Quick Guide GroSens Suite



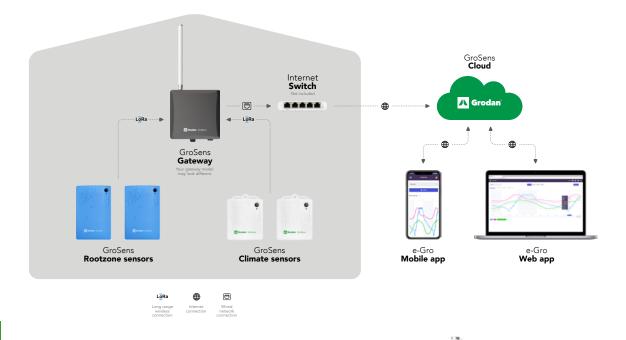
Our GroSens sensors and e-Gro software will give you direct access to your rootzone and climate insights wherever you are!



Part of the ROCKWOOL Group

Step 1 - Gateway setup

The most important thing is that we start with the GroSens Gateway setup. Without your gateway there is no data stream. It makes sure that the GroSens sensor data is sent to the cloud, ready for e-Gro to be picked up.



1

Let's start with assessing the ideal installation position within your growing facility. The optimal signal coverage is on average about a 150m/500ft radius. So make sure:

- **A.** The gateway is positioned around the center of your growing facility.
- **B.** The gateway is mounted as high as possible to ensure good coverage.
- C. The gateway has access to an internet connected cable.
- **D.** The gateway is not too much blocked by metal objects, walls and/or doors, as metal and concrete will negatively impact the signal strength.

Depending on your region, you will receive one of these 2 models



2

Now let's assemble the Gateway.

- A. Attach the antenna(s) as shown on the gateway manual in the box.
- B. Mount the gateway in 1 of the 3 options as shown on the gateway manual in the box. Use the appropriate accessories for the selected mounting option.
- C. Connect the ethernet and power cables as shown on the gateway manual in the box.

Step 2 - Check gateway status

Logging in to e-Gro on your computer for the first time.

1

The email you received from Grodan contains the URL and login credential for you to login to e-Gro.

Facility name	4
Facility name user.one@domain.com	
Facility settings	
e Account	
Lisers	

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- After logging in click on the 'User icon' in the top right part of the header to expand the menu and select 'Facility settings'.
 - **A.** This brings you to the overview page of your growing facility and hardware. For now, select the 'Devices' tab.
 - B. You should now be able to see your GroSens Gateway in the list with the status 'Online'. If this is the case you can continue with Step 3.
 - **C.** If you don't see your GroSens gateway online, wait for about 10 minutes. If it still doesn't appear online, double check if you successfully completed 'Step 1'. It may also be the case that your local network has a firewall that blocks unknown ports. Make sure you whitelist the following gateway ports in your local network firewall settings:

TCP port 443:

- 3.75.78.180
- 3.73.157.219
- as7cnaqfm7pfs-ats.iot.eu-central-1.amazonaws.com
- awsiot.wisdm.network
- awsiot-rakwireless-ota.s3.eu-central-1.amazonaws.com
- awsiot-rakwireless-upload.s3.eu-central-1.amazonaws.com
- nwtijs8xc8.execute-api.eu-central-1.amazonaws.com
- *.wisdm.network

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3



You can now download our e-Gro mobile app if you like!



You can then choose how you wish to continue the setup. Either on your computer (web app) or via the mobile app.

- A. Apple Appstore.
- B. Google playstore.

Step 3 - Sensor set-up

Our GroSens sensors are plug & play, so the only thing you need to do is insert the batteries, and they are ready to transfer data!

1 Make sure the gateway has been setup and is online before you insert the batteries in your GroSens sensors as explained in 'Step 2'.



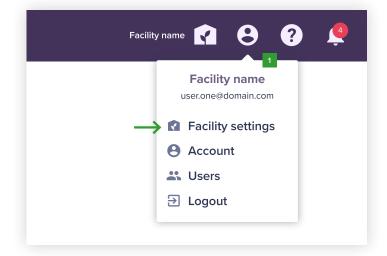
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Setup your GroSens sensors.

