



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 BAS 05.0038	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 17	Issue 16 (2020-08-10)
Date of Issue:	2021-11-02		Issue 15 (2018-05-21)
Applicant:	Crowcon Detection Instruments Ltd 172 Brook Drive Milton Park Abingdon Oxfordshire OX14 4SD United Kingdom		Issue 14 (2014-11-04)
Equipment:	Gasman Flammable Gas Detector		Issue 13 (2014-09-02)
Optional accessory:			Issue 12 (2014-08-06)
Type of Protection:	Intrinsic safety, Flameproof		Issue 11 (2009-12-17)
Marking:	Ex db ia IIC T4 Gb (-20 °C ≤ Ta ≤ +55 °C)		Issue 10 (2008-08-06)
	or		Issue 9 (2008-06-16)
	Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +65 °C)		Issue 8 (2008-04-04)
			Issue 7 (2007-07-05)

Approved for issue on behalf of the IECEx
Certification Body:

R S Sinclair

Position:

Technical Manager

Signature:
(for printed version)

Date:

2/11/2021

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.
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Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom





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Manufacturer: **Crowcon Detection Instruments Ltd**
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
United Kingdom

Additional
manufacturing
locations:

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

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

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

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

[GB/BAS/ExTR06.0029/00](#)
[GB/BAS/ExTR06.0172/00](#)
[GB/BAS/ExTR08.0076/00](#)
[GB/BAS/ExTR14.0249/00](#)
[GB/BAS/ExTR20.0114/00](#)

[GB/BAS/ExTR06.0058/00](#)
[GB/BAS/ExTR06.0177/00](#)
[GB/BAS/ExTR08.0128/00](#)
[GB/BAS/ExTR14.0324/00](#)
[GB/BAS/ExTR21.0187/00](#)

[GB/BAS/ExTR06.0104/00](#)
[GB/BAS/ExTR07.0191/00](#)
[GB/BAS/ExTR09.0166/00](#)
[GB/BAS/ExTR18.0048/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0070/09](#)

IECEX ATR:

File reference:



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Gasman Flammable Gas Detector is designed to detect the presence of flammable gas, give a visual indication of the concentration, and give audible and visual alarms if a preset level is exceeded. It comprises a rechargeable battery, a flammable gas sensor head, electronic circuits on printed circuit boards, a liquid crystal display, LED's and a piezo sounder, all contained in a plastic enclosure providing a degree of protection of at least IP20. External contacts are provided for recharging, and for serial data communications.

The flammable gas sensor module fitted is known as a flammable i-module. The flammable i-module can be replaced in the apparatus with an oxygen i-module (for oxygen deficiency detection), or a toxic i-module. The permitted i-modules are listed in the User Manual provided by the manufacturer.

The equipment may be fitted with either a Pellistor type sensor or a Molecular Property Spectrometer (MPS) sensor. The type of flammable gas sensor fitted to the equipment depends on the explosive atmosphere that the equipment is intended to be used in.

When fitted with a pellistor type sensor the equipment is suitable for explosive atmospheres requiring an equipment protection level (EPL) Gb and is marked accordingly. When fitted with the MPS type sensor the equipment is suitable for explosive atmospheres requiring an equipment protection level (EPL) Ga and is marked accordingly. The Gasman Flammable Gas Detector is only intended for use in one atmosphere depending on the sensors fitted and the end-user requirements.

Consequently, the equipment is marked with one, not both, of the following marking strings:

Ex db ia IIC T4 Gb (-20 °C ≤ Ta ≤ +55 °C)

Ex ia IIC T4 Ga (-20 °C ≤ Ta ≤ +65 °C)

The sensors are not replaceable by the end user and replacement may only be performed at suitable Crowcon service centres.

The apparatus is not designed for use in oxygen enriched atmospheres.

Charging conditions:

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using the following chargers:

Crowcon desktop charger / interface part number C01940

Crowcon desktop charger part number C01941

Crowcon desktop charger / Bluetooth Interface part number C011023

Alternatively, any Crowcon charger with an output (Um) of 9V may be used to charge the apparatus, although when both charging and data communications are required, only charger / interface part number's C01940 and C011023 must be used.

SPECIFIC CONDITIONS OF USE: NO



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 17.1

Standards update to IEC 60079-0, Edition 7 from IEC 60079-0, Edition 6.

Variation 17.2

Correction of marking plate for flameproof sensor.

Variation 17.3

Introduction of new model to the certification with alternative certification string as identifier. Product description updated to reflect this extension.

Variation 17.4

Introduction of new PCB design.

ExTR: **GB/BAS/ExTR21.0187/00**

File Reference: **20/0639**