certificate No: IECEx DNV 07.0004X

Issue No: 1

Date of Issue: 2014-12-19

Page 5 of 5

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

Update to the latest edition of standards with modified vibrator motor component and EMC component. Added a new plastic back cover material: RTP 399 X 123980.

