Grodan GS21RZ03 Rootzone Sensor User Manual

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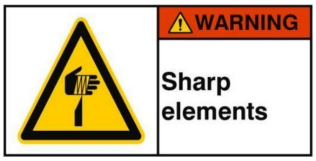
Contents

Safety warning



Be careful, this product contains six sharp measurement pins that can cause cutting or puncture. Do not touch!

Introduction

The GS21RZ03 (Rootzone sensor) is 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 GS21RZ03 has 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.

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

Placement

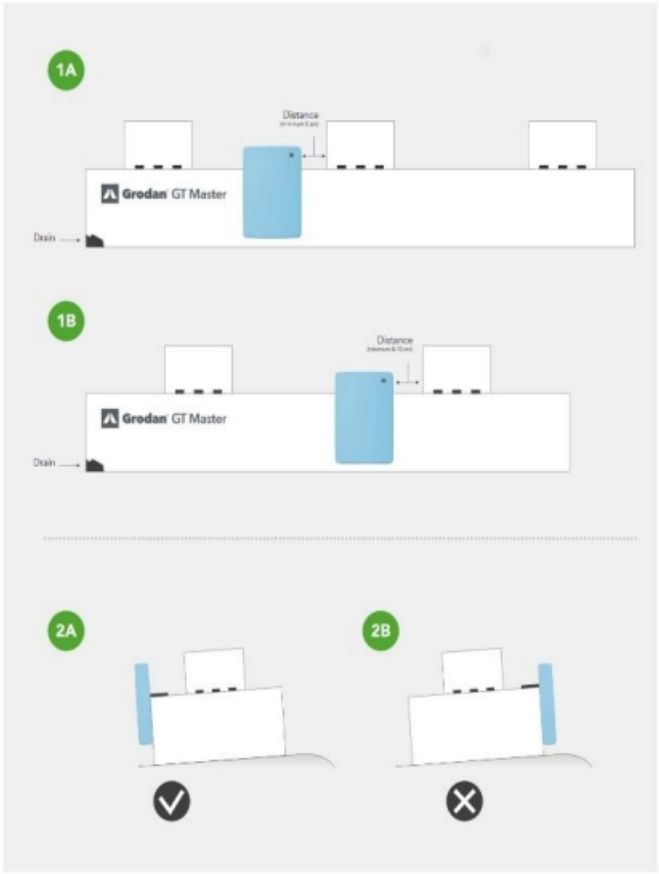
Position in the substrate

Picture 1A and 1B show the correct placement of the sensors in the substrates:

- Place the sensor 8-10 cm to the left of the 2nd block from the water drain hole
- Sensor should be positioned closer to 2nd than to 1st block, ideally at 2/3 of distance towards second block. If blocks are close to each other, the minimum distance is 5 cm between sensor and block.

Picture 2A and 2B show placement of the sensors, in case the substrates is on a slope

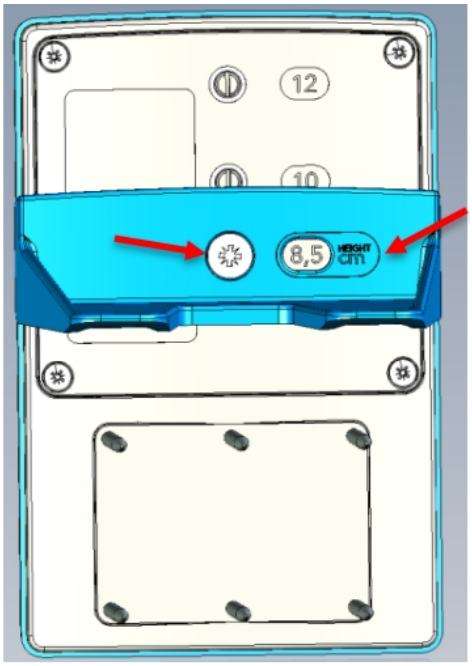
- Place the sensor at the lower side of the slope in the substrate



Adjustment for different substrate thicknesses

The support plate at the back of the sensor can be adjusted with the screw to one of the four different positions. Each position is optimized for the indicated substrate thickness: 7.5, 8.5, 10 and 12 cm.
The substrate thickness can be read through the window in the support plate.

Note: the 7.5 cm position is not visible in the picture as it is behind the alignment plate.



Radio Frequency – declaration of Conformity

European Union

This device complies with RED articles 3.1.a, 3.1.b and 3.2.

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-RZ001

NOTE: This equipment has been tested and found to comply with the limits for a Class B 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.

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

To comply with FCC/IC RF exposure limits for general population / uncontrolled exposure, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

Canada

Innovation, Science and Economic Development Canada (ISED) 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.

This Class B digital apparatus complies with Canadian ICES-003

IC: 25447-RZ001

Product Details

- **Applicable Product Number:** RZ21GS13 – Rootzone sensor

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:** 3V DC (4 Alkaline batteries 1.5V)
- **Standby current:** 0.1 mA Maximum
- **Operating current:** 120 mA Maximum

Warranty

For Warranty information, please contact our Customer Service Departments.

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Documents / Resources

	Grodan GS21RZ03 Rootzone Sensor [pdf] User Manual RZ002, 2AUKP-RZ002, 2AUKPRZ002, GS21RZ03 Rootzone Sensor, Rootzone Sensor

References

- Grodan