



2021

# **Rambridge Wholesale Supply**



# Who is Rambridge?

We're a family-run manufacturer and wholesale distributor based in Canada, focused on indoor/outdoor garden and greenhouse goods. Our partners receive our heartfelt dedication to accelerate every project. While we have grown over the past 35+ years, we remain people-focused: your success is our success.

Our knowledgeable team provides education to small-scale and professional application growers to lead successful grows from start to finish.

## Planting the first seed

It all started in our backyards with garden greenhouse installations for our own grows.

We began to create and rigorously test nutrients and additives specifically designed to enhance growth in Canadian soil - and from our discoveries, we opened our very first warehouse in Calgary. We rapidly evolved to full-scale lighting and application engineering, and we didn't stop there.

From there, we continued to grow with the future and evolved to expand our operations in the US, and adding two additional Canadian warehouses. We had one goal that still remains the same: provide growers of all sizes with innovative, reliable products proven to achieve optimal growth.



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# Table of Contents



## Fertilizers & Additives

- Blossom Blood
- Veg Booster
- Dry Flower Products
  - ▶Green Up
  - ▶Liquid Black Crystal
  - ▶Liquid Gold
  - ▶Clearing Solution
- Bumper A&B
- Blossom A&B
- Potassium Silicate
- Wegener's Liquid
- Bionova & Bionova Veganics
- Terpenez



## Growing Substrates

- Bionova Coco
- Eazy Plug & HGA Propagators
- Gold Label Substrates



## Lighting

- SolarMAX DE
- SolarMAX Super HPS & MH
- SolarMAX Reflector
- Dutch Lighting Innovations
- FOHSE
- Gavita



## Environmental

- Anden Dehumidifiers
- Mammoth Grow Tents



## Gardening Supplies

- Air-Pot
- Chikamasa



## Hydroponics & Irrigation

- Blumat Digital Moisture Meter
- Tropf Blumat



## Testing Meters & Solution

- Bluelab



## Commercial Applications

- Brome Compost
- Bruin De Bruine
- Elpress
- NetLED
- PIPP
- Wachsen
- Benching Layouts
- Dehumidifer Layouts
- Lighting Layouts



# Blossom Blood and Veg Booster

## Blossom Blood

The addition of Blossom Blood to your feed schedule during the flowering stage of a plant will promote fuller buds and flowers utilizing selective pH control. Blossom Blood's reputation comes from over 25 years of positive results. Developed for stabilization and floral production in hydroponic applications, Blossom Blood may also be used in soilless growing mediums. Blossom Blood is a specific type of pH buffer salt and is compatible with all quality nutrients.

## Veg Booster

Enables young cuttings or seedlings to better promote stronger fuller plant growth during the vegetative stage. Add Veg-Booster directly to your reservoir pH only once at the beginning of a plant's vegetative cycle when the seedling/cuttings have gotten over transplant shock. Works on soil grown plants too.



# Dry Flower Products



## Green Up

1-3.5-0



Green-Up is designed to reduce yellowing when cuttings are rooting. It has the ability to feed a cutting before the roots have developed. DO NOT foliar spray Green-Up directly on cuttings, seedlings or maturing plants. Green-Up is compatible with all quality brand name nutrients. Can be used on mature plants to reduce yellowing on lower leaves in flowering stage.



## Liquid Gold

0-0.04-0.06

Liquid Gold can be added directly to your reservoir water, or used as a foliar spray. It is compatible with any nutrient. Liquid Gold will increase the cell metabolic rate which translates into better growth. Liquid Gold is absorbed directly into the plant tissue and regular daily spraying will treat new growth cells.

## Liquid Black Crystal

0 - 0.04 - 0.06



Liquid Black Crystal assists in increasing the ion exchange across the root membrane. It improves the plants ability to absorb nutrients. Liquid Black Crystal must be put into your reservoir or used as a substrate drench. It is most effective when it is applied to the root zone of a plant. DO NOT foliar spray with Liquid Black Crystal directly onto leaf tissue.



## Clearing Solution

Clearing Solution is used to replace the nutrient in the final days before removing a floral crop from your growing system. Clearing Solution induces a stress on the plants system forcing reactions within the plant. DO NOT foliar spray Clearing Solution. DO NOT mix Clearing Solution with nutrients.

