

E-GRO

Replace your tedious spreadsheets with the power of e-Gro, the sensor and data-insights platform based on Grodan's 50+ years of precision growing experience. e-Gro helps you optimize your entire growing facility from propagation through processing.

e-Gro gives you the power to view substrate and climate sensor data from all grow rooms in your facility as well as key performance indicators such as overnight dry-back, dry-back since last irrigation, average ambient temperatures, and average relative humidity. You can track every batch from mother plant to harvest. You can even create custom alerts to notify you the moment a root-zone or climate parameter falls outside of your preferred range.

Powerful Algorithms Analyze All Data Sources

e-Gro collects data and uses powerful substrate algorithms based on Grodan's 50+ years of expertise in measuring root-zone WC, EC, and temperature, delivering a complete overview of the cultivation process. These tailored insights allow growers to view and compare batch performance, receive automatic calculations, set alerts, compare key growing info, tag colleagues, and share data by adding notes and pictures.

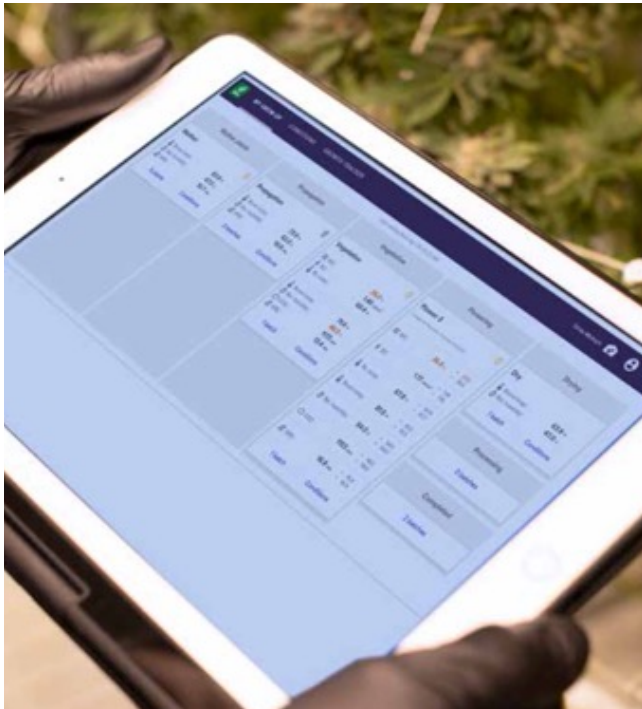


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My Grow Op

My Grow Op module provides a complete high-level dashboard where you can check the status of your entire growing facility, from mother plants to processing, accessible 24/7.

In My Grow Op, you can view important overviews of your facility's climate and root-zone information per room.



