

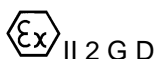


EU Type Examination Certificate CML 20ATEX1038X Issue 2

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **XTP601-Ex Oxygen Analyzer, XTC601-Ex Binary Gas Analyzer and XPM601-Ex Paramagnetic Gas Analyzer**
- 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 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
- 10 The equipment shall be marked with the following:



II 2 G D

Ex db IIB+H₂ T6 Gb

Ex tb IIIC T85°C Db

IP 66

Ta = -40°C to +60°C (for versions with a silicone O-ring; XTP601-Ex and XTC601-Ex)

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-Ex Oxygen Analyzer, XTC601-Ex Binary Gas Analyzer and XPM601-Ex Paramagnetic Gas Analyzer comprise a cylindrical enclosure 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.

Sample gases for analysis are transferred to and from the sensor cell via flame arrestors certified under certificate CML 20ATEX1302U or INERIS 12ATEX9013U, 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 38 W (XTP601) and 22 W (XTC601, XPM601).

The equipment is designated as the following:

XTP601-Ex1-C* Oxygen Analyzer

XTC601-Ex1-C* Binary Gas Analyzer

XPM601-Ex1-C* Paramagnetic Gas Analyzer

Where:

- * = C1 for version with viton O-ring
- C2 for version with silicon O-ring (only for XTP601-Ex and XTC601-Ex models)
- C3 for version with Ekraz O-ring

Notes:

- Certificates Sira 12ATEX1042X (XTP601) and Sira 13ATEX1087X (XTC601) are superseded by this certificate.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

Variation 1

This variation introduces the following modification:

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

Variation 2

This variation introduces the following modifications:

- i. To add the XPM601-Ex Paramagnetic Gas Analyzer model.
- ii. To remove the models without window.
- iii. To permit minor updates to the technical file (documentation)
- iv. To recognise minor editorial corrections to the product description.

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
2	26 Oct 2023	R16758A/00	Introduction of Variation 2



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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 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 sensor cell and associated pipework & connections of every unit shall be subjected to a pressure test in accordance with Clause G.4.1 of EN 60079-1:2014 for a minimum duration of 10 Seconds under at least:
 - 1.5 bar for XTP601-Ex and XTC601-Ex models
 - 0.5 bar for XPM601-Ex model

There shall be no leakage.

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 for XTP601-Ex and XTC601-Ex models and to 0.33 bar for XPM601-Ex model.
- 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 Issue 2
Equipment XTP601-Ex Oxygen Analyzer, XTC601-Ex Binary Gas Analyzer and XPM601-Ex Paramagnetic Gas Analyzer
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.

Issue 2

Drawing No	Sheets	Rev	Approved date	Title
Ex90482	1 to 14	07	26 Oct 2023	XTP601, XTC601 & XPM601 ANALYZER ATEX/IECEx/UKCA CERTIFICATION DRAWING