



GreenTech
Innovation
& Concept
Awards 2024

W I N N E R

Innovation

REDUCING
CLIMATE
COMPUTER
WORK BY

80%



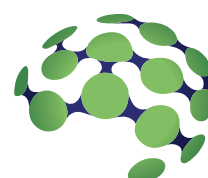
AUTONOMOUS GROWING WITH CROP CONTROLLER

OPTIMIZE & REALIZE YOUR **UNIQUE**
CROP STRATEGY WITH AI

YOUR **BENEFITS**

- ✓ Manage **up to 4 times more** hectares per grower
- ✓ Increase yield **up to 7%** and profit **up to 5%**
- ✓ Reduce water and fertilizer usage **up to 10%**
- ✓ And reduce energy usage **up to 15%**

With **continuous monitoring**
& **support** by an off-site
Autonomous Greenhouse Manager!



blue
radix

INTEGRATED AUTONOMOUS CLIMATE & IRRIGATION CONTROL

Imagine a greenhouse where climate and irrigation are managed cohesively and autonomously, with precision and efficiency. That's exactly what Crop Controller offers: Autonomous Climate & Irrigation Control, fully integrated and proven worldwide. By incorporating advanced AI technology, Crop Controller revolutionizes daily greenhouse management, reducing climate computer work for growers by an impressive 80%.

Crop Controller represents a new approach to greenhouse management, moving beyond dashboards and reporting tools. It provides full decision automation, empowering growers to achieve optimal results without the need for constant manual intervention. By integrating climate and irrigation control, Crop Controller streamlines operations and maximizes efficiency, setting a new standard for growing crops.



AI WITH A HUMAN TOUCH

AI delivers the most optimal value when it's smartly combined with the human touch. Therefore, our service Crop Controller comes with the support of off-site Autonomous Greenhouse Managers for:

- Guiding you from kick-off towards autonomous growing
- Helping you to structure a data driven crop strategy
- Monitoring progress Crop Controller, forecasts and results 24x7 on your behalf
- Frequent online alignment and contact



INTEGRATED AUTONOMOUS CLIMATE & IRRIGATION CONTROL, A WIN-WIN FOR TEAM AND COMPANY!

