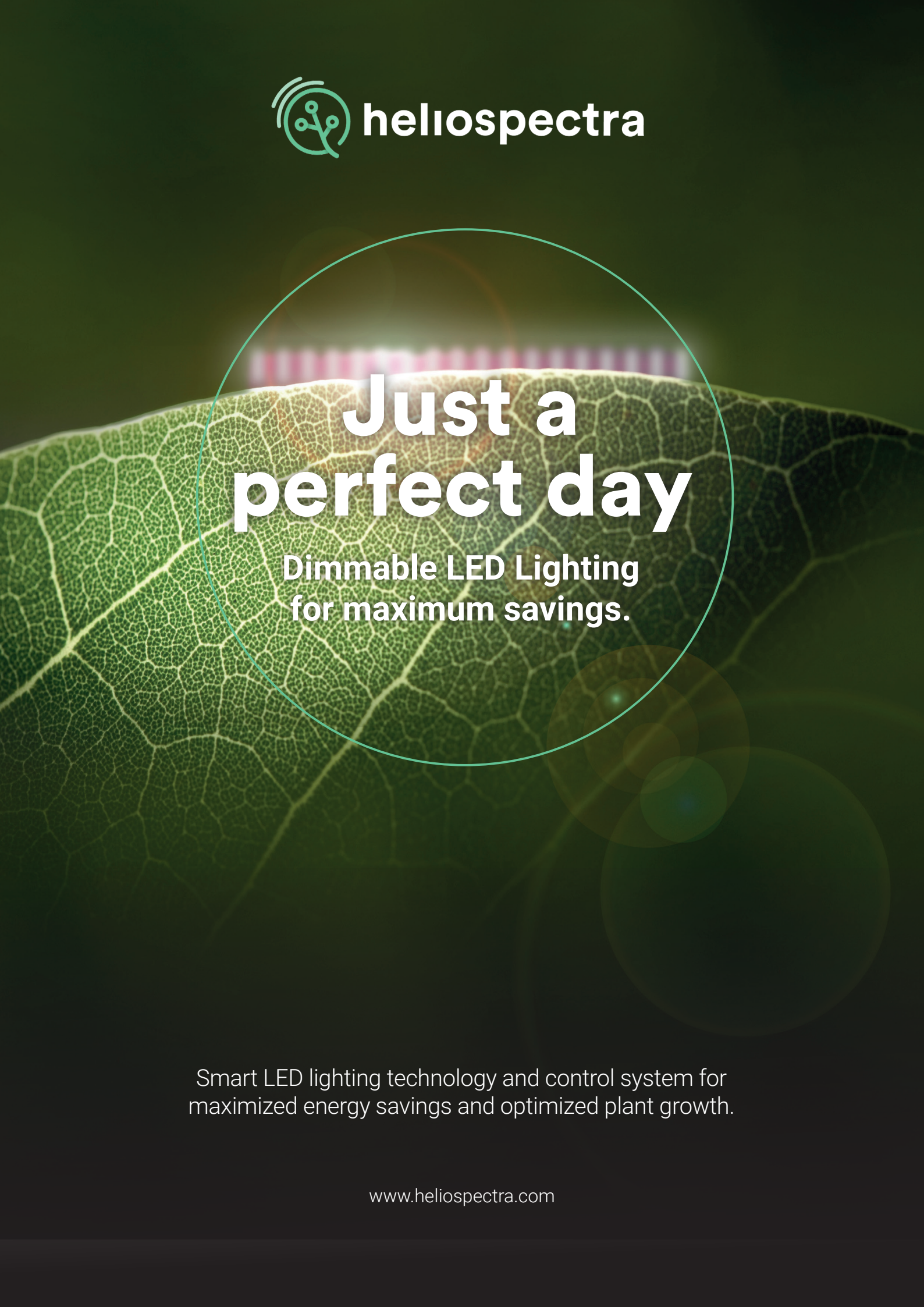
heliospectra



Just a perfect day

Dimmable LED Lighting for maximum savings.

