How to guide
e-Gro Dashboard Module
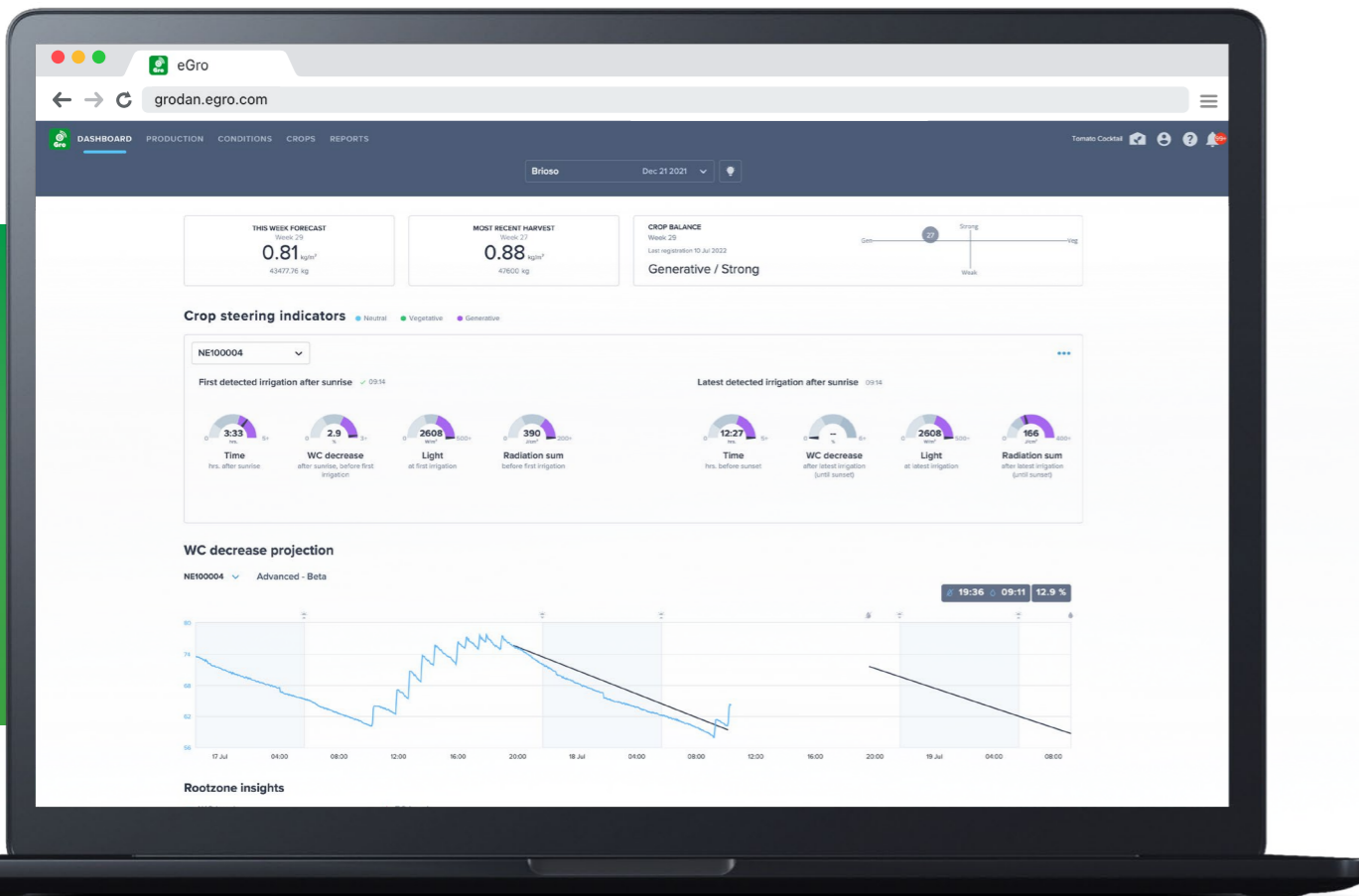
If you have any questions, please contact **egro.support@grodan.com**

Introduction

As a grower, you are always wondering whether you are following the best strategy for optimum growing. What if you could see at a glance whether your irrigation and nutrient strategy is being implemented properly, and how much water you should give your crop, and when? Based on the latest information from all other modules in e-Gro, the Dashboard Module enables you to monitor whether your current real-time performance is in line with your crop strategy. Thanks to these unique insights into the impact of your irrigation on the plant balance, you can make immediate and informed decisions about the necessary adjustments to your crop steering in order to achieve your intended crop yield and quality.

