UK Type Examination Certificate CML 23UKEX1358X Issue 0

United Kingdom Conformity Assessment

1 Product or Protective System Intended for use in Potentially Explosive Atmospheres UKSI 2016:1107 (as amended) – Schedule 3A, Part 1

2 Equipment **Oxygen Analyzer Type GPR 18 MS, GPR 18 and GPR 28**

3 Manufacturer **Analytical Industries Inc.**

4 Address **2855 Metropolitan Place, Pomona, CA 91767, USA**

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

6 Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, CH65 4LZ, United Kingdom, Approved Body Number 2503, in accordance with Regulation 42 of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016:1107 (as amended), 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 Schedule 1 of the Regulations.

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 specific conditions of use (affecting correct installation or safe use). These are specified in Section 14.

8 This UK Type Examination certificate relates only to the design and construction of the specified equipment. Further requirements of the Regulations apply to the manufacturing process and supply of the product. These are not covered by this certificate.

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

10 The equipment shall be marked with the following:

Ex II 2 G

Ex db IIB/IIB+H2 T6 Gb

Ta= -20°C to +60°C

11 Description

The oxygen analyzer is a flameproof enclosure containing electrical and electronical devices intended for oxygen analysis.

The containment system which carries the gas inside the enclosure is composed of a flow limiter at the inlet, and two certified flame arrestors at the gas inlet and outlet. In addition to this, the enclosure wall is fitted with a breather. The containment system is made up of a series of pipes and pipe fittings which pass the gas through an oxygen analyzer. The oxygen through the containment system is always <21%.

The enclosure is fitted with 2 cables entries 3/4" NPT and a glass window. A thermal probe can be used only if a heater is installed inside the enclosure, with a threshold fixed to +65°C.

Notes:

- INERIS 07ATEX0025X / IECEx INE 19.0054X is superseded by this certificate.
- The product covered by Issue 0 of this certificate remains identical to that previously covered by INERIS 07ATEX0025X / IECEx INE 19.0054X.
- Where INERIS 07ATEX0025X / IECEx INE 19.0054X 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	14 Nov 2023	R16751A/00	Issue of Prime Certificate.

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

13 Conditions of Manufacture

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

i. 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.

ii. The containment system shall be routine tested at 1.5 x its maximum operating pressure in accordance with EN/IEC 60079-1 Ed 7.0, clause G.4.1.

14 Specific Conditions of Use

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

i. The enclosure shall be installed to a flat rigid surface using the mounting means provided.
ii. All unused openings must be fitted with certified flameproof blanking elements and have a minimum marking equal to the marking on the enclosure.
iii. When installing cable glands, they must be certified as flameproof and have a minimum marking equal to the marking on the enclosure.
iv. The end user shall provide the earthing/bonding means as necessary.
v. The flanged joint of the enclosure has following parameters: width: 24.7 mm, gap less than 0.0635 mm.
vi. The flameproof joints of the flame arrestors and of the breathing device are not intended to be repaired.
vii. The containment system shall not have an internal source of release of oxygen in concentrations greater than that found in normal air, or other oxidizers.

Certificate Annex

Certificate Number	**CML 23UKEX1358X**
Equipment	**Oxygen Analyzer Type GPR 18 MS, GPR 18 and GPR 28**
Manufacturer	**Analytical Industries Inc.**

The following documents describe the equipment defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
GPR-x8 Explosion Proof Oxygen Analyzers Tech File	1 to 103	02	14 Nov 2023	GPR-x8 Explosion Proof Oxygen Analyzers Tech File
A-5566	1 to 3	0	14 Nov 2023	GPR-18 CONTAINMENT SYSTEM OVERVIEW
A-5537-Ex	1 to 2	0	14 Nov 2023	GPR-18MS/GPR-28 CERTIFICATION MARKING SPECIFICATION