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 ETL 20.0036X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 4	Issue 3 (2025-05-13) Issue 2 (2023-06-13) Issue 1 (2021-08-23) Issue 0 (2020-09-14)
Date of Issue:	2026-01-26		

Applicant: **Advanced Micro Instruments, Inc.**
15501 Red Hill Ave Ste. 100
Tustin, CA 92780
United States of America

Equipment: **Gas Analyzers, Models: 210BX-**-******, 2010BX-**-******, 3010BX-**-******

Optional accessory: None

Type of Protection: **Flameproof 'db', Intrinsic safety 'ia'**

Marking: Ex ia IIB+H2 T4 Ga/Ex db IIB+H2 T4 Gb

-32°C ≤ Tamb ≤ +46°C

IECEx ETL 20.0036X

Approved for issue on behalf of the IECEx Certification Body: **Hope Alm**

Position: **Certification Officer**

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:

Intertek
3933 US Route 11 South
Cortland NY 13045-2995
United States of America

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Certificate No.: **IECEx ETL 20.0036X**

Date of issue: 2026-01-26

Issue No: 4

Manufacturer: **Advanced Micro Instruments, Inc.**
15501 Red Hill Ave Ste. 100
Tustin, CA 92780
United States of America

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 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-26:2021 Explosive atmospheres - Part 26: Equipment with Separation Elements or combined Levels of Protection
Edition:4.0

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:

US/ETL/ExTR20.0045/00
US/ETL/ExTR20.0045/01
US/ETL/ExTR20.0045/02
US/ETL/ExTR20.0045/03
US/ETL/ExTR20.0045/04

Quality Assessment Report:

US/ETL/QAR20.0008/04

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

The product covered by this report is an oxygen analyser and a H2S Analyzer. Both products have nearly identical construction differing only by the sensor installed. The equipment incorporates both Flameproof and Intrinsic Safety (IS) protection methods. An equipment back plate provides mounting means for both flameproof (left) and analytical measurement (right) enclosures and equipment bonding connector.

The flameproof enclosure (shown to left) houses the circuitry that makes up the IS barrier. IS circuits leave the flameproof enclosure to connect to electrical circuits in the analytical measurement enclosure through an electrical bushing. This electrical bushing has been evaluated as a flameproof seal. Heated models contain an additional aluminium housing for the heater which threads into the side of the flameproof enclosure and extends into the analytical measurement enclosure. The heater is intended to provide temperature control to the analytical instrumentation. The heater housing has been evaluated to seal the flameproof enclosure. For non-heated models, a certified stopping plug is used to seal the opening, or the respective hole is not drilled into the enclosure. Field wired mains and alarm relay connections, located on bottom of flameproof enclosure, are required to be properly sealed to complete flameproof protection method.

IS barrier located inside the flameproof enclosure supplies the sensor and other circuits with power/data connections to/from the analytical measurement enclosure. The Intrinsically safe housing has three separate ports included in the enclosure: span gas inlet, sample gas inlet and exhaust gas. The incoming gases enter directly into the cell block part of the analytical measurement enclosure. O2 and H2S sensors are exposed to the cell block gas that measures/analyses the presence of oxygen and H2S. Other than the sensors, no part of the intrinsic circuit is directly in contact with the gas or the pressure. Process gas lines do not pass through or into the flameproof enclosure.

Full Model Nomenclature:

- 210BX followed by -AC or -DC; may be followed by -HEATED.
- 2010BX followed by -AC or -DC; may be followed by -HEATED.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Electrostatic hazard warning – refer to equipment instruction manual for techniques to mitigate risk of electrostatic discharge.
2. Equipment shall only be installed and operated in the upright orientation with the mounting plate vertical.
3. Flameproof joints are not intended to be repaired.
4. Equipment utilizes an aluminium housing. The end user shall perform a risk assessment whilst installing this equipment in an EPL Ga environment and it only be utilized where the risk of impact has been determined to be negligible.
5. The maximum Um value to the Intrinsically safe side shall be as follows: For AC models: 240VAC and For DC models: 24VDC
6. Electrical bushing separating the Flameproof and Analytical enclosures shall not be subject to environmental conditions which adversely affect the properties of the cement.