## **Bumper Crop Specialty Hydroponics Nutrients:**

## **The First Choice for Hydroponic Growers!**

Bumper Crop Nutrients are celebrating over 30 years of excellence! These nutrients were the first liquid foods in the market and are recognized for their quality. Rambridge has continued to improve the products' performance.

Bumper Crop Nutrients are an easy to use two part nutrient specifically for vegetative growth and a simple two part specifically for flowering. They contain the natural minerals plants prefer for healthy energetic growth.



### **Bumper A&B**

#### **The Food for Vegetative Growth**

Designed for feeding vegetative growth and fruit production, Bumper Crop is ideal for starting cuttings or for vegetables (like tomatoes and cucumbers, both which produce fruit and have on-going vegetative growth). High calcium and magnesium levels prevent blossom end rot and improve pollination.

Bumper Crop A&B formulation provides the N-P-K micro minerals plus the health minerals magnesium, sulphur and calcium.

### **Blossom A&B**

#### **Bud Bursting Performance!**

This is the formula that earned Bumper Crop its reputation for consistent flower yields crop after crop. It is loaded with the right stuff, in the right combination, without having to add other "nutrient supplements". Blossom A & B is recommended to growers who desire a simple, straight forward nutrient aimed at growing flowers. Blossom A&B are productive nutrient formulations for greenhouse production. To maximize both yields and crop quality it is recommended that you purchase a good nutrient meter to assist in maintaining nutrient levels in your nutrient solution.



## MY WAY TO GROW



Highly concentrated soil fertilizer + The original PK 13-14



Extremely concentrated coco fertilizer



Vegan growing fertilizer + Vegan flowering fertilizer



Highly concentrated hydro fertilizer



Highly concentrated NFT fertilizer + The original PK 13-14



## STIMULATORS



More roots, more flowers



For XL flowers



The original PK 13-14



Vegan flower accelerator



Premium green plants



The natural candy





The solution for the highest yield



The substrate energizer

## MAIN FERTILIZERS

## STIMULATORS

										
	Coco Forte A	Coco Forte B	EC**	ML / 10 LTR						
				Roots	X-cel	The Missing Link	BN-Zym	Vitasol	Silution	
Growth period Groeiperiode Período de crecimiento	9	9	0,9	8	5	6	5	-	2	
Start flowering phase Start bloeiperiode Comienzo (o principio) de floración	13	13	1,2	7	5	6	5	-	2	
	16	16	1,4	5	8	6	5	-	2	
	18	18	1,6	-	8	6	5	-	2	
Mid flowering phase Midden bloeiperiode Mitad floración	18	18	1,6	-	10	6	5	-	2	
	18	18	1,6	-	10	6	5	4	2	
	18	18	1,6	-	10	6	5	7	2	
Last flowering phase Laatste bloeiperiode Fin de la floración	16	16	1,4	-	10	6	5	8	2	
	<13	<13	1,2	-	10	6	5	10	2	
Rinse last week Laatste week spoelen Enjuagar la última semana	-	-	-	-	-	-	5	7	-	

## Bionova Coco Mix Plus

BioNova Coco Mix Plus  
unfertilized coco – 50L – NPK 0-0-0- 100%  
natural coco substrate

Bionova Cocomix Plus is an excellent natural 100% coco substrate. This coco mix consists of grinded and sieved cocopeat. The mix is delivered in recyclable plastic bags of 50 litres and is ready-to-use. Because this substrate is not fertilized, you have to start fertilizing after planting. Recommended is Coco Forte A+B. This mix is of a sublime quality and keeps its quality and airiness for a long period. This coco mix is perlite free, and therefore 100% compostable. Bio Cocomix plus contains: washed and buffered natural cocopeat derived from coco palm trees of Sri Lanka. EC  $\pm$  0.2. pH  $\pm$  6.5. This Cocomix Plus is free of chemical and animal ingredients



# Potassium Silicate

Nutrient Control for Fungus & Molds.  
Adding Potassium Silicate to your nutrient solution helps prevent the growth of mold and fungus in plants, helps raise the pH of the nutrient and is a source of potassium for your plant. Our Potassium Silicate mix is 16 times more concentrated than any other on the market. A smaller amount is required to get optimized results. Potassium Silicate can increase your plants tolerances of environmental stress, temperature changes, water and soil toxicity. It can also aid in the improved growth rate in the root zone and the foliage.