- A. When unpacking the GroSens Rootzone sensor, mind the sharp pins!
- **B.** Follow the steps to insert the batteries as shown on the sensor manuals in the box.
- C. Position your sensors in your growing facility as shown on the sensor manual in the box.

Step 4 - Rooms or sections setup

Setup your rooms or sections. Go back to e-Gro on your computer (preferred) or mobile app to continue the setup. Note: the following steps refer to "Rooms/Sections". If you are a vegetable grower, you will see 'Sections' in e-Gro. If you grow a non-vegetable crop, you will see 'Rooms' in e-Gro.



1

Visit the Devices page again via the 'User icon' in the top right part of the header to expand the menu and select 'Facility settings'

A. This brings you to the overview page of your growing facility and hardware. Make sure the 'Rooms/ Sections' tab is active.

	Facility name 👔 🖁) ? 🧳
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ROOMS	DEVICES	+ NEW ROOM
ole. Click the 'New room' but	on to start creating rooms	
Select	~	Search
Sensors		
You can only assign una	issigned sensors.	
Sensors:	С	
Select	~	
Lighting		
Lighting Artificial lighti	ng	
	ng Photoperiod:*	Lights off:

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Time so set up your rooms/sections. A room/section is a grouped set of GroSens sensors which enables you to analyze your data in a better way which ideally should align with the layout of your growing facility.

- **A.** On the 'Rooms/Sections' page, click on the 'New room/section' button.
- B. Fill in all the fields to complete your room/section setup. It's important you select the correct growing media and substrate type as the accuracy of the GroSens rootzone data will depend on it.
- **C.** You can select multiple sensors to your room/section by simply clicking multiple sensors.
- D. Enable 'Artificial lighting' if you want to set up a photo-period for your room/section. If you grow with natural sunlight, leave off. The system will then use the sunrise and sunset times based on the location of your growing facility.
- E. All done! You can create up to 20 rooms/sections by repeating the steps above.

Step 5 - Sensor & Room/Section management

Edit, move or unassign sensors from rooms/sections.

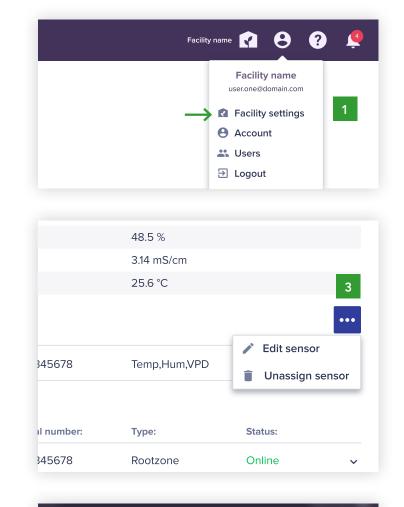
- Click the 'User icon' in the top right part of the header to expand the menu and select 'Facility settings'.
- 2 Then select the 'Devices' tab.
- 3 Expand the sensor you wish to edit via the arrow icon. This then shows you all the details of your sensor plus a 3dots menu icon.

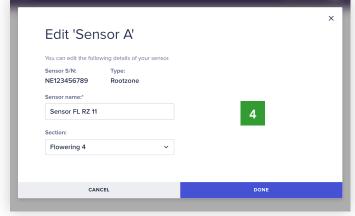
4 Click the 3dots menu icon and select 'Edit sensor'.

- A. You can now give your GroSens sensor a custom name making it easier to recognize your sensors.
- B. You can also select another room/ section to which the sensors should be assigned to. This removes the sensors from the current room or section, but keeps the historical data to the previous room or section.

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Click the 'Unassign sensor' option in the 3dots menu icon if you wish to temporally not have the said sensor assigned to any room/section. The sensor will then show up in the 'Unassigned list' on the bottom of the 'Devices' page. This removes the sensors from the current room or section, but keeps the historical data to the previous said room/section.





3

Edit or delete rooms/sections.

