



A Leader in Smart Horticulture Lighting Technology, Controls, and Services



# **About Us**

Heliospectra was founded in 2006 in Sweden by plant scientists and biologists with one vision – to make crop production more intelligent and resource-efficient. Today, with customers spanning seven continents, Heliospectra is a leader in innovative horticulture lighting technology, custom light control systems and specialized services for greenhouse and controlled plant growth environments.



### **Innovation**

We provide the most advanced crop lighting, controls and services to customers across six continents.



### **Expertise**

Our team consists of plant biologists and actual growers who understand your growing needs.



### Collaboration

Rooted in plant and light research, we partner with you from seed to harvest.



#### Quality

Each solution is designed to optimize the quality of your crop in your unique growing environment.



### Sustainability

We help you consistently produce sustainable and resource efficient nutritious crops



#### Passion

Our passion is to redefine nature's potential so that together we can feed and heal the world.



# What We Do

# LED Grow Lights Solutions



MITRA X



MITRA



ELIXIA



DYNA



ADELPHI WIRELESS CONNECTOR

### **Crop Control**

helioCORE™



AUTOMATE LIGHT STRATEGIES



OPTIMIZE LIGHT ZONES AND GROUPINGS



MAXIMIZE GROWTH



CONSISTENT YIELD



SAVE MONEY



MONITOR YOUR GROW FACILITY

# Crop Services helioCARE™



LIGHT PLANNING



ON SITE SERVICE



TRIALS



CULTIVATION TRAINING





Introducing

# **ADELPHI**

### Wireless, Instant Dimming and Control for your Greenhouse

Our NEW Wireless Connector allows for true wireless dimming and control in your greenhouse facility. Integration with helioCORE enables you to set DLI targets and zone light strategies over time, lowering your energy cost, increasing crop quality, and maximizing ROI.

### helioCORE<sup>TM</sup>

Integration with helioCORE and sensors allow for automated light strategies and real-time light adjustments.

### **No Wiring**

No extra wiring needed during installation, saving your money and time.

#### Fall-Back Schedule

To protect against power issues and network failures, a fall-back schedule guarantees safe and secure crop production according to your settings and standards.















### 5 Different

**Spectral Variants** 

Ensure healthy, high-quality production year-round with 5 spectral variants specifically developed for greenhouse cultivation on various crops.

# **Wireless Control**

With the Adelphi

Add precise dimming and control with the Adelphi wireless controller without installing new wiring. Set light strategies and zone strategies to optimize your ROI.

Up to 3.5 µmol/J

of Fixture Efficacy

Maximize your production consistently, harvest after harvest, while saving electricity, with consistently high-quality LED light output.

66 With Heliospectra lights, we now save between 10 to 13 days off production on our crisp lettuce. The opportunity to accelerate harvests and create additional revenue cycles significantly scales our business.



- Managing Partner, Green Mountain Harvest Hydroponics













# 2.8µmol/J

of Fixture Efficacy

Maximize your production consistently, harvest after harvest, while saving electricity, with consistently high-quality LED light output.

## **3 Customized**

Spectra for Diverse **Applications** 

Achieve your unique growth goals with spectral options specifically tailored to every application.

### **25% More**

Terpenes and Cannabinoids

Deliver truly next-level products by maximizing plant expression and secondary metabolites in cannabis crops.



66 By using Heliospectra LED grow lights we were able to cut the HVAC demanded in half, saving The Grove over 1.4mil USD in upfront expenses.

- Master Grower and Cultivation Manager, The Grove











Tomatoes



Microgreens

1,0004

**Spectral Combinations** 

Always be in control, no matter what you grow, with variable control spectra and a seemingly infinite number of light strategies. 90%

More Yield

Increased production cycle after cycle and year-round with leading light science to meet every crop's requirements.

46% Less

**Energy Use Than HPS** 

Reduce energy consumption and save on HVAC infrastructure costs, all the while increasing production, with highly efficient LEDs.

Increasing yield by 13% over the winter growing season, Heliospectra LED lighting helped us deliver fresh, flavorful and highest quality arugula and microgreens to more than 400 retail stores across Toronto, Canada.

- Master Grower and Cultivation Manager, Greenbelt Microgreens









Herbs



Microgreens



1,000°

**Spectral Combinations** 

Move your research forward with countless spectral options and full wavelength control from UVA to Far-red.

### 134 Research

Institutions Trust DYNA

Researchers around the globe use DYNA to aid diverse research applications with precision spectra control and wireless functionality.

50%

Removable Heat

Maintain precise temperature control in growth chambers and remove up to 50% of the heat generated by fixtures with innovative ducting solutions.

66 At University of Queensland, we replaced the old HPS vapour lamps with Heliospectra LED grow lights and saved approximately 28% power required for lighting and about \$10,000 in costs associated with bulb replacement each year.



