



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX QPS 20.0011X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 2 [Issue 1 \(2021-05-19\)](#)
[Issue 0 \(2020-07-16\)](#)
Date of Issue: 2023-02-28
Applicant: **Galvanic Applied Sciences Inc**
7000 Fisher Rd SE
Calgary
AB T2H 0W3
Canada
Equipment: **AccuLase Z2 analyzer with options of single or dual Laser system.**
Optional accessory:
Type of Protection: **Increased Safety "e", inherently safe optical radiation "op is"**
Marking: Ex ec op is IIB+H2 T3 Gc
T_{amb}= -20°C to +50°C
Electrical Rating: 100-240 VAC, 1 Phase, 50/60 Hz, 230 Watts.

Approved for issue on behalf of the IECEx
Certification Body:

D, Adams, P.Eng.

Position:

Manager, Hazardous Locations Department [Ex Equipment]

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

QPS
Evaluation Services Inc.
81 Kelfield St
Unit 8
Toronto, Ontario M9W 5A3
Canada





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Page 2 of 4

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Manufacturer: **Galvanic Applied Sciences Inc**
7000 Fisher Rd SE
Calgary
AB T2H 0W3
Canada

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-28:2015](#) Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[CA/QPS/ExTR20.0017/00](#)

[CA/QPS/ExTR20.0017/01](#)

[CA/QPS/ExTR20.0017/02](#)

Quality Assessment Reports:

[GB/ITS/QAR14.0026/03](#)

[GB/ITS/QAR14.0026/05](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX QPS 20.0011X**

Page 3 of 4

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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The AccuLase Z2 analyzer uses Tunable Diode Laser Absorption Spectroscopy to determine the concentration of a target gas species in a variety of gaseous process streams. The AccuLase Z2 analyzer is comprised of an Electronic Enclosure and a Laser Detector Enclosure.

The analyzer uses a laser source which is located in the Laser Detector Enclosure. The laser source is a Class 3b radiation product. The analyzer has analog outputs and alarm relay contacts which may be powered by a source separate from the one used to power the analyzer system. Disconnecting the main power source may not remove power from the analog output signals and relay contacts.

During normal operation of the analyzer, the front door of the analyzer must remain closed. The operator can communicate with the analyzer via a handheld keypad which plugs into a connector located on the exterior of the upper enclosure. The keypad is only required for temporary maintenance activities. Communication with the analyzer is also possible through ethernet connection. Ethernet ports are provided inside the electronics enclosure for temporary access during periods where the immediate area is proven to be non-hazardous...

The AccuLase Z2 analyzer has options of single or dual Laser system.

The models are: AccuLase - Z2 (Single Laser System), AccuLase - M - Z2 (Dual Laser System),

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Read and understand the manual before working with the analyzer.
2. Only qualified personnel should install, operate, and maintain the analyzer.
3. INVISIBLE LASER RADIATION. CLASS 3b RADIATION PRODUCT. AVOID EXPOSURE TO THE BEAM.



IECEX Certificate of Conformity

Certificate No.: **IECEX QPS 20.0011X**

Page 4 of 4

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1. The air pump moved to the outside of the measuring enclosure and is located next to the measuring enclosure.
2. Add alternative power supply. Manufacture: Phoenix Contact, model: 2320908. Input: 100-230Vac.
3. Additional power filter.
4. Additional adaptor plate between enclosures.
5. Removal of the ethernet port on the outside of the electronic enclosure.
6. Corrections to nameplate and analyzer ratings.
7. Revised Installation and Safety Manual.