# Wegener's Liquid



Wegener's Liquid provides a balanced NPK (8-6-6) with calcium, magnesium, plus a formulation of trace minerals and elements including plant based extracts from bees wax and select foliage that help plants to absorb and use organic nutrients. Great for your lawn, garden or houseplants. Wegener's Liquid is a concentrate and must be diluted 200 times. One teaspoon (5 ml) to a quart (litre) of water will provide your plants with a healthy organic based diet they'll love.

**Use A Little - Grow A Lot:** Whether you are a commercial grower or a home gardener, you will find that Wegener's Liquid addresses nutrient imbalances and is ideal for helping plants recover from stress. Wegener's Liquid provides a gentle release of nutrients which will not burn plants.

**Environmentally Safe:** Wegener's does not easily leach into waterways making it a preferred choice for golf courses, lake front landscaping, around ponds and water gardens.

**Commercial Use:** Wegener's Liquid provides the complete nutrition required for growing in soilless mediums. This makes it ideal for interior plant maintenance, nursery stock, fruit, vegetables or herbs.

**Lawn Management:** Use Wegener's Liquid on recreational turf including golf courses, not only as a great fertilizer but as a biological thatch control. When the grass is cut, the cuttings form thatch which is slow in breaking down and decomposing. Apply Wegener's immediately after cutting and thatch breakdown speeds up. It has results you'll appreciate.



# Terpenez 0-0-0 Essential Oil Intensifier



Terpenez represents a new class of horticultural products aimed at enhancing the aromatic experience associated with gardening. Many of the plants chosen for cultivation are selected based upon the value of their essential oils. With that knowledge, Terpenez has been purposefully formulated from all organic botanical extracts and is designed to assist the plant with processes associated with oil and resin production. Terpenez is blended in house in California USA and is made from the finest botanical inputs currently available. Versatile in its application, Terpenez is recommended to be applied during flush as part of your standard 11-14 day flush regimen but can be applied at a diluted rate throughout your flowering cycle for advanced results. Terpenez can also be used exclusively during the flush cycle to aid in the removal of residual nutrient salts and enhance the scent profile of your garden. Bottom line: it's an organic terpene enhancer. Boosts terpenoid profiles & increases overall aromatic effect. Terpenez alternatively uses bio-identical organic steam distilled plant extracts that the target plant identifies as its own. No undue stress, no heavy metals and no salts just extracts and an organic wetting agent.





## TERPENEZ

ESSENTIAL OIL INTENSIFIER

0-0-0

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As with all gardening products, results are variable and dependent upon a variety of conditions however the vast majority of users have experienced very favorable results that were not only more intense than they expected but far more pervasive than anyone could have hoped. If your goal is an overall increase in the intensity of the natural bouquet of your garden, Terpenez may be the answer.

### HOW DOES IT WORK?

Terpenez has been carefully formulated to provide essential oil bearing plants with both precursors (ex. metabolic building blocks, trace elements etc.) as well as readily available bio-identical organic plant compounds with the objectives of increased overall essential oil production and intensity. Precursors provide support to the pathways, essential for oil production, while bio-identical plant compounds augment in-situ concentrations through contact assimilation.



### WHY 0-0-0?

Terpenez was purposefully formulated as 0-0-0 from certified organic inputs ensuring it won't conflict with your existing schedule or contaminate your crop. Commercial Grade.

100% NATURAL PRODUCT

GROWSOLUTIONS.COM





Nature's Choice



# Eazy Plug System

Eazy Plug & Eazy Block are made of organic materials which are bonded and formed into an extensive product line of plugs and blocks for the professional horticulture and can be used for the production of a wide range of crops. HGA Garden manufactures this breakthrough, natural and sustainable growth solution for growing all of your plants. Our products are carefully balanced and have a predetermined pH, EC value and a fixed air- to - water ratio. Because of this, growing conditions are always optimal and a very fast and powerful rooting or germination is ensured. The Eazy Plug and Block are supplied dried, making them clean and lightweight, with limitless shelf life and no risk of molds. The dry Eazy Plug & Eazy Block take water back up very easily and quickly, retaining all of their former characteristics.