Smart LED lighting technology and control system for maximized energy savings and optimized plant growth.

www.heliospectra.com

Save Energy, Optimize Yield

Save up to 30% extra on top of your LED light savings.

With our high-quality LED lights with wireless dimming, sensors and our helioCORE software, you can automate your lighting strategy and tailor it to any situation. The software support optimal plant growth and automatically adjust and dim your LED lights based on natural light levels, fluctuating energy prices and by optimizing the efficacy of the light, thereby prioritizing lamp use at times of day when energy and utility costs are lowest. Our software also offers the possibility to set up to multiple grow zones, without upgrade, and to operate them separately. Allowing you to save more energy by not using bays and section not in use.

Optimizing plant growth

Heliospectra has researched light and its effect on plants for over 17 years. By offering four different base spectra (R40, R60, R80, R90) with or without far-red and with the ability to dim the intensity on demand wirelessly, our spectrum portfolio targets a wide variety of crops.

Our flexible far-red solutions combine three spectra in one, each dimmable from 0-100%. The flexible far-fed enables growers to have the far-red on or off depending on crop variety or at a specific part of the day. This allows growers to speed up growth, induce flowering, increase the number of flowers and improve plant growth and quality during low-light periods.

For further control, helioCORE's possibility to set up multiple grow zones and operate them separately allows growers to set multiple lighting strategies at once in their greenhouse, depending on crop or crop variety. Making sure you always have an optimal grow-light environment.

17 years in the industry

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

Using only top tier components, 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

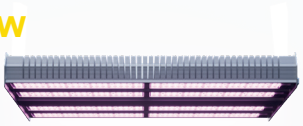
Our passion is to redefine nature's potential so that together we can feed and heal the world.

What We Do

LED Grow Lights
Solutions

MITRA X & MITRA X FLEX

NEW



CERES & CERES FLEX

ELIXIA

DYNA

ADELPHI
WIRELESS CONNECTOR

NEW

DOXA
WIRELESS SENSOR

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

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.

Up to 9000 units

The Adelphi is built for large-scale greenhouse installations. With a system capable of running up to 9000 units in harsh environments, our long-range radio protocol secures a stable network for your facility.

No Wiring

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

helioCORE™

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

IP 66
Dust & Waterproof

DLC
Certified

MITRA X

Optimized for Greenhouse Environments

DOWNLOAD MITRA X SPEC SHEET

Soft Fruit | Leafy Greens & Herbs | Vine Crops | Flowers

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

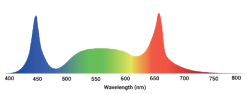
Add precise dimming and control with the Adelphi wireless controller without installing new wiring. Set light strategies and zone strategies to minimize energy costs and optimize your ROI.

Up to 3.6 µmol/J
of Fixture Efficacy

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

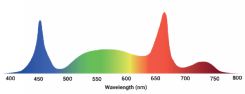
Spectrum portfolio overview:

helioSPEC R40



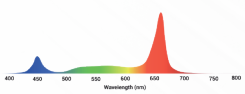
Efficacy (µmol/J): 2.9
PF Light output (µmol/s): 1887

helioSPEC R40F



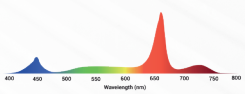
Efficacy (µmol/J): 2.9
PF Light output (µmol/s): 1954

helioSPEC R60



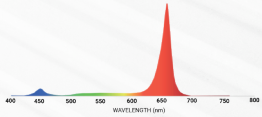
Efficacy (µmol/J): 3.1
PF Light output (µmol/s): 2119

helioSPEC R60F



Efficacy (µmol/J): 3.1
PF Light output (µmol/s): 2041

helioSPEC R80



Efficacy (µmol/J): 3.6
PF Light output (µmol/s): 2220

NEW!

