



1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment      **IR400 and IR700 Gas Detector**

3 Manufacturer   **General Monitors (Ireland) Limited**

4 Address          Ballybrit Business Park  
                     Galway  
                     Ireland

5 The equipment is specified in the description of this certificate and the documents to which it refers.

6 CML B.V., Chamber of Commerce No 67386717, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

7 If an ‘X’ suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.

8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018	EN 60079-1:2014
EN 60079-31:2014	EN 60079-29-1:2016 (IR400 only)

10 The equipment shall be marked with the following:



|| 2 G D

Ex db IIB+H<sub>2</sub> T5 Gb

Ex tb IIIC T100°C Db IP66

EN 60079-29-1 (Applies to Model IR400 only)

Ta = -60°C to +75°C

Ta = -40°C to +75°C (EN 60079-29-1 for model IR400)



Rambert



**CML 23ATEX1038X**  
**Issue 0**

## 11 Description

The IR400 is an optical gas detector that is rated at 24 V dc maximum. The IR700 is identical in construction and only the filter medium and the firmware are different. They are manufactured from cast aluminium A356-T6 or stainless steel, are cylindrical in shape and incorporate three separate compartments: electronic, optical and detector. The electronic and optical compartments have a cylindrical joint cap and the detector compartment has a flanged lid fitted with four – M4 socket head cap screws. Both compartments are fitted with a sapphire optically clear UV window, which is held in place by a threaded locknut and is sealed with a silicone sponged 'O' ring. The electronics module tube contains the PCBs and associated electronics that perform the equipment's measuring function.

The enclosures meet IP 6X ingress protection and have been additionally tested according to the requirements of EN 60529 to meet IP X6, hence having an overall rating of IP 66.

### Notes:

- Sira 07ATEX1253X, Issue 10 is superseded by CML 23ATEX1038X.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by Sira 07ATEX1253X, Issue 10.
- Where Sira 07ATEX1253X, Issue 10, is specified in other product certification, or other technical specifications, this certificate reference for the product shall be used in its place; updating of the other product certificate or technical specification is not required.

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	26 Jun 2023	R16134F/00	Issue of Prime Certificate

Note: Drawings that describe the equipment or component are listed in the Annex.

## 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- Where the product incorporates certified parts or safety critical components, the manufacturer of the product defined on this certificate shall continually monitor these parts/components for any modifications introduced by the manufacturer(s) of these constituent parts. If the manufacturer of any constituent part introduces any changes which affect the compliance of the certified product that is the subject of this certificate, the manufacturer is required to have this certificate updated.

## 14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- Guidance for Installation of fixed gas detection systems are set out in EN 60079-29-2.
- Guidance for functional safety of fixed gas detection systems are set out in EN 60079-29-3 which has not been covered in the scope of this assessment.
- The IR400 gas performance range covers 0-100% LFL methane only in a performance ambient temperature of -40°C to +75°C, The current firmware is version J.

## Certificate Annex

**Certificate Number** CML 23ATEX1038X  
**Equipment** IR400 and IR700 Gas Detector  
**Manufacturer** General Monitors (Ireland) Limited



The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
32508	1 to 3	D	26 Jun 2023	Drawing IR400 Approval
32509	1 of 1	R	26 Jun 2023	Nameplate IR400
32703	1 of 1	D	26 Jun 2023	Nameplate IR700
M22374	1 of 1	J	26 Jun 2023	Potting procedure