## Gold Label Substrates



**Gold Label Coco** is the best buffered coco in the market with a very low EC. This not only guarantees a clean and buffered substrate, but also a production process with respect for the environment. Gold Label Coco is an ideal hydroponics substrate: It's an organic rest material and a renewable resource, light and airy, can hold 8-10 times its weight in water, has a high capillary action, a stable pH and can be reused or recycled in the compost bin.

**Gold Label Hydrocorn** are manufactured using a mix of the best quality pure clay and are baked in an open furnace using high grade clean fuels. This guarantees absence of heavy metals or other contaminates. Gold Label Hydro carries the RHP for Horticulture quality certificate. Gold Label Hydrocorn is the inert hydroponics substrate of choice for professionals. The 16-25 mm size provides stability and the unique uneven shape of the pebble is an ideal surface for roots and beneficial bacteria. The porous structure has a high water capacity and is suitable for both ebb/flood and top irrigation systems.



**Gold Label 60/40** is 60% Hydrocorn and 40% Coco. It is an ideal match for high water capacity, lower watering frequency and better rooting. We utilize the 16-25mm Hydrocorn from Gold Label and the purest Gold Label Coco to give you the perfect ebb and flood growing substrate that also works well in any pot based systems. The 60/40 mix allows you to feed less frequently than in straight Hydrocorn. This gives you a buffer on the watering times but still allows you to feed regularly without over watering.

**60/40 Mix Grow Slab 12L** are easy, Plug & Play grow trays for hydroponically cultivation. You can cut the bottom parts for drainage and plug in your system for automated irrigation. Gold Label HydroCoco 60/40 is an ideal match for high water capacity, lower watering frequency and better rooting.

The 60/40 mix allows you to feed less frequently than in straight Hydrocorn and gives a buffer on the watering times.





SolarMAX DE lamps are designed and manufactured in Europe for optimum plant production and lowest light depreciation. SolarMAX DE contain high quality components, making them suitable for stable operation in Dim and Boost mode. SolarMAX DE lamps have high light intensity and long lifetime to support plants during critical flowering stages to receive up to a 25% higher yield.

### **SolarMAX DE 1950 $\mu\text{mol/s}$**

Features:

- SolarMAX DE Flower 400v
- 1950  $\mu\text{mol/s}$
- Designed for conventional ANSI S52 based systems
- 2000K
- Rated 20,000 Lifetime hours
- Life maintenance 10,00 hrs >99%
- Made in Germany

### **SolarMAX DE 2100 $\mu\text{mol/s}$**

Features:

- SolarMAX DE Flower 400v
- 2100  $\mu\text{mol/s}$
- Designed for horticultural high frequency output ballasts
- 2000K
- Rated at 20,000 Lifetime hours
- Life maintenance 10,00 hrs >99%
- Made in Germany

## AUVL Lamps

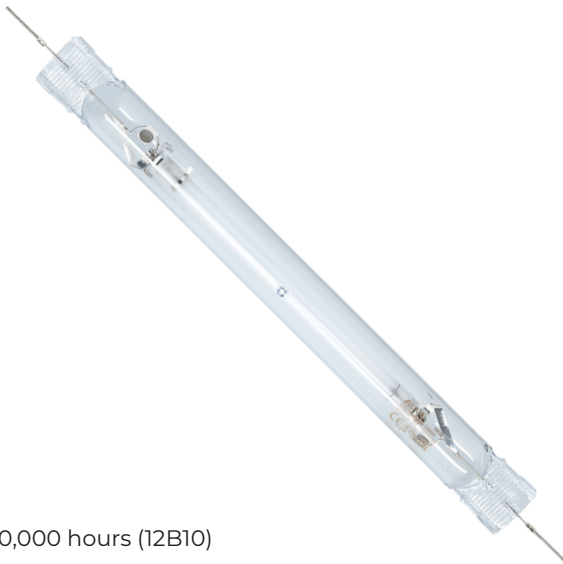


AUVL Double Ended Sodium lamps create an even spread of light.

The construction design of AUVL Grow Green double-ended sodium lamps enable the lamp to spread light very evenly and allow for stable operation in Dim& Boost mode because of their high-quality components.

They have a higher light intensity and a longer lifetime in comparison to most conventional single-ended sodium vapour lamps.

AUVL Grow Green double-ended Sodium Lamps support the plants in crucial fruiting and flowering stages to receive up to 25% higher yield.