The Dashboard Module

The Dashboard Module provides a quick and easy real-time view of your crop performance over the past week based on your rootzone and water management data. This allows you to check that you're still on track, anytime and anywhere, and to take corrective action to steer your crop – either more vegetatively, more generatively or neutrally – if you're not. Any parameters that exceed the pre-defined ranges are highlighted in orange to immediately attract your attention, and all the ranges are customizable so that you can tailor the dashboard to your own situation.

Key information at a glance

The dashboard visualizes a number of carefully selected key performance indicators (KPIs) so that you can get a complete overview of your current situation at a glance. The KPIs are harvest forecast, most recent harvest, and crop balance (shown per week on a graph based on generativity and strength). Additionally, the dashboard presents four color-coded crop steering indicators: time, WC decrease, light and radiation sum. The color of each dial shows you whether the crop is vegetative, generative or neutral based on the first and last detected irrigation after sunrise. The data in the crop steering indicators is updated every 3 minutes to give you real-time insight into what is happening right now.
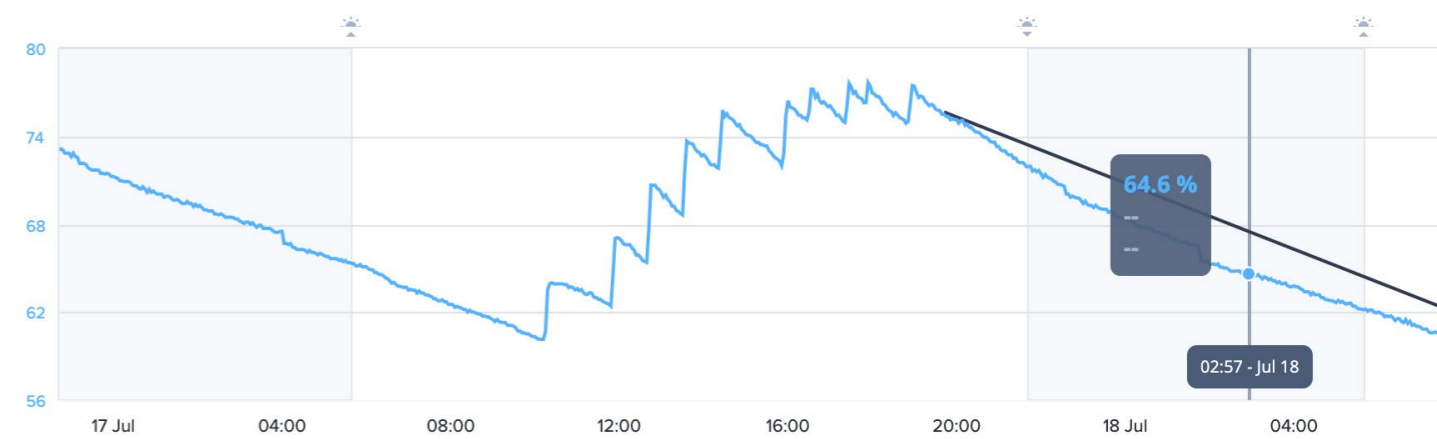
WC decrease projection

The WC decrease projection feature helps you to predict when to stop watering your plants before sunset, based on the data from your rootzone sensors. This allows you to make more data-driven decisions on overnight irrigation actions and better control the outcome of your irrigation strategy. If used correctly, this feature supports more efficient water usage and a sustainable approach to crop production. The information shown in the dashboard depends on which model you are using in the e-Gro Conditions Module: the classic model (which calculates the WC decrease using a mathematical model) or the Advanced-Beta model (which predicts the WC decrease overnight using a machine learning algorithm combining historical and forecast parameters).
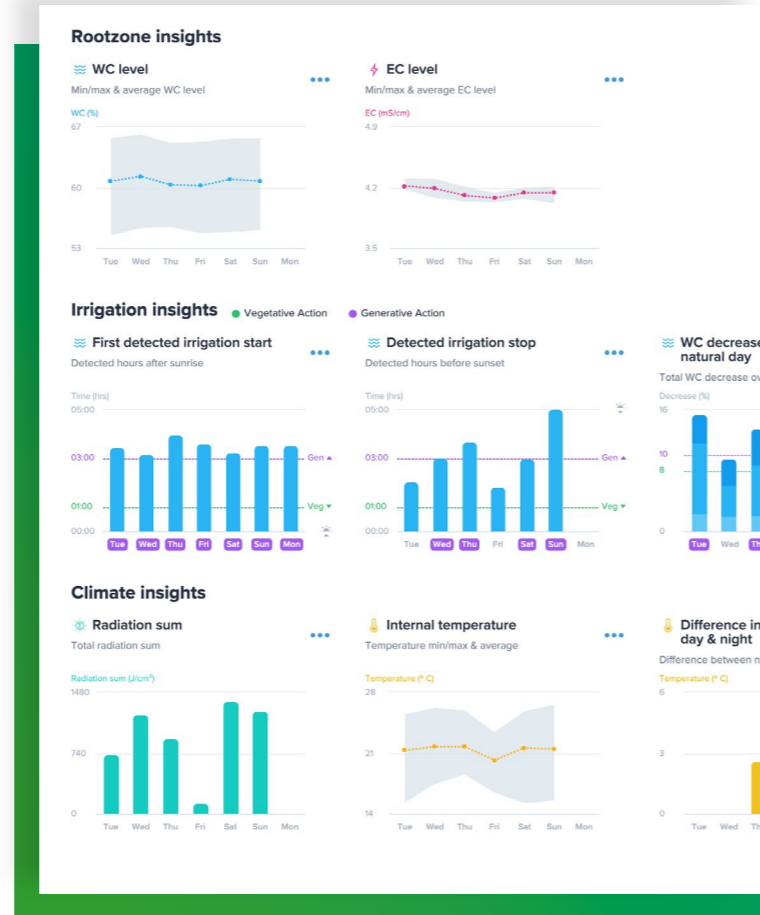
WC decrease projection

