



## EU Type Examination Certificate CML 20ATEX1038X Issue 1


- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **XTP601 Oxygen Analyser and XTC601 Series Binary Gas Analyser**
- 3 Manufacturer **Michell Instruments Ltd**
- 4 Address **48 Lancaster Way Business Park  
Ely  
Cambridgeshire  
CB6 3NW  
United Kingdom**
- 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 6738671, 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

- 10 The equipment shall be marked with the following:

 II 2 G D

Ex db IIB+H<sub>2</sub> T6 Gb

Ex tb IIIC T85°C Db

IP 66

Ta = -40°C to +60°C (for versions with a silicone O-ring)

Ta = -15°C to +60°C (for versions with a viton O-ring)

Ta = -10°C to +60°C (for versions with a Ekraz O-ring)



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## 11 Description

The XTP601 Series Oxygen Analysers and XTC601 Series Binary Gas Analysers comprise a cylindrical enclosure, with or without a window, which is certified under certificate PTB 06ATEX1023U. Internally, the enclosure is provided with a sensor cell, a base mounted main PCB and a display PCB which is positioned immediately behind the window.

A glass light guide, within an 'Ex d' cable gland, is mounted in the wall of the enclosure to give a visual indication of the status of the sensor.

Sample gases for analysis are transferred to and from the sensor cell via flame arrestors certified under certificate CML 20ATEX1038X, CML 21UKEX1048X, IECEx CML 20.0018X or ISSeP 09ATEX049U and IECEx INE 12.0002U, these are fitted into the enclosure wall such that the sample gases are isolated from the interior of the enclosure.

The equipment is rated at up to 28 V d.c. and up to 40 W (XTP601) and 25 W (XTC601)

The equipment is designated as the following:

### **XTP601-Ex\* C\*\* Oxygen Analyser**

and

### **XTC601-Ex\* C\*\* Binary Gas Analyser**

Where:

\* = 1 for version with window and display  
2 for version with window but without display  
3 for version without window

\*\* = C1 for version with viton O-ring  
C2 for version with silicon O-ring  
C3 for version with Ekraz O-ring

### **Notes:**

- Certificates Sira 12ATEX1042X (XTP601) and Sira 13ATEX1087X (XTC601) are superseded by this certificate.
- Where Sira 12ATEX1042X or Sira 13ATEX1087X 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.



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### Variation 1

This variation introduces the following modification:

- i. To update the component certificates referenced for FA-\*-\* flame arrestors and BA-\*-\* breathers.

### 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	17 Feb 2020	R12969A/00	Issue of Prime Certificate
1	07 Jan 2022	R14948A/00	Introduction of Variation 1

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.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. The sensor cell and associated pipework & connections of every unit shall be subjected to a pressure test of at least 1.5 bar for at least 10 Seconds, in accordance with Clause G.4.1 of EN 60079-1:2014. There shall be no leakage.
- iii. Each and every light guide assembly shall be subjected to a routine overpressure test at 13.5 bar, without damage or leakage, in accordance with Clause 15.2.3 of EN 60079-1:2014.

### 14 Specific Conditions of Use (Special Conditions)

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

- i. Cable entry holes shall be fitted with either an appropriately certified cable gland or appropriately certified blanking element. These shall provide and maintain a minimum enclosure ingress protection of IP66.
- ii. The maximum pressure associated with the process medium in the internal pipes shall be limited to 1 bar.
- iii. The maximum temperature associated with the process medium shall be limited to +60°C.
- iv. Flameproof joints of the Flame Arrestor and Breather are not intended to be repaired.

## Certificate Annex

**Certificate Number** CML 20ATEX1038X  
**Equipment** XTP601 Oxygen Analyser and  
XTC601 Series Binary Gas Analyser  
**Manufacturer** Michell Instruments Ltd



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

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
Ex90482	1 to 13	04	17 Feb 2020	XT*601 Series Analysers – IECEx & ATEX certification drawing

### Issue 1

Drawing No	Sheets	Rev	Approved date	Title
Ex90482	1 to 13	06	07 Jan 2022	XT*601 Series Analysers IECEx & ATEX & UKCA Certification drawing.