

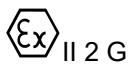


EU Type Examination Certificate CML 17ATEX1239X Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Ultraviolet Absorption Spectrophotometric Analyzer, Type FPA4100*** CE**
- 3 Manufacturer **Galvanic Applies Sciences Inc.**
- 4 Address **7000 Fisher Rd. SE,
Calgary, Alberta,
Canada, T2H 0W3**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, 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 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-11:2012
- 10 The equipment shall be marked with the following:



II 2 G

Ex db ia IIB+H2 T4 Gb

Ta= -20°C to +50°C



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11 Description

The Galvanic Applied Sciences FPA4100 CE Analyzer is an Ultraviolet Spectrophotometer Analyser designed to measure a wide variety of analytes in liquid or gas process streams using ultraviolet light.

The equipment consists of a controller and photonics enclosure, as well as a flow cell arrangement and a remote intrinsically safe keypad.

Main Input: 110/240 Vac, 50/60 Hz 100 Watts or 24 Vdc, 100 watts

The equipment will be equipped with one of the following options with the suffix.

Type	TYPE CODE	UV LIGHT SOURCE
4100VIS	VIS	TUNGSTEN
4100UV1	UV1	MERCURY
4100UV2	UV2	MERCURY BIHOSPOR
4100UV3	UV3	ZINC
4100UV4	UV4	CADMIUM

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	08/01/2018	R11327A/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.

- 13.1 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.

14 Special Conditions for Safe Use (Conditions of Certification)

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

- 14.1 The FPA4100*** CE Analyzer shall be installed in accordance with the manufacturer's instructions and is only for indoor use.
- 14.2 The enclosure is manufactured from Aluminium alloy. In rare cases, ignition sources due to impact and friction sparks could occur.
- 14.3 The external connector shall only be used with the Galvanic Science Keypad, model SA2992
- 14.4 The USB connection point located behind the flameproof window, shall only be accessed for servicing/maintenance when an explosive atmosphere is not present.

Certificate Annex



Certificate Number CML 17ATEX1239X
Equipment FPA4100*** CE Analyzer
Manufacturer Galvanic Applies Sciences Inc.

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

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
APR-000135	1 to 2	5	08/01/2017	FPA4100CE Assembly
APR-000136	1 to 2	1	08/01/2017	Controller Enclosure Assembly
APR-000137	1 to 2	2	08/01/2017	Photonic Enclosure Assembly,
APR-000151	1 to 2	0	08/01/2017	FPA 4100CE Zone 1 Enclosure interconnect AC power
APR-000150	1	2	08/01/2017	FPA4100CE Zone 1 Analyzer Nameplate
APR-000144	1	0	08/01/2017	Fiber Optic Bundle (Detector)
APR-000145	1	0	08/01/2017	Fiber Optic Bundle (Source)
APR-000158	1	0	08/01/2017	SA29992-zz Connector Label