### ADVANTAGES

Long life of 10,000 hours (12B10)

Stable photon flow  $\geq 90\%$  over the lifetime

10-20% higher light intensity than conventional sodium vapour lamps

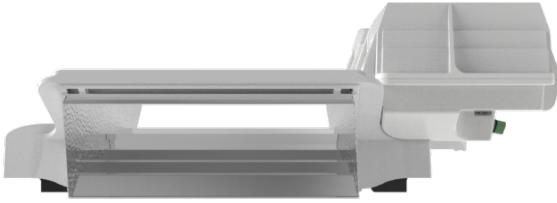
First choice for the flowering stage due to the high proportion of red light

More stable mounting due to 2-sided connection K12x30s – advantages in illumination

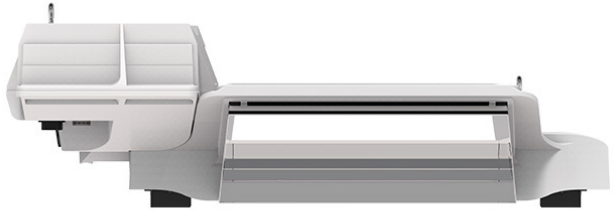
High photon flow of 2,100  $\mu\text{mol/s}$

Designed for operating with all major ECG's/ electronic ballasts

Stable operation in Dim & Boost mode possible



**1000W 600/750 DE**

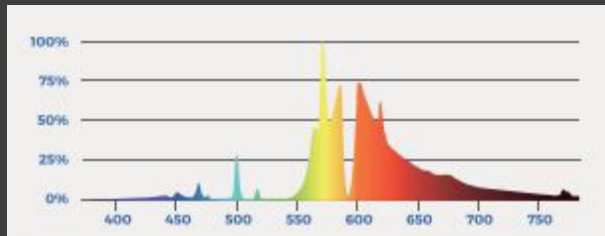


**JOULE-Series**

**1000W 600/750 DE DIMMABLE**

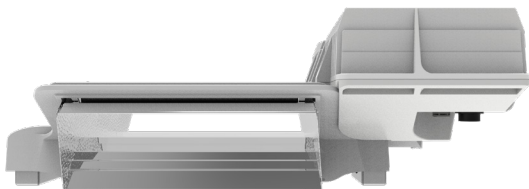
The new Dutch Lighting Innovations JOULE-Series 1000W Fixture is designed for the DLI Horticulture Plus 1000W De Lamp.

This Lamp is optimized by DLI to increase photosynthesis efficiency in flowering plants. By enhancing the gas chemistry of the lamp, the output maintains high light.





**315W CMH**



**630W CMH**

## **CRI-Series**

The DLI CRI-Series DE fixture is made to grow plants.

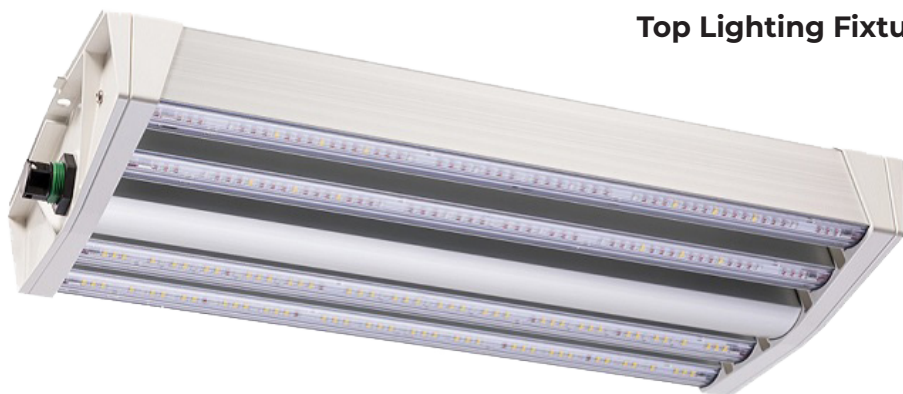
The output of the DLI CRI-Series 315W CMH fixture can not be adjusted. It can only be set to on/off and to the controller setting. By using the DLM-4 Zone Controller the fixture can be remotely switched and adjusted.

Available in 315W and 630W

## **DLM-4 ZONE CONTROLLER**

The DLM-4 Zone Controller is specially designed to set up a Daily Lighting Management system for your Dutch Lighting Innovations fixtures.