1 Click the 'User icon' in the top right part of the header to expand the menu and select 'Facility settings'.

Stone wool	NG 2.0	100 ft ²	•••
		100 ft ²	•••
		🖍 Edit roc	m
		Delete	room

- 2 Then select the 'Rooms/Sections' tab. Click the 3dots menu icon of the room/section you wish to edit and select 'Edit section/room'.
 - 'In the Edit window you can:
 - A. Now edit any field to your liking.
 - **B.** Be aware you can only select sensors for a room or section that have the unassigned status. If you wish to select a sensor that is already assigned to a room/section, you need to unassign that sensor first or select a different room/section via the 'Edit sensor' option as explained in the 'Edit, move or unassign sensor' steps above.
- If you wish to delete a room/section, click 'Delete room/section' from the 3dots menu icon placed in the table row of each room/section. You will be asked to confirm the deletion.

Step 6 - User management

Add more users to e-Gro. (optional). At the initial setup you are the only user in e-Gro. User management offers you the possibility to add more users to your growing facility giving each user their own login credentials and personalized user settings.

- 1 Click on the 'User icon' in the top right part of the header to expand the menu and select 'Users'.
 - **A.** This page shows you all the users that have access to your facility in e-Gro.
 - B. Click the 'New user' button.
 - C. Fill in all the fields to complete your user setup. A primary user is a user that has access to all features and can add, edit and delete items. A secondary user only has viewing rights. Note: It may take a few minutes to process the request. The window will close after the proces has been completed.

_	Facility name user.one@domain.com
	Logour
	Facility:
Email:	
User permissions Email: user.one@email.com PRIMARY user.two@email.com	Facility:

- 2 The user should receive an email after a few minutes with a link that enables him/ her to create a password and activate the account. Make sure they check their spam folder too.
- If you wish to delete a user, click 'Delete user' from the 3dots menu icon placed in the table row of each user. You will be asked to confirm the deletion.

Edit my account.

- Click on the 'User icon' in the top right part of the header to expand the menu and select 'Account'.
 - A. If you wish to receive alerts and notifications on your mobile e-Gro app, turn the toggle switch on. If you don't want to receive alerts and notifications on your mobile e-Gro app, turn the toggle switch off. Note: This does not impact the e-Gro web app notifications.

Step 7 - Conditions module

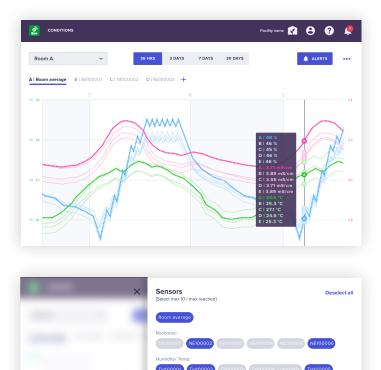
The Conditions module enables you to analyse your rootzone and climate data where ever you are. These features are designed for the web app on your computer. Your mobile e-Gro app only allows you to view single sensors in the 36 hrs. view. The desktop web app offers you all the features described in the steps below.

1 Select the 'Conditions' module from the main menu in the header.

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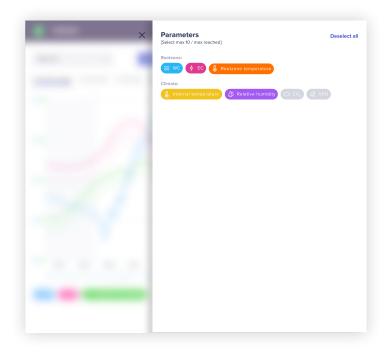
Select a room/section via the room/ section selector on the top-left of the Conditions module.

- A. On default, only the room/ section average is shown. Click the blue '+' icon next to the 'Room/Section average' label to select more sensors. This opens up the "drawer" where you can select up to 10 sensors from the selected room/section to be plotted within the same graph.
- **B.** Below the graph you can see that on default 3 rootzone parameters are



selected. Click the Blue '+' icon to open the "drawer" and select or deselect any paremeter you wish to see plotted on the graph. You can also toggle certain parameters temporarily off by simply clicking on the colored parameter labels underneath the graph.

C. Move your mouse over the graph to see the sensor readings. You can also highlight a sensor on the graph by clicking either on the line of said sensor or clicking on the label of the sensor above the graph. The room/section average is always focused on default.



View different time spans.