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Weekly insights

A number of other graphs provide useful insights into what has happened over the past week:

- **Rootzone insights (WC level and EC level)** are shown as line graphs. Since the conditions are dynamic and vary every day, the highs and lows are visualized as well as the averages. This allows you to analyze trends in rootzone parameters and see how this correlates with your chosen irrigation strategy.

- **Irrigation insights** are shown as bar charts so that you can immediately see whether your plant is growing vegetatively or generatively based on your current irrigation strategy – and whether you need to make any changes.

- **Climate insights** are represented as a mix of bar charts and line graphs showing radiation sum, internal temperature and difference between internal day and night temperature. The minimums and maximums are shown in addition to the averages to support easier analysis.

Customized ranges

In the graphs showing the crop steering indicators and insights, any parameters that exceed the defined ranges for your targets or generative/vegetative growth are highlighted in orange. This ensures that you immediately spot which areas require your attention. Default ranges are pre-set into the system, but you can customize all these ranges in line with your own situation. To set your own ranges and targets, simply click on the 3-dots icon at the top of each graph and enter your chosen values.

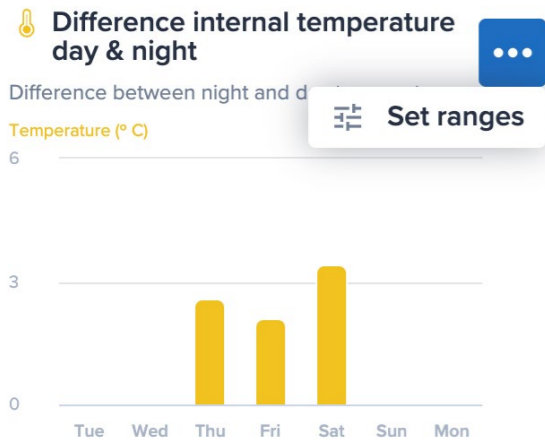## The basis for immediate and informed decision-making

This 'How to' guide shows you how easy it is to monitor all the information in e-Gro as the basis for responsive and informed crop steering. The benefits of the Dashboard Module include:

- **Time savings:** All the available real-time crop data from the entire e-Gro system is presented in an easy-to-understand manner, all in one place. This saves you valuable time on having to gather data from multiple sources as the basis for conducting your own analysis.

- **More control:** You can define your own targets and ranges for generative and vegetative growth to tailor the system to your specific needs. Any parameters that are out of range are highlighted in orange so you can spot them immediately. This enables you to take decisive action and keep your crop strategy on track. If you prefer, you can work with the default ranges that Grodan has pre-set for you.

- **Responsiveness:** Having real-time data at your fingertips enables you to continuously monitor your progress and – if necessary – make fast and effective decisions about your crop steering to keep your results in line with your objectives.