WC



EC



Substrate Temperature



Room Temperature



Relative Humidity



CO2



VPD



Number of Batches



Lights on /off

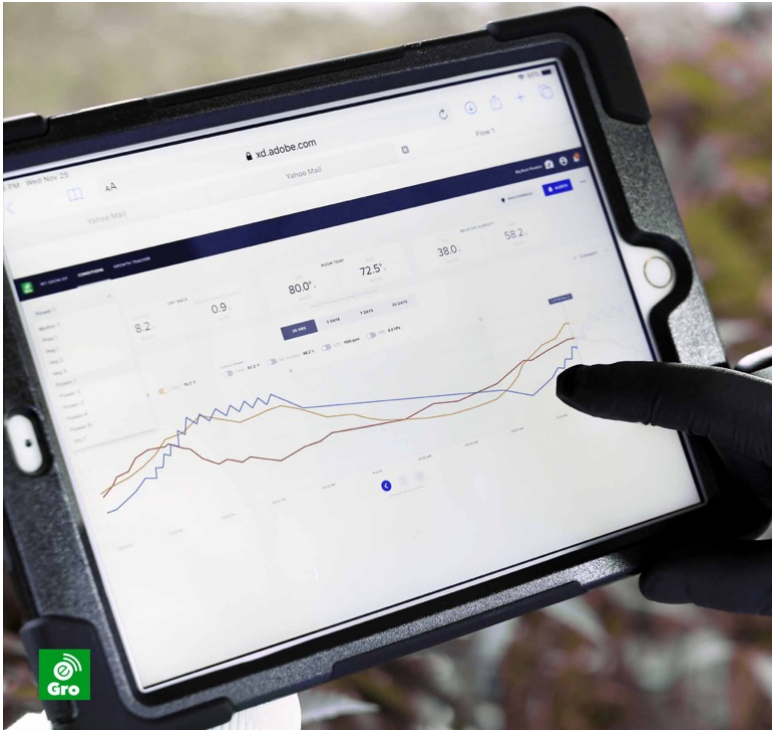
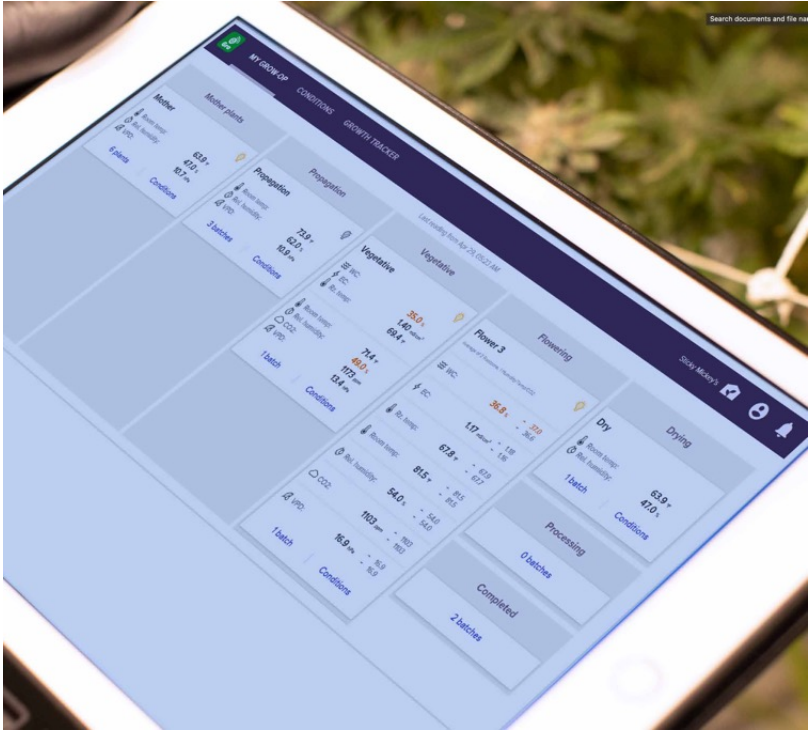
Instant alerts notify you of any parameters falling out of range, so you can better control your growing strategy.



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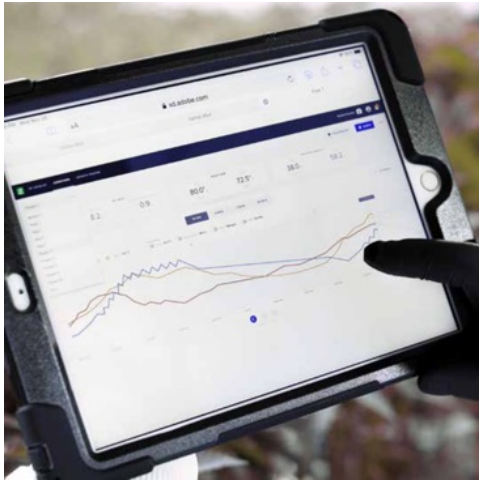
Benefits of My Grow Op

Integrating the feedback from both root-zone and climate sensors allows you to identify potential issues and better steer your crops based on the needs of each cultivar.



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Conditions Module



The Conditions Module gives you the power to overlay and analyze root-zone and climate data to optimize your irrigation and crop steering strategies. Visualizing key climate parameters on the same graph as substrate data, allows growers to gain greater insights into how their climate strategies drive root-zone dynamics and vice versa.

This module helps you minimize inputs costs, while maximizing yield and crop performance.



Rootzone data

Get real-time data from Grodan root-zone sensors, including VWC (%), EC (mS/cm), and temperature (° C or F).



Climate data

Get real-time data from the Grodan climate sensor, including relative humidity, ambient temperature, room VPD, and CO2 concentration.



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Conditions Module Personalized Viewing

e-Gro lets each user see the graphs and data that are the most important to them and in the format they prefer, so decisions can be made quickly and efficiently.