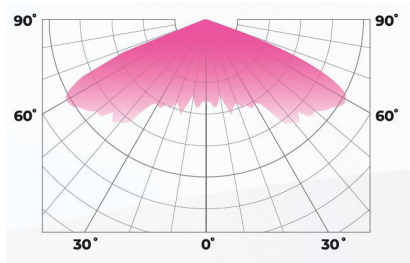


**Top Lighting Fixture**

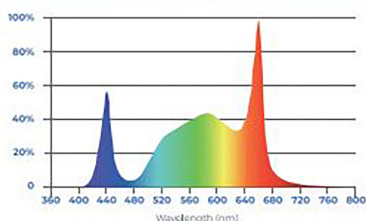
## DIODE-Series

DLI Toplighting fixtures are designed to deliver high levels of photosynthetic photon flux (PPF) values with optimal angled vertical light uniformity. The unique design of the lenses create a high uniform light distribution over the canopy.

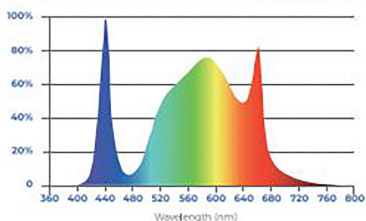
The fixtures are constructed in a slim water-proof design and suspended above the plant canopy with the easy-hang system.



**Indoor White Spectrum**

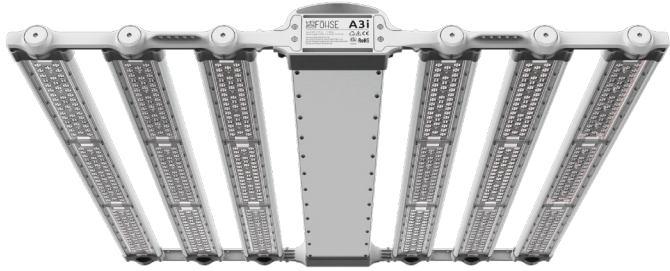


**Greenhouse White Spectrum**

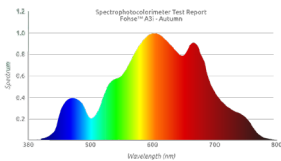
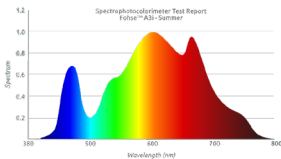
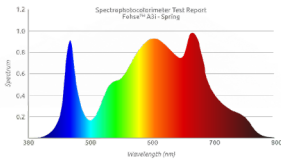


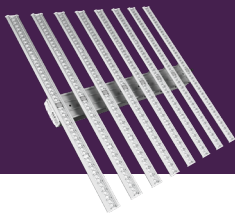


**A3i**  
For heavy-yielding flowering cycles in  
single-tier cannabis applications.



PPF: 4,200  $\mu\text{Mol/s}$   
Light source: Samsung LEDs  
Fixture Efficacy (100% - 50% power): 2.8 - 3.0  $\mu\text{Mol/J}$   
Input power: 1500W  
Input voltage: Options up to 480V  
Fixture dimensions: 42.28L x 42.5W x 4H in  
Weight: 70 lbs  
Thermal management: Passive  
Lens angle: 90°  
Maximum Ambient Operating Temperature: 37.8°C  
Dimming: 30%  
Lens angle: 90°  
CRI: 92  
Control interface Wall-mounted OLED panel  
L90: 50,000 hours  
Power Supply Rating: 100,000 hours  
Certifications: ETL, IP67, CE  
Mounting: Universal Hanging





## FIV 600W LED

For accelerated vegetative growth in multi-tier vertical cannabis applications.

