

## Table of Contents

1. Summary .....	2
2. Safe use of the GWX gateway .....	2
2.1 How and where to use the GWX gateway .....	2
2.2 GWX Operating temperature and other conditions .....	3
2.3 Installation of GWX gateway .....	3
2.4 Disposal of the GWX gateway .....	3
2.5 Risks and how to use the GWX gateway .....	3
3. Technical Details.....	4
3.1 Radio properties .....	4
3.2 Antenna locations.....	5
4. Sales box .....	5
5. Simplified EU Declaration of Conformity .....	6
6. FCC Declaration of Conformity .....	6
7. Canada Declaration of Conformity .....	7
8. Document history .....	8



## 1. SUMMARY



GWX is a gateway device meant to be used with wireless sensors. GWX uses 868 MHz (EU only) and/or 2.4 GHz proprietary radio to advertise itself to nearby sensor devices so they can connect and send their measurement data. GWX then transmits the data to Sensire Cloud via LTE/3G/2G connection. GWX also includes NFC that can be used to configure and debug the device using a mobile device and Sensire provided app. GWX can also configure sensor devices using the NFC.

Figure 1. GWX gateway.

## 2. SAFE USE OF THE GWX GATEWAY

### 2.1 HOW AND WHERE TO USE THE GWX GATEWAY

GWX is a gateway device meant to be used with wireless sensors. This device is to be installed and used only indoors. The device is to be installed on the wall using the included wall holder.

GWX works in a plug-and-play manner and does not need to be touched after correct installation. Never power up GWX when its temperature is below freezing (under 0°C).

GWX has enclosure which is closed with screws and should not be opened.

Safety distance of 20 cm to user shall be maintained.

Version 0.8

15.05.2021

## 2.2 GWX OPERATING TEMPERATURE AND OTHER CONDITIONS

Operating temperature range: 0...+50°C

Storage temperature range: 0...+50°C

Pollution degree: 2

## 2.3 INSTALLATION OF GWX GATEWAY

Install the provided wall holder to a suitable place on the wall by using the adhesive tape. Screws can also be used. Holes should be drilled to the wall if screws are used. Wall plugs might also be needed depending on the wall material.

Set GWX to the wall holder after it has been installed. Connect the provided power adapter to a wall socket and to GWX *DC IN* socket. GWX *PWR* LED should light up with green color. GWX should now be in a working condition.

## 2.4 DISPOSAL OF THE GWX GATEWAY

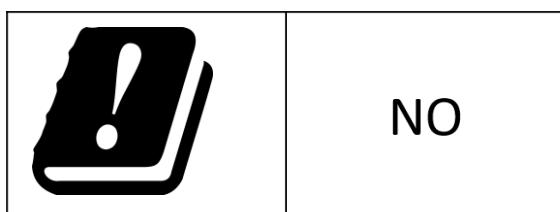
In case that GWX needs to be disposed, it needs to be sent back to manufacturer or disposed as WEEE waste. Local regulations need to be obeyed when disposing the device.



## 2.5 RISKS AND HOW TO USE THE GWX GATEWAY

To ensure that GWX gateway works properly and that no harm will come to user please make sure that:

- Do not power up GWX when its temperature is below freezing (under 0°C)
- Do not open or disassemble the device
- Handle GWX so it will not be physically damaged
- Stop using GWX if it becomes damaged as it contains supercapacitor
- Do not change GWX antennas
- Do not change GWX power adapter
- Do not use USB cables longer than 3 meters with the device
- If damaged return GWX to manufacturer or dispose it to WEEE waste in accordance with local regulations
- If the device is used in a manner not specified in this manual and product specification the protection provided by the device may be impaired



NO

This device 2.4 GHz SRD feature is not allowed to be used within a 20 km radius of the centre of Ny-Ålesund at Svalbard, Norway.



Version 0.8

15.05.2021

### 3. TECHNICAL DETAILS

#### 0.2 RADIO PROPERTIES

868 MHz mode (EU only)	
Used frequency bands	865 - 868 MHz and 869.4 - 869.65 MHz
Maximum power	< 25 mW
Receiver category	2
2.4 GHz mode	
Used frequency bands	2400 - 2480 MHz
Maximum power	<10 mW
LTE-FDD	
Used frequency bands	B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/ B19/B20/B25/B26/B28
Maximum power	Class 3
LTE-TDD	
Used frequency bands	B38/B39/B40/B41
Maximum power	Class 3
WCDMA	
Used frequency bands	B1/B2/B4/B5/B6/B8/B19
Maximum power	Class 3
GSM	
Used frequency bands	B2/B3/B5/B8
Maximum power	Class 4
NFC	
Frequency	13,56 MHz



Version 0.8

15.05.2021

## 0.2 ANTENNA LOCATIONS



*Figure 3. GWX antenna location.*

## 4. SALES BOX

Sales box will include:

- GWX Device
- GWX wall holder with adhesive tape
- GWX User Manual

GWX device sales box package should be recycled based on local regulations.

Version 0.8

15.05.2021

## 5. SIMPLIFIED EU DECLARATION OF CONFORMITY

Hereby, Sensire declares that the radio equipment type GWX is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address: [www.sensire.com](http://www.sensire.com).

## 6. FCC DECLARATION OF CONFORMITY

**GWX FCC ID is 2AYEK-GWX.**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.



Version 0.8

15.05.2021

## 7. CANADA DECLARATION OF CONFORMITY

**GWX ISED ID is 26767-GWX.**

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license- exempt RSS(s). Operation is subject to the following two conditions:

- 1) This device may not cause interference.
- 2) This device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

L'émetteur/récepteur exempt de licence contenu dans le 7erver7 appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1) L'appareil ne doit pas produire de brouillage.
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Tout changement ou toute modification effectués par l'utilisateur et dont la conformité n'est pas expressément 7erver7 par l'organisme 7erver7er7e de sa conformité peut 7erver7er l'annulation de droit de cet utilisateur de se 7erver de l'équipement.



Version 0.8

15.05.2021

## 8. DOCUMENT HISTORY

Version	Author, date	Change	Date	Approver
0.1	Simo Kuusela	First draft version		
0.2	Simo Kuusela	Added GWX summary and antenna photo		
0.3	Simo Kuusela	Added Norway use restriction information		
0.4	Simo Kuusela	Remove screws from included items in sales box		
0.5	Simo Kuusela	Added FCC and ISED ID		
0.6	Simo Kuusela	Added mention to not use USB cables longer than 3m		
0.7	Simo Kuusela	Change maximum operating temperature and mention not to power up GWX in temperatures below freezing		
0.8	Simo Kuusela, Elina Kukkonen	Changed lithium battery to supercapacitor		
0.9	Simo Kuusela	Change maximum operating temperature to +50°C		