CERTIFICATE OF CONFORMITY

FM Approvals

1. **EQUIPMENT CERTIFICATE OF CONFORMITY PER CANADIAN REQUIREMENTS FOR EXPLOSIVE ATMOSPHERES**
2. **Certificate No:** **FM26CA0008X**
3. **Equipment:** **IR Plus Gas Detector**
   (Type Reference and Name)
4. **Name of Listing Company:** **Crowcon Detection Instruments Ltd**
5. **Address of Listing Company:** **172 Brook Drive,**
   Milton Park,
   Abingdon,
   Oxfordshire,
   OX14 4SD,
   United Kingdom
6. The examination and test results are recorded in confidential report number:

   PR470822 dated 6th August 2026

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

   CSA C22.2 No. 60079-0:2019 (R2024), CSA C22.2 No. 60079-1:2016 (R2021),
   CSA C22.2 No. 60079-11:2014 (R2023), CSA C22.2 No. 60079-29-1:2017+AMD1: 2022 (R2022),
   CSA C22.2 No. 60079-31:2015 (R2020), CSA C22.2 No. 61010-1:2024

8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.
9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.
10. Approval Guide Listing Category:

    Gas Detection, Combustible Gas, Fixed

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

08/06/2026
Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1165 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

11. Equipment Ratings:

IR Plus (With No Display)
Flameproof for Ex db IIC Gb; Temperature class T6 with ambient temperature range -40°C to +60°C or T4 with ambient temperature range -40°C to +70°C; Protection by Enclosure for Ex tb IIIC T135°C Db with ambient temperature range -40°C to +70°C hazardous (classified) locations.

IR Plus (With Fixed Display)
Intrinsically Safe and Flameproof for Ex db ia IIC T4 Gb with ambient temperature range -40°C to +70°C hazardous (classified) locations.

12. The marking of the equipment shall include:

IR Plus (With No Display)
Ex db IIC T6 Gb; Ta = -40°C to +60°C;
Ex db IIC T4 Gb; Ta = -40°C to +70°C;
Ex tb IIIC T135°C Db; Ta = -40°C to +70°C
60079-29-1

IR Plus (With Fixed Display)
Ex db ia IIC T4 Gb; Ta = -40°C to +70°C
60079-29-1

13. **Description of Equipment:**

The IR Plus Gas Detector consists of a stainless steel enclosure designed for detection of flammable gases passing through an infrared bean between the detector's window and mirror. The detector is fitted with a weatherproof cap to prevent dust or water interference. The IR Plus Gas Detector provides output signals and has an optional intrinsically safe display providing gas readings and alarm indications. The flameproof enclosure has two M20 or ¾" NPT cable entries.

Model Code Options:

IRPL-a-b-019-c-d, IR Plus Gas Detector
a = Gas:
- AA = Methane
- AB = Propane
- HC = Switching

b = Cable Entry:
- AC = M20
- AD = ¾" NPT

c = Outputs:
- AD = 4-20 mA Source & RS-485
- AE = 4-20 mA Sink & RS-485
- AF = 4-20 mA Source, HART over 4-20mA, & RS-485
- AG = 4-20 mA Sink, HART over 4-20mA, & RS-485

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d = Display Options:
- 00 = No Display
- 01 = Fixed Display
- 02 = Fixed Display with Local HART
- 04 = Spare Detector - Fixed Display Ready

Specifications – The manufacturer's specifications are as follows:

Sensor Type:	Infrared Sensor
Gases:	Methane, Propane
Range:	0-100%LFL
Installation:	Fixed
Sampling Type:	Diffusion
Accuracy:	±2 %FS
Response Time:	Methane: t(90) 36s with flow adaptor at 1l/min Propane: t(90) 38s with flow adaptor at 1l/min
Operating Temperature:	-40°C to +75°C
Storage Temperature:	-40°C to +75°C
Relative Humidity:	0 to 95% RH
Supply Parameters:	12-30 Vdc, 5.5W maximum
Safety Related Measurement Signal:	4-20mA, RS-485
Alarms:	4-20mA, RS-485
Ingress Protection (Verified for Performance):	IP65
Firmware:	i-Module: V5 i2.10 IR Plus Host: V5 i1.09

Accessories - The following accessories are included in the Approval:

C011401	Test Cap
C011402	Flow Adapter
C011403	Sun Shade

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C011404	Wall Mounting Kit
C011405	Pipe Mounting Kit
M041165	Weatherproof Cap

14. **Specific Conditions of Use:**

    1. The flamepaths are not to be repaired.
    2. For performance certification, the IR Plus Gas Detector must be installed in a system with capabilities for a latching alarm.
    3. For ingress protection, the weatherproof cap must be fitted on the detector.

15. **Test and Assessment Procedure and Conditions:**

    This Certificate has been issued in accordance with FM Approvals Canadian Certification Scheme.

16. **Schedule Drawings**

    A copy of the technical documentation has been kept by FM Approvals.

17. **Certificate History**

    Details of the supplements to this certificate are described below:

Date	Description
6 August 2026	Original Issue.

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