View Multiple Sensors at One Time

You choose the sensors and zones you want to see. Data Cards let you see up to 7 data sources to analyze together.



Time Slider

Easily see your crop's history in 36-hour, 3-day, 7-day, and 30-day intervals.



Compare Performance in Different Rooms

You have the flexibility to add a second graph and compare data from other rooms to better understand performance between the two grow rooms.

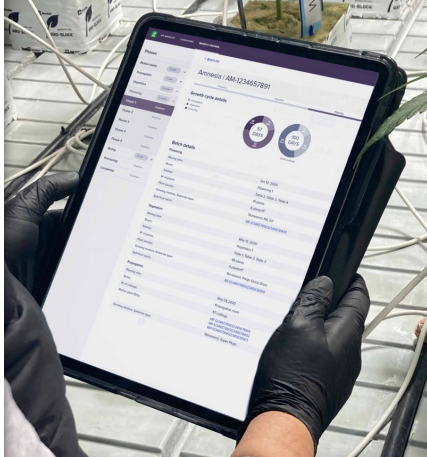
Benefits of Conditions Module

Optimize your irrigation and climate strategies based on real-time accurate data to save on inputs, maximize yield, and increase sustainability.



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Growth Tracker



Process efficiency is increasingly important to realize optimal yields and quality of your crops. The Growth Tracker module allows you to easily input and track key parameters throughout the various stages of a batch's lifecycle, from mothers, to propagation, veg, flower, and harvest, culminating in cultivar-specific, crop-cycle insights. In Growth Tracker, you can view each batch's historical climate and rootzone information to optimize crop steering and genetics for future production runs.

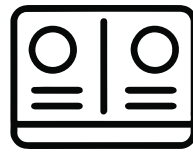
Benefits of Growth Tracker

With the Growth Tracker module, you can optimize:



Cultivar-Specific Strategies

Gather and analyze all crucial strain-specific information throughout the entire growing cycle by batch.



Crop Steering

Compare the performance of individual batches to desired average performance to adjust and hone your irrigation and crop steering strategy.



Crop Data

Get a comprehensive view of your data and plants with the option to add pictures and notes.



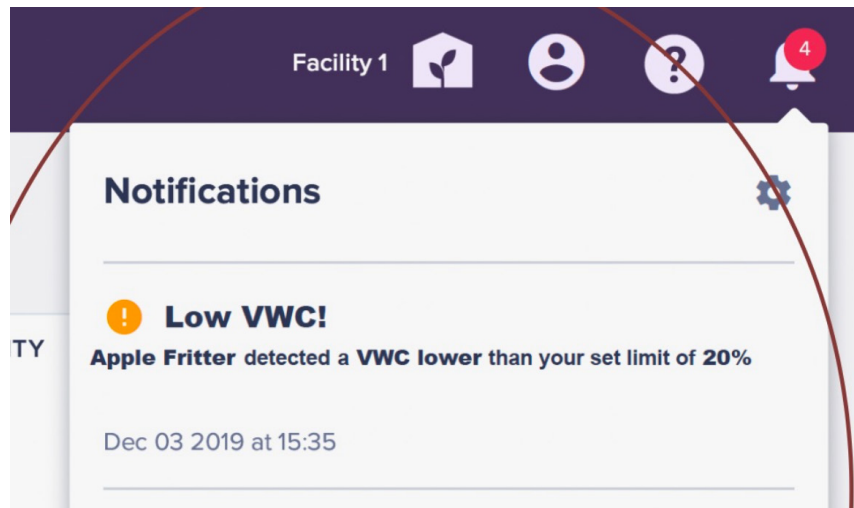
SOPs

Use captured data to improve SOPs and train all team members on the operational parameters.

