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 SGS 23.0057X**	Page 1 of 3	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2024-09-17		

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

Equipment: **IR Plus Gas Detector**

Optional accessory:

Type of Protection: **Flameproof and Dust Protection by Enclosure**

Marking: Ex db IIC T4 Gb (Tamb = -40°C to +70°C)

Ex db IIC T6 Gb (Tamb = -40°C to +60°C)

Ex tb IIIC T135°C Db (Tamb = -40°C to +70°C)

Approved for issue on behalf of the IECEx
Certification Body: **M Powney**

Position: **Certification 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:

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

IECEx Certificate of Conformity

Certificate No.:	**IECEx SGS 23.0057X**	
Date of issue:	2024-09-17	Issue No: 0

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

Manufacturing locations:
Crowcon Detection Instruments Limited
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
United Kingdom

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   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:

GB/SGS/ExTR23.0070/00

Quality Assessment Report:

GB/BAS/QAR06.0070/11

EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The IR Plus Gas Detector comprises a stainless-steel enclosure incorporating a main optical housing and a front mirror housing connected by an internal cable way. A detector window constructed from Quartz or Sapphire is clamped within the main optical housing. A glass mirror is retained inside the front mirror housing, and both housings may be fitted with anti-condensation heaters. The front of the enclosure is protected by a plastic weather cover, which may be fitted with an optional gassing cover. Alternatively, a plastic flow adaptor moulding may replace the weather cover.

The main housing contains optics and a stacked PCB assembly. The internal circuits of the IR Plus Gas Detector circuits are rated up to a maximum of 32V and 5.6W.

The main enclosure is sealed with a M50 threaded stainless-steel endplate and secured using two M5x10 cap head stainless-steel screws. The mirror housing is sealed with a M56 threaded stainless-steel endplate, secured using M3 socket set screws.

Two cable entry holes are provided for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. The cable entries may be Metric (M20 or M25) or NPT (½" or ¾"). The cable entry thread form and size for each cable entry is identified on the body of the IR Gas Detector by etched markings.

The cable entry devices shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component).

Any unused cable entry holes must be fitted with a suitable flameproof stopping plug certified as Equipment (not a Component).

When used in a dust atmosphere, the IP6X rating must be maintained by the use of suitably rated cable entry devices.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The equipment must be earthed using the cable gland and steel armoured cable.
2. The flamepaths are not to be repaired.
3. The Gas Detector can only be mounted Horizontal +/- 15°.