MITRA X FLEX

Flexible Far-Red for Targeted Crop Strategies

DOWNLOAD MITRA X FLEX SPEC SHEET

Soft Fruit + Leafy Greens + Tomatoes + Flowers

Speed up Production with Flexible Far-Red

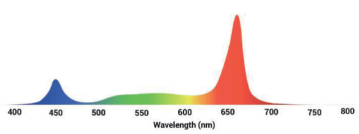
MITRA X FLEX allows growers to use targeted crop strategies with its flexible far-red by combining three spectra in one without losing power. The flexible far-fed enables growers to have the far-red on or off depending on crop variety or at a specific part of the day, speed up growth, induce flowering, and increase the number of flowers. Far-red can also improve plant growth and quality during low-light periods.

Applications

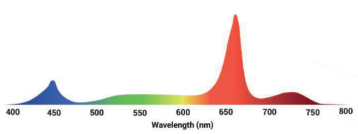
- End of day Far-red treatments
- Far-red enriched spectrum for end of production or full crop cycle, inducing flowering
- PAR only for crop production, vegetative phase

Three Spectrum in One Fixture:

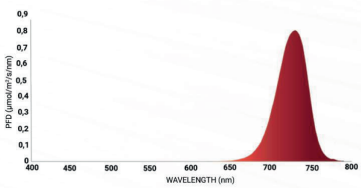
PAR Only



PAR + Far-Red



Far-Red Only



MITRA X FLEX is avaliable in the following spectrum:

- helioSPEC R40F Flex
- helioSPEC R60F Flex
- helioSPEC R80F Flex

heliospectra

NEW!

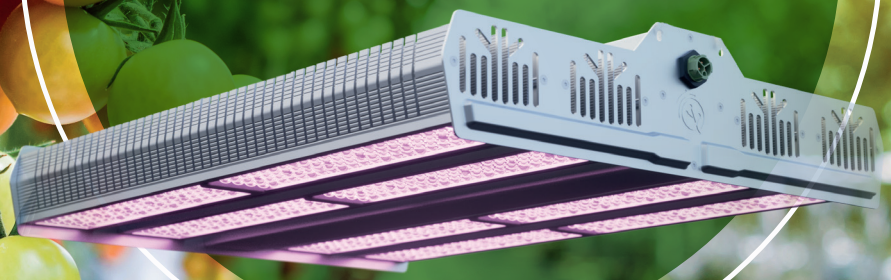
CERES

A 1000W high output 1-1 HPS Replacement

DOWNLOAD CERES SPEC SHEET

IP 66
Dust & Waterproof

Efficacy of up to **3.6** µmol/J



Ornamentals + Herbs + Vine Crops

Wide Optics

140°and 150° options

CERES comes with high-quality optics, offered in both 140° and 150° beam angle for a high light output and a uniform light environment.

Easy Installation

With Wieland Connector

Our 1000W fixture comes with customizable hangers and a pre-installed Wieland connector for quick and easy installation.

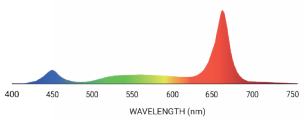
Wireless Control

With the Adelphi Connector

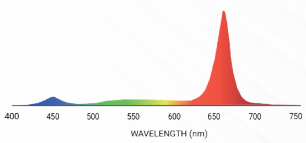
Add precise dimming and control with the Adelphi wireless controller without installing new wiring. Set light strategies and zone strategies to optimize your ROI.

Spectrum portfolio overview:

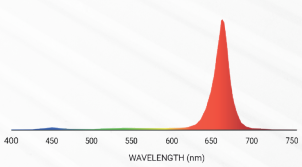
helioSPEC R60
Efficacy (µmol/J): 3.2
PF Light output (µmol/s): 3213



helioSPEC R80
Efficacy (µmol/J): 3.3
PF Light output (µmol/s): **3277**



helioSPEC R90
Efficacy (µmol/J): 3.6
PF Light output (µmol/s): **3731**



NEW!

