



1 **TYPE EXAMINATION CERTIFICATE**

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

3 Certificate Number: **CSANe 22ATEX1157X** Issue: **0**

4 Equipment: **G1100 WirelessHART Smart Gateway**

5 Applicant: **Microcyber Corporation**

6 Address: Floor 1-3, 1#, No.17-8,
Wensu Street,
Hunnan New District,
Shenyang,
Liaoning, 110179,
P.R.C

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

8 CSA Group Netherlands B.V., certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 3 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.

9 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 IEC 60079-7:2015+A1:2018

10 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.

11 This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 3G

Ex ec IIC T6 Gc

Ta = -20°C - +60°C

IP65

Signed: Michelle Halliwell

Title: Director of Operations



Project Number 80139962

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SCHEDULE

TYPE EXAMINATION CERTIFICATE

CSANe 22ATEX1157X
Issue 0

13 DESCRIPTION OF EQUIPMENT

The G1100 WirelessHART Smart Gateway is intended to be used for Zone 2 flammable and explosive atmosphere. It consists of a metallic cover, metallic housing with an external antenna, and all the opening entry will be used certified cable gland, conduit fitting or stopping plug with suitable ingress protection for final installation.

G1100 WirelessHART Smart Gateway works in 2.4GHz ISM radio frequency band and is compatible with IEEE802.15.4 wireless standard. It provides highly reliable wireless network communication technology in common frequency band for complex factory environment. And it can provide network management function, security management function, device management function and process data protocol conversion function of the entire wireless network.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	01 December 2022	R80139963A	The release of the prime certificate.

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

- 15.1 The model of button battery is BR1225A with BR Coin-type Lithium, and using in G1100 WirelessHART Smart Gateway enclosure, the button battery cannot be replaced in hazardous location.
- 15.2 Use certified cable gland, stopping plug, conduit fitting or similar device with suitable ingress of protection for final installation.
- 15.3 Equipment shall be operated such that the supply cable is protected from mechanical damage. The cable shall not be subjected to tension or torque.
- 15.4 The socket of RS 232(DB-XP) and MICROSD(TF-01A) is soldered on the PCB board and not be connect or disconnect in hazardous location.

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 Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 The G1100 WirelessHART Smart Gateway shall be subjected to a dielectric strength test with 500Vac or 710Vdc for least 60 s without dielectric breakdown occurring between input and the equipment enclosure. Alternatively, the test may be carried out at 600Vac or 850Vdc for at least 100 ms. Between input and the equipment enclosure. The testing base on clause 7.1 of IEC 60079-7:2017 and EN IEC 60079-7:2015+A1:2018.

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Certificate Annexe



Certificate Number: CSANe 22ATEX1157X
Equipment: WirelessHART Smart Gateway G1100
Applicant: Microcyber Corporation

Issue 0

Drawing	Sheets	Rev.	Date (Stamp)	Title
Mechanical drawings				
G1100-20-00	1 of 1	V1.0	26 Oct 22	G1100 WirelessHART Smart Gateway Procedure drawing
G1100-20-00-01	1 of 1	V1.0	26 Oct 22	General Assembly Drawing
G1100-20-01	1 of 1	V1.0	26 Oct 22	Shell Cover
G1100-20-06	1 of 1	V1.0	26 Oct 22	Shell Body
G1100-20-11	1 of 1	V1.0	26 Oct 22	Housing Seal
G1100-20-08-00	1 of 1	V1.0	26 Oct 22	Omnidirectional Antenna Assembly
G1100-20-08-01	1 of 1	V1.0	26 Oct 22	Antenna Body
G1100-20-08-02	1 of 1	V1.0	26 Oct 22	Antenna Outside Columu
G1100-20-08-03	1 of 1	V1.0	26 Oct 22	Antenna Blocks
G1100-20-08-04	1 of 1	V1.0	26 Oct 22	Antenna Silicone Pad
G1100-20-08-05	1 of 1	V1.0	26 Oct 22	Antenna Adapter
G1100-20-08-07	1 of 1	V1.0	26 Oct 22	Antenna Terminal
G1100-20-08-08	1 of 1	V1.0	26 Oct 22	O Ring For Antenna Adapter
G1100-20-08-09	1 of 1	V1.0	26 Oct 22	Antenna Fixed Joint Gasket
G1100-20-08-10	1 of 1	V1.0	26 Oct 22	Antenna Hexagon Fastener
G1100-20-07	1 of 1	V1.0	26 Oct 22	Nameplate
G1100-20-02	1 of 1	V1.0	26 Oct 22	AM335X Circuit Board
G1100-20-03	1 of 1	V1.0	26 Oct 22	GW-WH-003 Circuit Board
G1100-20-04	1 of 1	V1.0	26 Oct 22	GW-WH-0001 Circuit Board
G1100-20-05	1 of 1	V1.0	26 Oct 22	GW-WH-0002 Circuit Board
G1100-20-09	1 of 1	V1.0	26 Oct 22	LTP5903 Circuit Board
G1100-20-10	1 of 1	V1.0	26 Oct 22	LTP5903 Circuit Board AP
Electrical drawings				
G1100-20-02-BOM	1 of 1	1.0	26 Oct 22	AM335X Core Board BOM
G1100-20-04-BOM	1 of 4	1.3	26 Oct 22	GW-WH-0001-BOM
G1100-20-05-BOM	1 of 1	1.4	26 Oct 22	GW-WH-0002-BOM
G1100-20-03-BOM	1 of 1	1.3	26 Oct 22	GW-WH-0003-BOM
G1100-20-09-BOM	1 of 2	1.0	26 Oct 22	LTP5903 Core Board BOM
G1100-20-10-BOM	1 of 1	1.0	26 Oct 22	LTP5903 Core Board AP BOM
G1100-20-05-PCB	1 of 1	V1.0	26 Oct 22	GW-WH-0002 PCB
G1100-20-04-PCB	1 of 1	V1.0	26 Oct 22	GW-WH-0001 PCB
G1100-20-02-PCB	1 of 6	V1.0	26 Oct 22	AM335X Core Board PCB
G1100-20-09-PCB	1 of 10	V1.0	26 Oct 22	LTP5903 Core Board PCB
G1100-20-10-PCB	1 of 6	V1.0	26 Oct 22	LTP5903 Core Board AP PCB
G1100-20-03-PCB	1 of 1	V1.0	26 Oct 22	GW-WH-0003 PCB
G1100-20-05-SCH	1 of 2	V1.0	26 Oct 22	GW-WH-0002 SCH
G1100-20-04-SCH	1 of 7	V1.0	26 Oct 22	GW-WH-0001 SCH
G1100-20-02-SCH	1 of 1	V1.0	26 Oct 22	AM335X Core Board SCH
G1100-20-09-SCH	1 of 7	V1.0	26 Oct 22	LTP5903 Core Board SCH
G1100-20-10-SCH	1 of 1	V1.0	26 Oct 22	LTP5903 Core Board AP SCH
G1100-20-03-SCH	1 of 1	V1.0	26 Oct 22	GW-WH-0003 SCH
G1100-20-01-FBD	1 of 1	V1.0	26 Oct 22	GW-WH-G1100 FBD

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