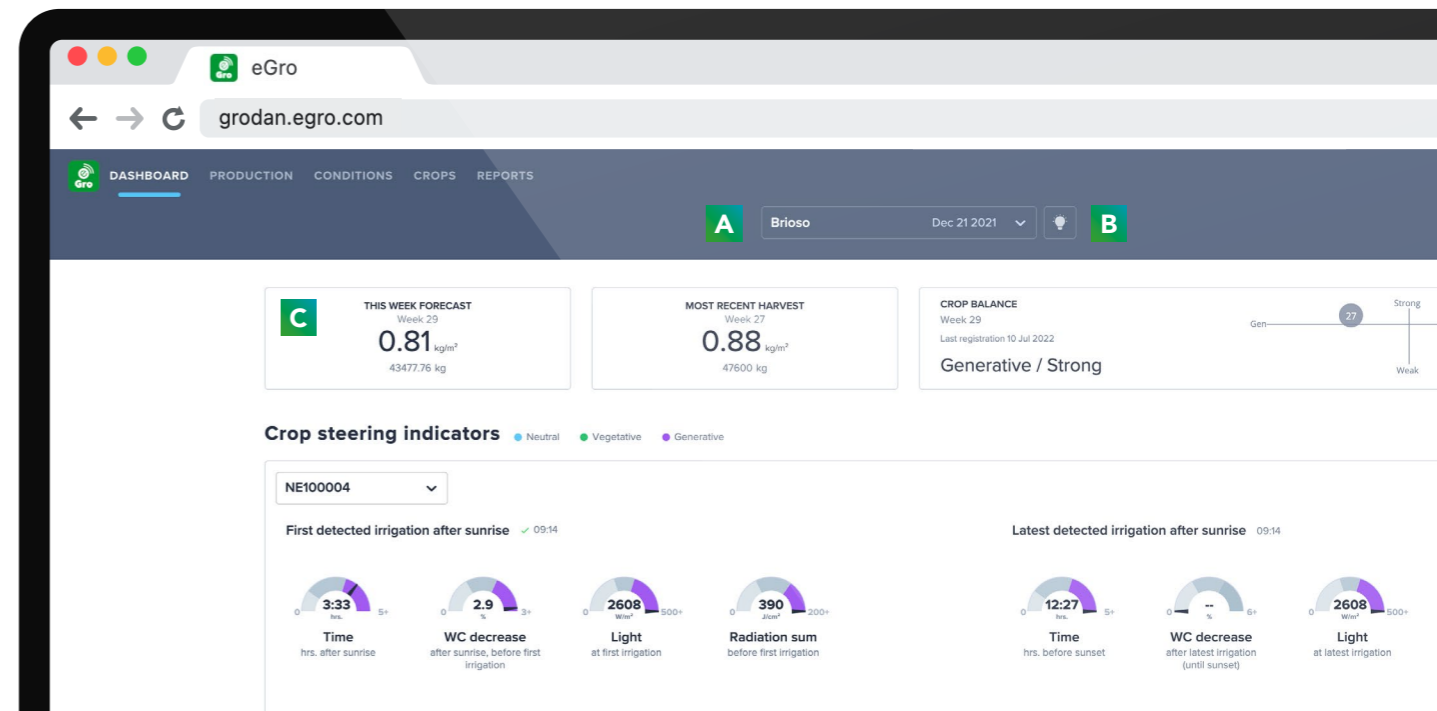## How to leverage the Dashboard Module

The Dashboard Module displays all the data contained elsewhere in e-Gro, so to get the best out of this module you should ideally be using all the other e-Gro modules. This also means that e-Gro is already integrated with your Grosens system, climate computer, and that you are manually inputting your harvest plans and actual harvests in the Production Module. The Dashboard Module can be used for multiple crop types and multiple varieties, and it offers the following functionalities:

- **A - Crop Selector:** The crop selector at the top enables you to switch between multiple crops to view the specific production details. The rootzone and climate details are tied to each individual crop.

- **B - Lighting:** The lightbulb icon next to the crop selector enables you to set and adjust your lighting schedule.

- **C - KPI's** Grodan has selected three key performance indicators that are displayed at the top of the screen – harvest forecast, most recent harvest and crop balance (shown per week on a graph based on generativity and strength).