CERES FLEX

Flexible, high-output spectrum for high-light crops

DOWNLOAD CERES FLEX SPEC SHEET

Ornamentals + Leafy Greens + Vine Crops

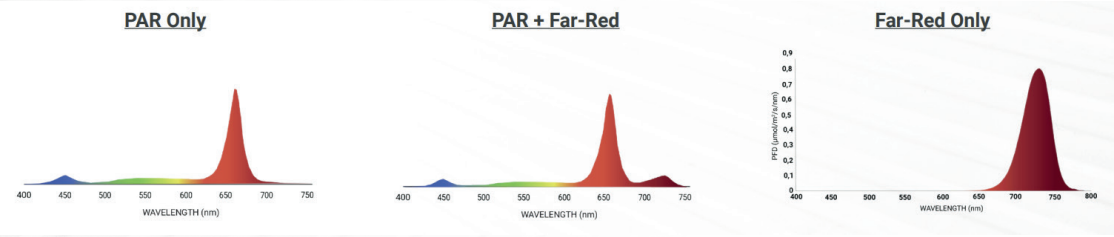
Efficient and Flexible

With three spectra in one fixture and an efficacy of up to 3.6 µmol/J, CERES FLEX provides growers with a flexible LED light solution without losing efficiency. The flexible far-fed enables growers to have the far-red on or off depending on crop variety or at a specific part of the day, speed up growth, induce flowering, and increase the number of flowers. Far-red can also improve plant growth and quality during low-light periods.

Applications

- End of day Far-red treatments
- Far-red enriched spectrum for end of production or full crop cycle, inducing flowering
- PAR only for crop production, vegetative phase

Three Spectrum in One Fixture:



CERES FLEX is avaliable in the following spectrum:

- helioSPEC R60F Flex
- helioSPEC R80F Flex
- helioSPEC R90F Flex

heliospectra

ELIXIA

Unparalleled Flexible Spectrum Control

DOWNLOAD ELIXIA SPEC SHEET

Research + Herbs + Tomatoes + Microgreens

1,000[4]
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

DYNA

Designed for Plant Scientists

DOWNLOAD DYNA SPEC SHEET

Herbs

Microgreens

Research

1,000[9]

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.

> 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:

- Achieve your crop goals
- Increase yield and improve quality
- Alter morphology and accelerate production
- Help to transition and adapt your growth environment to LED

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 SERVICES:

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™**

New Improved UX

Now with an updated more user-friendly inter-face for improved user experience and added functionality.

Crop Control helioCORE™

Save Money and Gain Control of Your Light Environment

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 while providing significant energy savings.

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.

Decrease Energy Costs

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

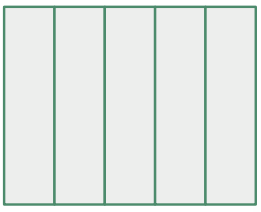
Monitor your hardware status and quickly adjust light settings, intensities and spectra from any type of device.

Open API for integration with 3rd party systems.

Customized Lighting Strategies for Grow Zones

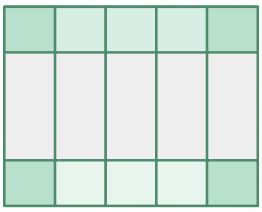
helioCORE and sensor feedback algorithms enable growers to break down their grow environment into multiple controllable “grow zones” with customized lighting strategies to optimize energy use while improving growth consistency throughout the greenhouse and as the season changes. Allowing you only to 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.

Your CORE functions:

- **DLI Controller** - minimize energy consumption while optimizing the light environment.
- **Set Grow Zones** - optimize light strategies per crop, zone or crop stage
- **Schedule** - Induce flowering or extend the photoperiods

heliospectra

www.heliospectra.com

LET'S CONNECT

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