

User Manual

Climate Sensor HT & Climate Sensor HT + CO2

GS21CL12 & GS21CL13



Introduction

The GS21CL12 (Climate Sensor HT) and GS21CL13 (Climate Sensor HT + CO2) are part of the Grodan GroSens sensor platform. This sensor platform enables growers to read out climate and root zone information from their growing rooms and view this data in a mobile phone app or in graphs on their desktop or laptop.

The GS21CL12 and GS21CL13 have been certified for the European (including Turkey), USA and Canadian markets.

Onboarding

For onboarding the sensor in the platform, please download the “Companion” App from the Apple App Store or Google Play Store.



App: Companion
Owner: ROCKWOOL International A/S

Follow the instructions in the app to configure and connect the sensor.

Placement

With the supplied mounting brackets the sensor can be placed freely in the growing room or greenhouse. The sensor can be mounted to the wall with a screw through the suspension eye, it can be mounted to a pole with a tie wrap through the suspension slits or it can be hung from a rope or chain through the suspension eye. To achieve best accuracy the ventilation openings at the back of the sensor should be kept free to allow air circulation in the sensor.

Radio Frequency - declaration of Conformity

European Union

EU Declaration of Conformity (DoC)

Hereby we,

Name of manufacturer: Rockwool b.v. – Grodan

Address: Industrieweg 15

Zip code & City: 6045 JG Roermond

Country: The Netherlands

Telephone number: +31 475 353 020

declare that this DoC is issued under our sole responsibility and that this product:

Product description: Climate sensor, temperature and relative humidity

Type designation(s): GS21CL12

Trademark: Grodan GroSens

is in conformity with the relevant Union harmonization legislation:

- 2014/53/EU - Radio Equipment Directive
- 2011/65/EU - RoHS Directive
- 1907/2006/EC - REACH Regulation
- 2012/19/EC - WEEE Directive

with reference to the following standards applied:

- Safety - EN/IEC 62368-1:2014/A11:2017
- EMF assessment - EN 62479:2010
- EMC - EN 301 489 V2.2.3, part 1 & 3 (V2.1.1), 17 (V3.2.4)
- Radio - EN 300 328 v2.2.2
- Radio - EN 300 220-1 V3.1.1, EN 300 220-2 v3.2.1

Where applicable:

The issued EU-type examination certificate:

- CB test certificate: NL2-020164/A1

Description of accessories and components, including software, which allow the radio equipment to operate as intended and covered by the DoC:

- set of 3 AA batteries

Signed for and on behalf of:

Roermond, 4-6-2021

Place and date of issue



Edwin Dilling, project manager

Name, Function, signature

EU Declaration of Conformity (DoC)

Hereby we,

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Address: Industrieweg 15
Zip code & City: 6045 JG Roermond
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declare that this DoC is issued under our sole responsibility and that this product:

Product description: Climate sensor, temperature, relative humidity and CO2
Type designation(s): GS21CL13
Trademark: Grodan GroSens

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- 2014/53/EU - Radio Equipment Directive
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Roermond, 4-6-2021

Place and date of issue



Edwin Dilling, project manager

Name, Function, signature

North America

FCC Declaration of Conformity (for USA)

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.



FCC ID: 2AUKP-CL002

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

The provided antenna must be used with this unit to ensure compliance.

Canada

Industry Canada Declaration of Conformity

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

IC ID: 25447-CL002

Product Details

Applicable Product Number: RZ21CL12 - Climate Sensor HT

RZ21CL13 - Climate Sensor HT +
CO2

LoRa

Operating Frequency Range: 863 – 870 MHz (EU)
902 – 928 MHz (USA, CAN)

Maximum Output Power: 14 dBm (EU)
22 dBm (USA, CAN)

BLE

Operating Frequency Range: 2402-2480 MHz

Maximum Output Power: 4 dBm

Power

Operating voltage: 4.5V DC (3 Alkaline batteries)

Standby current: 0.1 mA Maximum

Operating current: 120 mA Maximum

Warranty

For Warranty information, please contact our Customer Service Departments.

Europe

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USA, Canada

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