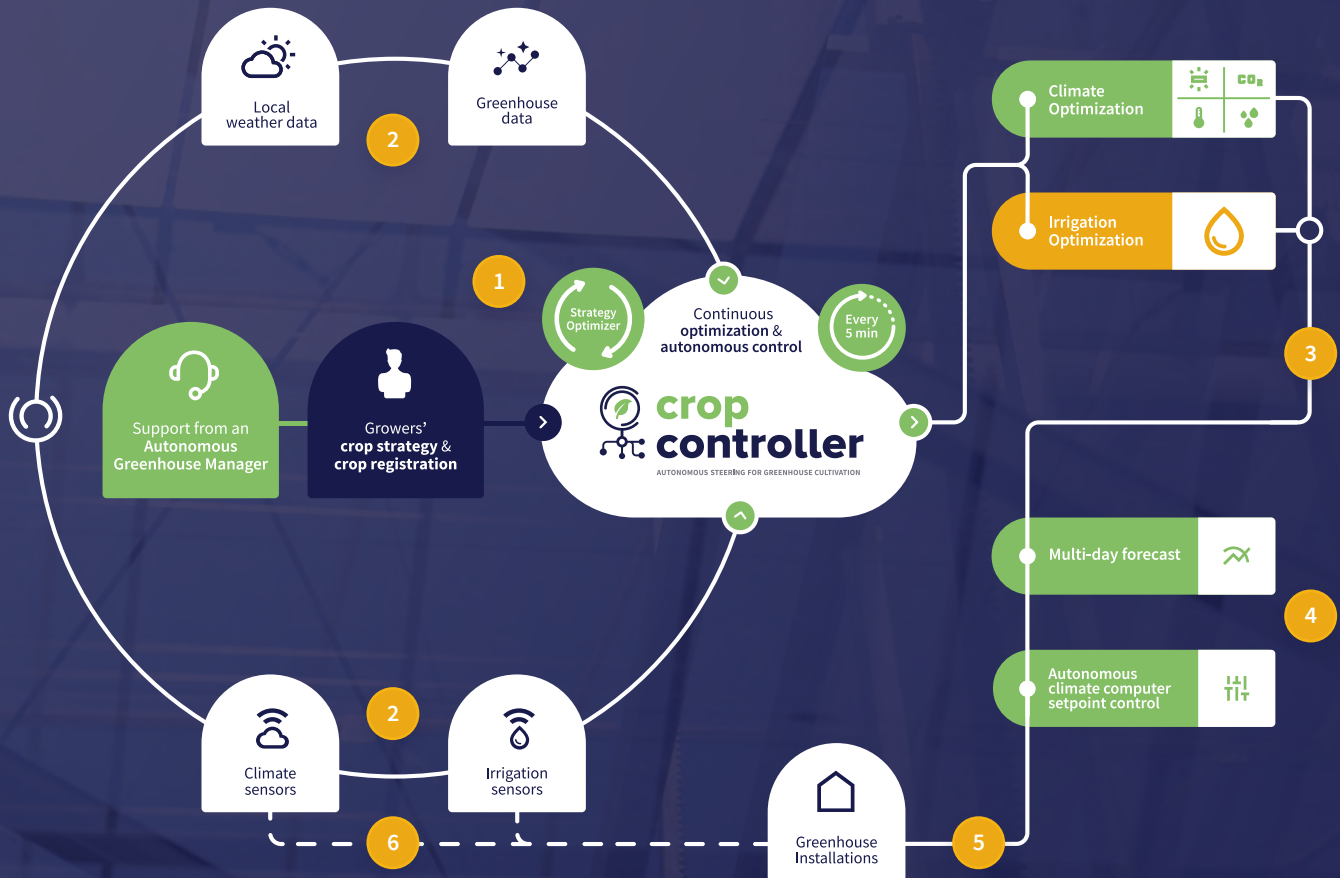
BENEFITS FOR GROWERS

- ✓ Crop Controller **works for you 24/7**. You're in control while managing 4 times more hectares.
- ✓ **80% less climate computer work**. You can spend more time in the greenhouse while your unique crop strategy is executed autonomously.
- ✓ **Peace of mind** as your crop is in good hands. Your Autonomous Greenhouse Manager monitors the greenhouse data on your behalf.
- ✓ **Improve** work-life balance, no checks during evenings, have weekends off.

BENEFITS FOR GREENHOUSE OWNERS

- ✓ **Sustainable scaling**. Growers can manage more while using less resources.
- ✓ **Company benefits:**
 - 5% profit increase
 - 7% yield improvement
 - 10% less water and fertilizer usage
 - 15% energy savings
- ✓ **More efficiency and continuity**. Growers reduce climate computer work with 80%, having more time for nurturing crops and other tasks.
- ✓ **Improve** work-life balance and **general satisfaction** of employees.

HOW CROP CONTROLLER WORKS



1 OPTIMIZING YOUR UNIQUE CROP STRATEGY

Your unique crop strategy is the starting point. **Strategy Optimizer**, within Crop Controller, enables you to create an improved data-driven crop and scenario planning for the whole cultivation and track crop development.

2 DATA PROCESSING WITH AI

During the entire crop cycle, AI continuously uses all available data from greenhouse sensors, climate boxes and meteo-data providers to forecast and optimize the climate and irrigation according to the crop strategy.

3 CALCULATING SETPOINTS

Crop Controller is taking care of the execution by calculating climate and irrigation profiles every hour for 3 days ahead. Ensuring optimal temperature, radiation and humidity while realizing perfect water content levels, drainage, EC and PH-levels, for the full crop cycle.

4 AUTONOMOUS CLIMATE COMPUTER CONTROL

Accordingly, it calculates setpoints on a 5-minute level. The calculated setpoints are sent to the climate computer without human interference.

5 AUTONOMOUS STEERING OF INSTALLATIONS

Crop Controller autonomously steers the climate and irrigation installations via the climate computer to reach the targets defined by the grower.

6 OPTIMIZE AND EXECUTE LOOP

Connected sensors and slab scales are measuring climate and irrigation conditions and are input for the continuous, autonomous 'optimize-and-execute loop' to achieve and maintain optimal conditions for the plant in the most cost-efficient way.

DATA & INTEGRATIONS

Blue Radix works closely together with partners in your greenhouse ecosystem. Crop Controller runs in glass and plastic greenhouses with main-brand climate computers, existing slab scales and irrigation sensors for vegetable crops. Together we ensure your data is secure and is solely being used for your benefit alone.

CUSTOMER SUCCESS STORIES

AUTONOMOUS GROWING



“I **no longer** have to **analyze all the data** and set the climate computers manually. If you can't get enough skilled people to control the cultivation, Crop Controller **really makes the difference.**”

Arie van der Giessen

Vice President & Regional Facility Manager
Village Farms, USA



“It makes our job so much easier and **helps us oversee it all.** Crop Controller helped to produce a better product and we had a **yield increase of 2,5 to 5 percent** because of Autonomous Growing. We like what we see and we want more of it.”

Jake Knelsen & Pete Neufeld

Grower & Head Grower
Vine Fresh Acres, Canada



“We **reduced office time** by at least **1.5 hours a day.** We had **good, strong plants** with great colours and produced at least **5% more kilos per m²** because of Crop Controller.”

Karla Denisse Abundis

Grower
Bresca Hortalizas, Mexico



“Autonomous Growing is indispensable to **scale up production.** Our specialist can now manage 20 hectares instead of 5 hectares. This is **a win-win for the employees and the company.**”

Marion van Gog

Chief Executive Officer
Van Gog Kwekerijen, The Netherlands



“Crop Controller helps our growers to **manage more area** than before. It also realizes **better results** in terms of **yield.** Based on more information **fewer mistakes** are being made.”

Theo van Noord

Chief Executive Officer
Noordhuys Tomatoes, The Netherlands



“Autonomous Growing gives me **peace of mind.** Working with Crop Controller adds an extra dimension to my profession as a grower. It makes working in **horticulture increasingly** attractive to **more young people.**”

Hidde Preidel

Junior Crop Specialist
RedStar, The Netherlands

ABOUT **BLUE RADIX**

Blue Radix is the independent specialist and market leader in Autonomous Growing. We create AI-solutions for almost all daily decisions and actions in greenhouses to solve the scarcity of experienced growers and to feed the growing world population in a sustainable way. With Integrated Autonomous Climate & Irrigation Control by Crop Controller growers can optimize and realize their unique crop strategy with AI and reduce their climate computer work by 80%.



Scan the QR code
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www.blue-radix.com