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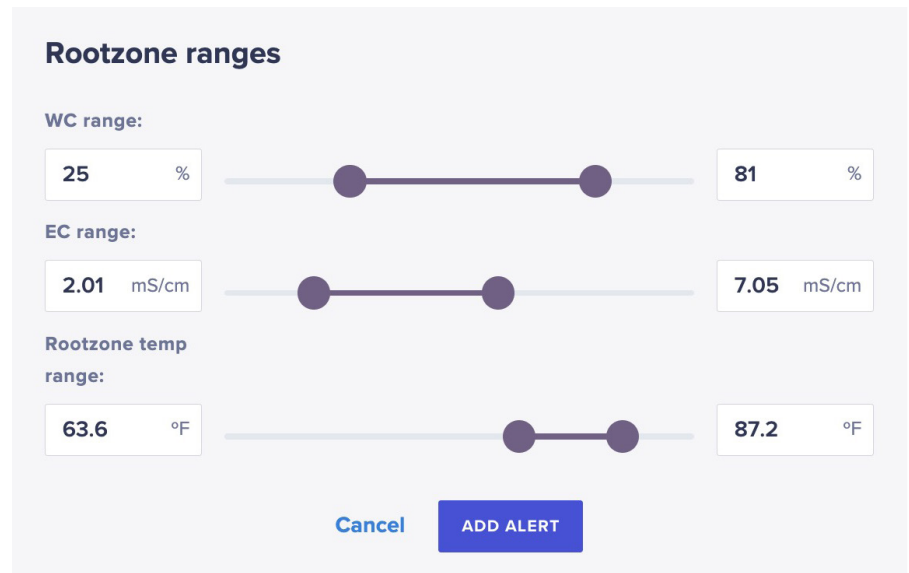
Alerts

Proactively address suboptimal growing conditions with immediate notifications in the app and via SMS when your crop's climate or rootzone settings go out of your customized range.



Set It

Set your alert choices for each stage of the crop's growth cycle. You can set the alert range for specific rooms or phases. You can even be notified if sensors have a low battery or weak signal.



Benefits of Conditions Module

Reduce the chance of errors or problems from issues such as irrigation line occlusion, failed solenoids, or closed vales with custom, timely alerts for water content and EC. Ability to customize the alert for each grow room, crop, variety, and growth stage.

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Grodan Root-Zone Sensors

The Grodan root-zone sensor is one of the most widely used and trusted sensors in the cannabis industry for both indoor and greenhouse crops. Based on over 50 years of precision growing expertise, we have expanded the system to include Grodan root-zone and Grodan Climate sensors.

The Grodan sensor family integrates with the e-Gro software to provide precision data for analysis. If you want solid and actionable insights, the data source must be highly accurate and precise. All Grodan sensors are built to the highest standards and are rigorously tested at scientific institutes, including the world-renowned Wageningen University in The Netherlands.



Accuracy

All Grodan sensors have been tested and proven in comparative trials to provide precise measurements of all parameters. The more accurate the measurements, the more confidently you can adjust your growing conditions and deploy optimal crop steering strategies.

Custom Configurations

Grodan sensors are modular, so you can scale them to meet your operational needs.

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GroSens Root Zone Sensor

Grodan root-zone sensors have a high degree of accuracy and give you 24/7 access to real-time measurements of volumetric water content (VWC), electrical conductivity (EC), and substrate temperature in the stone wool substrate.



Data logging

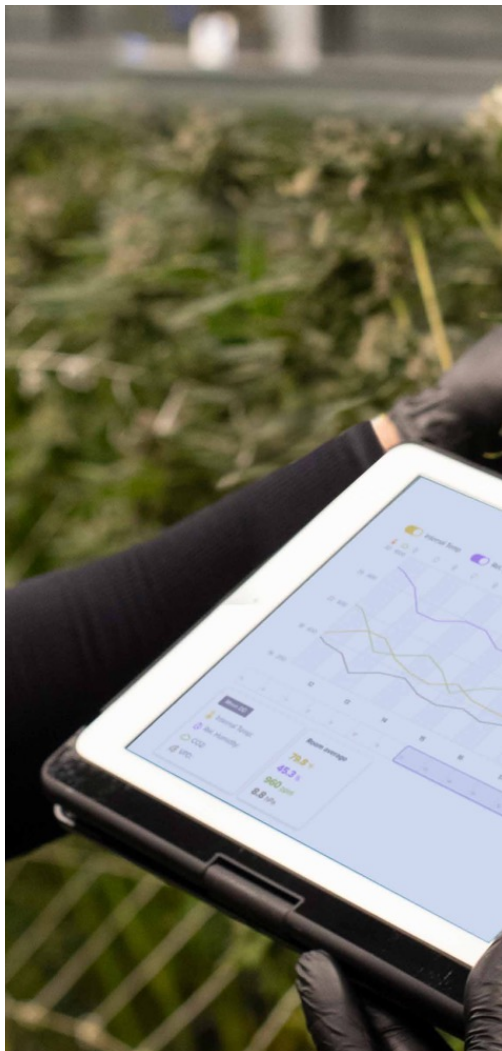
Easy access to all historical measurements, up to 2,300 historical data points to be precise.