D - Crop steering indicators:
Four color-coded crop steering indicators (time, WC decrease, light and radiation sum) are displayed as dials, with the color indicating whether the crop is vegetative, generative or neutral based on based on the first and last detected irrigation after sunrise. Click on the drop-down menu to select the desired sensor.
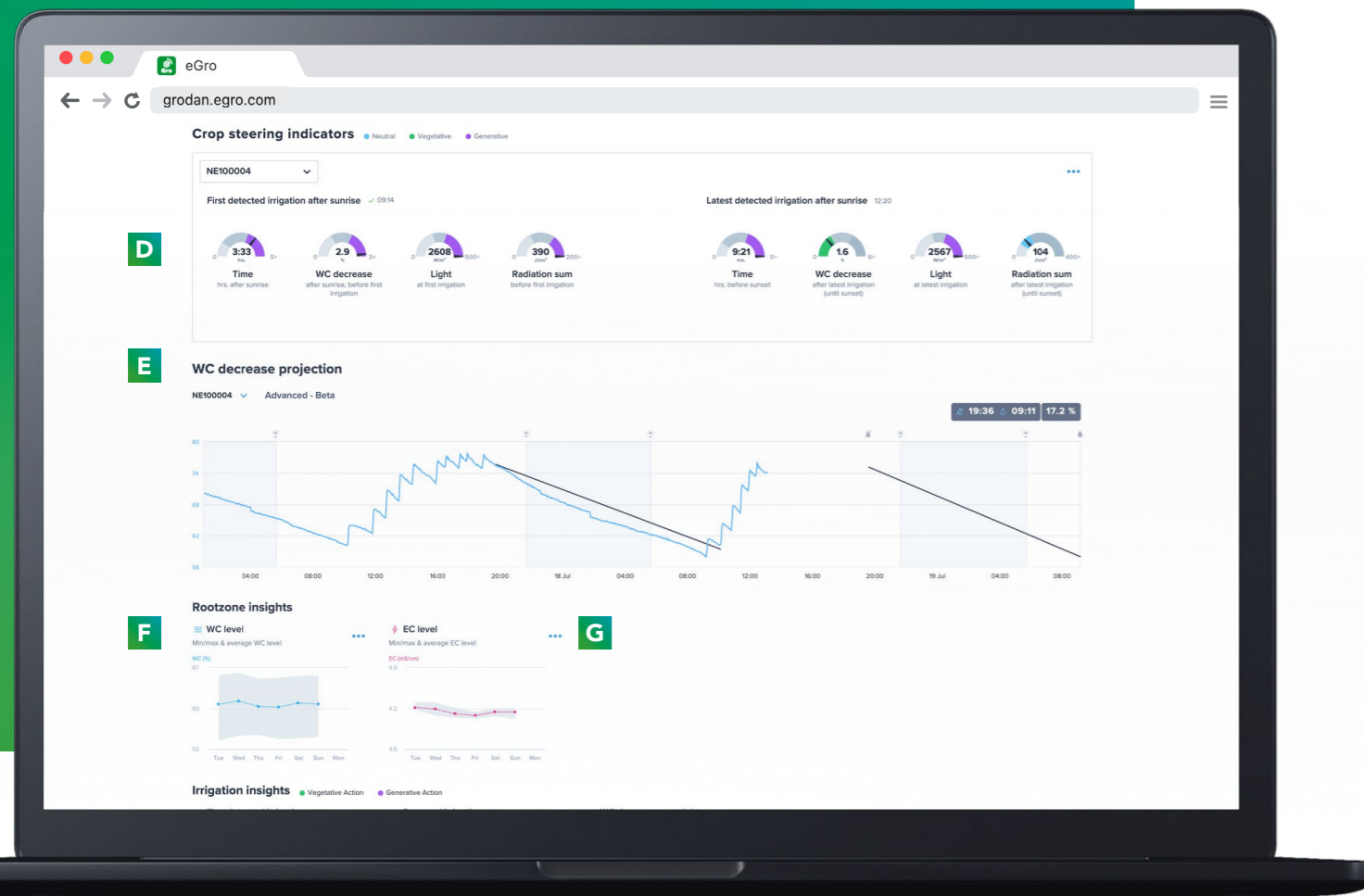
E - WC decrease projection:
The WC decrease projection feature helps you to predict when to stop watering your plants before sunset, based on the data from your rootzone sensors. Simply hover and move your mouse over the graph to see the detailed readings over time. Use the drop-down menu to select the desired sensor.

F - Weekly insights:
The other graphs provide insights into what has happened over the past week in terms of your rootzone, irrigation and climate. Simply hover and move your mouse over the graphs to see the detailed readings over time.

G - 3-dots icons:
Click on the 3-dots icon at the top-right of any of the graphs to set your own ranges.

Getting started with the Dashboard Module

The Dashboard Module puts all the e-Gro information about your current crop performance at your fingertips so that you can monitor whether your rootzone and water management strategy is still on track. By bringing together all the information contained in e-Gro all in one place, the Dashboard Module supports you in making fast and informed decisions about how to steer your crop in order to optimize your quality and yield. All these insights are readily available for you 24/7, optimized for access via your smartphone, tablet and desktop. Our Grodan green experts are happy to discuss how you can start using the Dashboard Module in your greenhouse or how to take your current crop steering strategy to the next level.

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