



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:	IECEx NEP 23.0011X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2023-05-22		
Applicant:	RAE Systems (Shanghai) Inc. No.990 E. Huiwang Road JIADING DISTRICT Shanghai 201815 China		
Equipment:	Fixed Gas Detector Model GTYQ-FGM-7100, FGM-7300		
Optional accessory:			
Type of Protection:	Ex db, tb		
Marking:	LEL: -40°C ~+65°C (Ex db IIC T6 Gb Ex tb IIIC T80°C Db IP66) -40°C ~+75°C (Ex db IIC T5 Gb Ex tb IIIC T90°C Db IP66) EC: -20°C ~+55°C (Ex db IIC T6 Gb Ex tb IIIC T80°C Db IP66)		

Approved for issue on behalf of the IECEx
Certification Body:

Guo Aihua

Position:

General Manager

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.



Certificate issued by:

**Shanghai Inspection and Testing Institute of Instruments
and Automatic Systems Co., Ltd. (SITIIS)/
National Supervision and Inspection Center for Explosion
Protection and Safety of Instrumentation (NEPSI)
103 Cao Bao Road
Shanghai 200233
China**



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Manufacturer: **RAE Systems (Shanghai) Inc.**
No.990 E. Huiwang Road
JIADING DISTRICT
Shanghai 201815
China

Manufacturing
locations: **Honeywell Sensing and Control
(China) Co., Ltd**
1668 Tianyin Road
Nanjing Science Park
Jiangning District
Nanjing 211100
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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with 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:

CN/NEP/ExTR23.0015/00

Quality Assessment Report:

NO/PRE/QAR16.0005/05



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

GTYQ-FGM-7100 for LEL, FGM-7300 for EC, both are in aluminium alloy enclosure. Same structure but different sensor type.

Fixed Gas Detector comprises a cylindrical main housing and a gas sensing head. The main housing, which contains the electronics and an LCD display, comprises a threaded window cover and a base with mounting lugs. The base has two 3/4 NPT cable entries to connect separately certified cable glands and one M25*1.5 threaded hole, which is used to mount the sensing head.

Product with different sensor type has the same structure for the sensing head. It is made of stainless steel and comprises two parts, cylindrical jointed and fastened with a threaded nut. The sensing end has an 80um sinter fused into the enclosure to allow gas penetration to be detected by the internal equipment, the mounting end contains a setting compound through which the equipment wiring passes.

Electrical data: 16~32 VDC

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Repairs of the flameproof joints may only be made by the manufacturer or on behalf of the manufacturer and on his own responsibility. Repair in compliance with the values in IEC 60079-1 is not accepted.
2. The cable entries have to be connected by means of suitable cable entry devices with type of protection of Ex db IIC Gb, Ex tb IIIC Db IP66. The cable entry device shall be approved in accordance with IEC60079-0:2017, IEC60079-1:2014 and IEC60079-31:2013, and which are covered by a separate conformity certificate.
3. When used in combustible dust atmospheres, there is potential electrostatic charging risk on the surface of the equipment. Refer to the manual for the precaution.
4. Use minimum 80°C rated conduct wires to make external connection when the max. ambient temperature is +75°C.