GroSens Climate Sensor

Climate is a critical aspect of crop optimization. Measure relative humidity, ambient temperature, vapor pressure deficit (VPD), and CO2 concentration with high accuracy over a wide range.



E-GRO - SUPPORT AND SERVICE



Grodan Crop Advisors

When you invest in your cultivation business with e-Gro, you get priority access to Grodan's expert Crop Advisors.

They help you get the maximum benefit from e-Gro's powerful platform and support you in interpreting your data, diagnosing problems, and optimizing your crop steering and irrigation strategies with our proven precision growing methods. You can leverage Grodan's 50+ years of crop steering expertise.

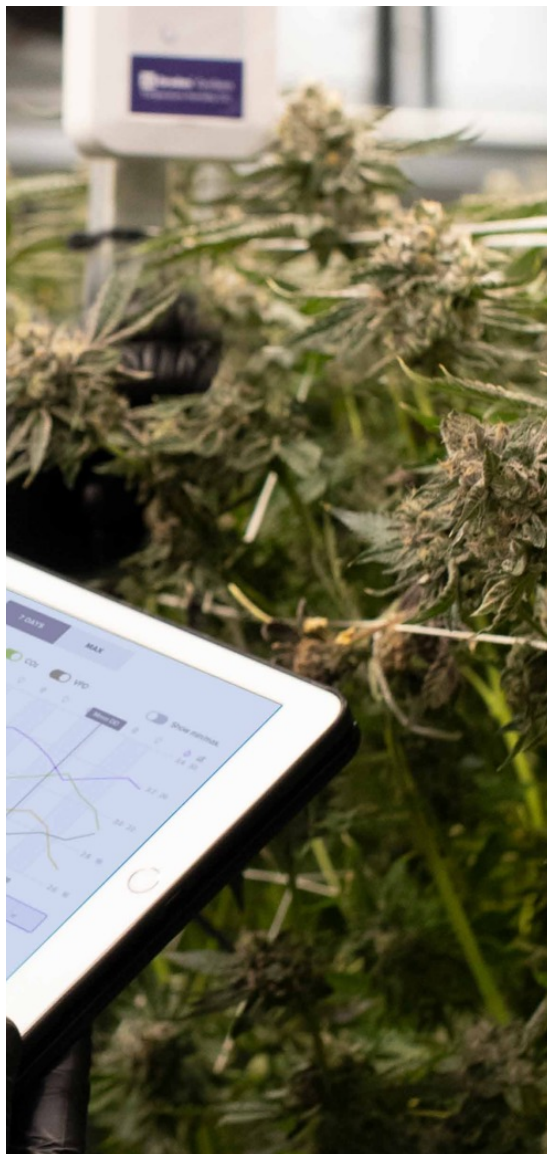
Dedicated e-Gro Support Team

They are like your own e-Gro concierge who will set you up on the platform, so there is no guesswork or fumbling around on your own; you are guided so you can quickly get value from your investment. You can email or phone the e-Gro support team for any questions or help with solving technical issues.

When you invest in e-Gro, your product doesn't end there. It grows. We have an entire e-Gro Development Team of industry-leading Data Scientists, Software Engineers, UX Designers, and Technical Experts who are committed to improving and expanding e-Gro's capabilities. So, your return on investment grows too.



E-GRO - CONTINUOUS DEVELOPMENT



Data Security

Your data security is of paramount importance. We use state-of-the-art encryption and security protocols that meet and exceed all North American, European, and local laws and regulations.

The GRODAN Group is the preferred supplier of innovative, sustainable stone wool substrate solutions for the licensed cannabis industry. Based on expert Precision Growing principles, these advanced substrate solutions help growers achieve greater yields and crop quality. In addition to its stone wool substrates, the GRODAN Group also provides tailor-made advice and tools to support Precision Growing and thus facilitate the sustainable production of crops.