- Dr. Lee Hickey, University of Queensland





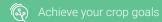
# Crop Services

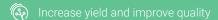
# helioCARE™

### Innovation, Technology and Meaningful Partnerships

We partner with you from the ground up to help you achieve your crop goals, and make an easier transition into LED with the help of our technical and horticulture experts.

### Your CARE benefits:







### **Light Planning** LIGHT PLANNING SERVICES:

Our experts can optimize the light conditions in your greenhouse, indoor grow facility or research chamber.



### **Cultivation Training CULTIVATION TRAINING** SERVICES:

We work with your team to create a customized training curriculum based on your crop and production goals.



On Site Service BENEFIT FROM OUR ON-SITE SERVICES:

We can help you get the most out of your light solution with on-site installation support and ongoing consultancy.



Trials TRY-BEFORE-YOU-BUY

Try the solution on-site with our industry experts before committing.

Heliospectra is not just selling a light, they continue to support and aid us as we learn - ensuring that our growers and the company as a whole are getting the most out of the investment.

Andrew Fuller, Technical Director, Bridge Farm Group

Learn more about helioCARE™





# Crop Control helioCORE™

### **Making Your Lights Even Smarter**

Take the guess work out of advanced lighting and connect your Heliospectra lights to helioCORE™.

Our integrated light control system will give you consistent, high-quality crop production all year-round.



### **Automate Light Strategies**

Apply customized lighting strategies across the production and harvest cycle to induce flowering, extend photoperiods or develop the flavor profiles you are looking to achieve.



### **Optimize Grow Zones and Groupings**

Organize your light strategies by microclimate, crop type or production stage. Group lights and create light zones to standardize schedules and settings.



#### **Consistent Yield**

Adjust your lights based on predictive algorithms and real-time data to give the daily light intervals your plants need year-round.



#### Save Money

Track your energy consumption and run your lights during the most cost-efficient hours when energy and utility costs are lowest.



#### **Maximize Growth**

Maintain light intensity and quality to maximize plant efficiency and photosynthesis.



### **Monitor Your Grow Facility**

Monitor your hardware status and quickly adjust light settings, intensities and spectra from any type of device.

Learn more about helioCORE™



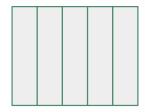


### **Customized Lighting Strategies for Grow Zones**

### - Optimize Energy Use and Stabilize Yields

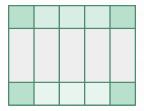
helioCORE and sensor feedback algorithms enable growers to break down their grow environment into multiple controllable "grow zones" with customized lighting strategies to optimize energy use while improving growth consistency throughout the greenhouse and as the season changes. Allowing you only to use the right amount of light needed in that area and turn off lights in sections not in use. All via an easy to work with user interface.

### Strategies for Dividing your Greenhouse into Zones



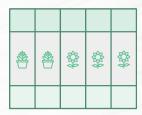
**Zones by Bay** 

Divide your greenhouse into zones based on your greenhouse bay-layout and infrastructure



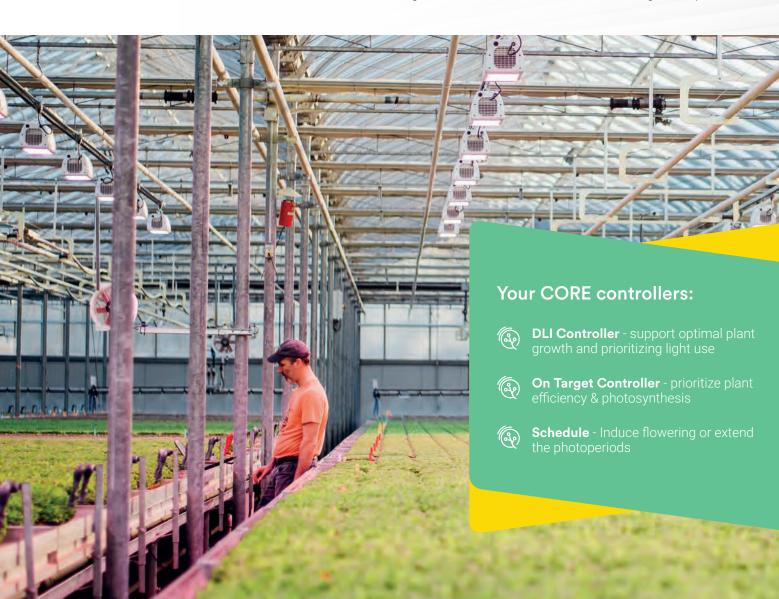
### **Zones by Climate**

Divide your zones based on different microclimates in your greenhouse, such as natural light levels.



### **Zones by Crops**

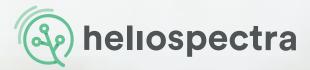
Different zones can also be defined depending on what crop is grown in each area or what stage that crop is in.





Swedish by design, global in growth. We partner with you to optimize crop production and increase speed to market of quality products.

Let us redefine nature's potential, together! Visit us online at **www.heliospectra.com** 





LET'S CONNECT