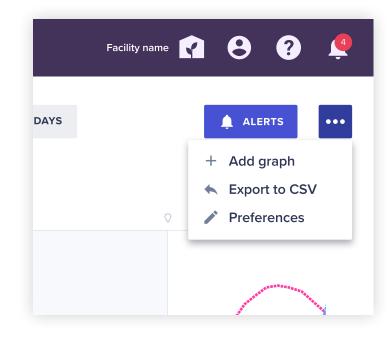
Select different timespans in the top-center of the Conditions module. Each timespan option plots a new data point every 3 minutes except for the 30 days view, where only hourly data points are plotted. Depending on the amount of sensors selected it can take a few seconds to load all the data points.

Customize your graph.

Click on the 3dots menu icon in the top-right position of the Conditions module. Selected it can take a few seconds to load all the data points.

Select 'Add graph' if you wish to add a second graph.

- Be aware that by adding a second graph, the graphs will reduce in height by 50%. A. For each graph you can set a different room/
 - section, parameters and sensors.
- 2 Select 'Export to CSV' if you wish to export your data in an CSV file which can be opened in MS Excel.
- 3 Select 'Preferences' if you wish to set the Y axis behavior. This feature is only available for rootzone parameters.



Set alerts.

1 On the conditions module page, click the 'Alerts' button on the top-right position of the graph.

2

The 'Conditions alerts' window gives you the option to view, create and edit rootzone alerts or climate alerts.

- A. To create a rootzone alert, make sure the 'Rootzone' tab is selected and click the 'Create alert' button.
- B. Fill in all the fields to complete your alert setup. You can also add more rooms or sections to your alert, so you don't have to redo the alert for each room or section separately.
- C. Per parameter you can set a range, every time a sensor reading of said parameter goes outside of your set range, an alert notification will be sent to your e-Gro web app as well as to your mobile e-Gro app (if account option is on)
- **D.** Click the 'Add' button to finalize the alert setup.
- E. Now all your created alerts will show up in the Rootzone alerts list which you can easily toggle on or off if needed. Be aware that all alert notifications will be sent to all users in your growing facility.

F. If you wish to edit or delete any alert,

- Condition alerts INTERNAL CLIMATE Alert name N° of rooms N° of sensors 2 2 Alpha Beta 4 12 Charlie 5 8 Flowering 2 Flowering 3 Flowering 4 Flowering 5 Alert timesnan Lights off WC range: 40 % - 60 % 4 mS/cm² - 6 mS/cm² EC range: Delta 7 12 C Echo 4 8 New alert Alert name:* Alert in room: + Add room Alert timespan Choose a times Lights on / Day time Lights off / Night time From: Till: **Rootzone** ranges WC range: EC range: mS/cm mS/cm Rootzone temp range ۴F
- 0
 mS/cm

 Rootzone temp range:

 0

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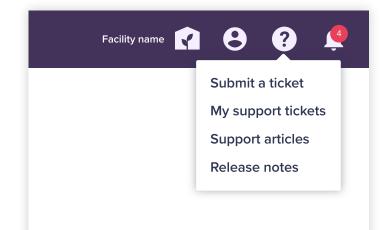
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- simply expand the said alert table row, click the 3dots menu icon and select 'Edit or Delete alert'.
- **G.** To setup climate alerts, follow the same steps as shown above but make sure the 'Internal climate' tab is selected instead.
- H. Click the 'Done' button to close the 'Conditions alerts' window.





Need help? We've got support! We have an support center where you can find manuals, FAQ's, a knowledge base, release notes and an option to submit a request, issue and/or suggestion.

Click the 'Question mark' icon in the top right part of the header to expand the support menu and select either:

- 'Submit a ticket' Allows you to submit a request, issue and/ or suggestion.
- 2. 'My support tickets' This page contains all your submitted tickets and their status for you to follow.
- 3.'Support articles' Here you can find GroSens and e-Gro documentation such as manuals and FAQ's.

4. 'Release notes' – This page has articles with the latest release notes.

You've successfully set up your GroSens suite!

The GroSens Suite provides a complete solution for starting, improving, and optimizing your growing business. Paired with our advanced stone wool products, the GroSens Suite unlocks the power of Precision Growing. Helping you to future-proof your business. **Grow your ambitions!**

Grodan

a division of ROCKWOOL 8024 Esquesing Line Milton, Ontario L9T 6W3 Tel. : 800-872-2476 info@grodan.com www.grodan101.org