



EU-TYPE EXAMINATION CERTIFICATE

Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

Certificate Number: **CSANe 23ATEX1152X** Issue: **0**

Equipment: **Portable Gas Detector/BZ100**

Applicant: **Hanwei Electronics Group Corporation**

Address: **No. 169, Xuesong Road
National Hi-Tech Zone
Zhengzhou 450001
China**

This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 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 14.2.

Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0:2018 EN 60079-11:2012

If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

The marking of the equipment shall include the following:



II 1G

Ex ia IIC T4 Ga

Ta = -20°C to 50°C

Signed: Michelle Halliwell

Title: Director of Operations



Project Number 80151344

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SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

CSANe 23ATEX1152X
Issue 0

13 DESCRIPTION OF EQUIPMENT

BZ100 is a portable toxic gas detector which is powered by a single primary lithium cell (3.6V). The physical dimensions are 61.5mm*52.8mm*27mm (alligator clip dimensions are not included) and its weight is about 85g. It is housed in a non-metallic enclosure (PC), partially covered with soft thermoplastic rubber material (TPE). The gas detector supports one EC sensor. The EC sensor is for hydrogen sulfide (H₂S), carbon monoxide (CO) or oxygen (O₂) monitoring of ambient air. The front has an LCD display and one power-on button for users to operate functions and change settings. The back of the enclosure is equipped with a metallic alligator clip. There are three status LEDs, audible alarm and vibration alarm. When the gas concentration reaches the high, low, TWA or STEL alarm present value, it will trigger audio, visual and vibration alarms.

Internally, the electronics consist of a main printed circuit board and a sensor printed circuit board.

The detector has been tested to comply with IP67/IP68(1m, 1h) in accordance with the EN/IEC 60529.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	07 December 2023	R80151345A	The release of the prime certificate.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

15.1 It is not allowed to disassemble, change the battery, adjust or repair the gas detector.

15.2 Before use, ensure that the ESD film on the perspective window panel is not damaged or peeling or the product is enclosed by a leather cover.

15.3 The product shall not be used or be exposed to air with an oxygen concentration of more than 21%.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

17 CONDITIONS OF MANUFACTURE

17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.

17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

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Certificate Annexe



Certificate Number: CSANe 23ATEX1152X
Equipment: Portable Gas Detector/BZ100
Applicant: Hanwei Electronics Group Corporation

Issue 0

Drawing	Sheets	Rev.	Date (Stamp)	Title
HKJ-BZ100-001	1 of 1	V1.00	01 Dec 23	General Assembly Drawing
HKJ-BZ100-001-001	1 of 1	V1.00	01 Dec 23	Top cover
HKJ-BZ100-001-005	1 of 1	V1.00	01 Dec 23	Bottom cover
HKJ-BZ100-001-009	1 of 1	V1.00	01 Dec 23	Perspective window panel
HKJ-BZ100-003-001	1 to 3	V1.00	01 Dec 23	SCH-BZ100-Main Board
HKJ-BZ100-003-002	1 of 1	V1.00	01 Dec 23	SCH-BZ100 Sensor Board
HKJ-BZ100-002-001	1 to 2	V1.00	01 Dec 23	BOM-BZ100-Main Board
HKJ-BZ100-002-002	1 of 1	V1.00	01 Dec 23	BOM-BZ100-CO-H2S Sensor Board
HKJ-BZ100-002-003	1 of 1	V1.00	01 Dec 23	BOM-BZ100-O2 Sensor Board
HKJ-BZ100-004-001	1 to 7	V1.00	01 Dec 23	PCB_Layout-BZ100 Main Board
HKJ-BZ100-004-002	1 to 5	V1.00	01 Dec 23	PCB_Layout-BZ100 Sensor Board
HKJ-BZ100-003-003	1 of 1	V1.00	01 Dec 23	Sensor List-BZ100
HKJ-BZ100-003-004	1 of 1	V1.00	01 Dec 23	Wire list
HKJ-BZ100-001-010	1 of 1	V1.00	01 Dec 23	Back label

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