PPF: 1,440  $\mu\text{Mol/s}$

Light source: Samsung LEDs

Fixture Efficacy (100% - 50% power): 2.4-2.6  $\mu\text{Mol/J}$

Input power: 600W

Input voltage: Options up to 480V

Fixture dimensions: 42L x 46.5W x 4.6H in

Weight: 38 lbs

Thermal management: Passive

Maximum Ambient Air Temperature: 37.7°C

BTUs/hours: 2,047

Dimming: 30%

Lens angle: 100°

CRI: 90

Control interface Wall-mounted OLED panel

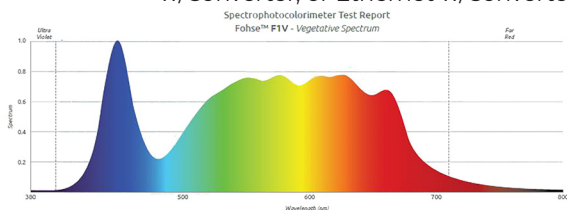
L90: 50,000 hours

Power Supply Rating: 100,000 hours

Certifications: UL, IP65, CE

Mounting: Universal Hanging

Communication protocol: RS485, 0-10V w/Converter, or Ethernet w/Converter



## FIV 1000W LED

For high-intensity flowering cycles in multi-tier cannabis applications.



PPF: 2,400  $\mu\text{Mol/s}$

Light source: Samsung LEDs

Fixture Efficacy (100% - 50% power): 2.4-2.6  $\mu\text{Mol/J}$

Input power: 1000W

Input voltage: Options up to 480V

Fixture dimensions: 42L x 46.5W x 4.6H in

Weight: 38 lbs

Thermal management: Passive

Maximum Ambient Air Temperature: 37.7°C

BTUs/hours: 3,412

Dimming: 30%

Lens angle: 100°

CRI: 90

Control interface Wall-mounted OLED panel

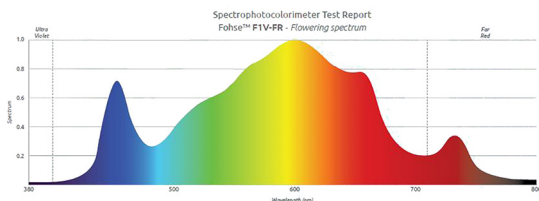
L90: 50,000 hours

Power Supply Rating: 100,000 hours

Certifications: UL, IP65, CE

Mounting: Universal Hanging

Communication protocol: RS485, 0-10V w/Converter, or Ethernet w/Converter



## Aries

### Fixture Specifications:

Light Source: Samsung LEDs

PPF: 1,792  $\mu\text{Mol/s}$

Fixture Efficacy (100% - 50% power): 2.8-3.0  $\mu\text{Mol/J}$

Input power: 640W

Input voltage: Options up to 480V

Fixture dimensions: 33L x 34W x 4.25H in

Weight: 34 lbs

Thermal management: Passive

BTUs/ hour: 2,183

Dimming: 10%

Lens angle: 100°

CRI: 92

Control interface: Wall-mounted OLED panel

L90: 50,000 hours

Power supply rating: 100,000 hours

Certifications: IP67

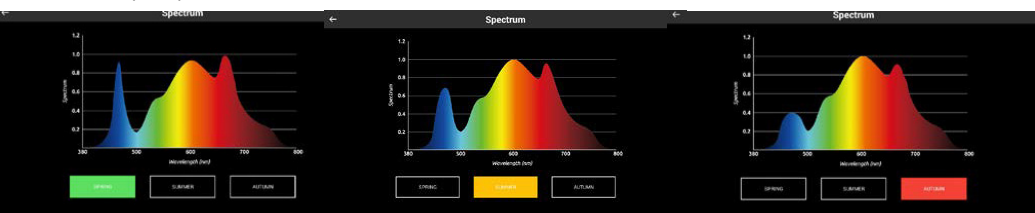
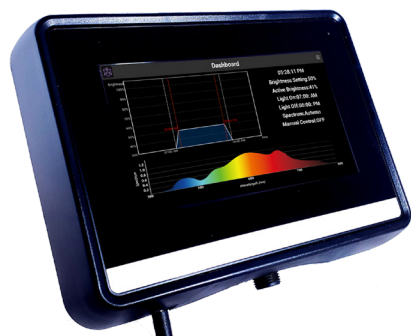
Communication protocol: RS485, 0-10V w/Converter,  
or Ethernet w/Converter

Mounting: Universal Hanging



### FOHSE Central Control

- Daisy chain up to 100 fixtures per controller (or more with signal repeaters)
- Automate lighting schedules, brightness, and spectrum
- Wall-mounting bracket included
- Compact size : 9" x 6.7" x 1.68"
- Standard 110 volt outlet plug
- Input power : 10 Watts



## Pleiades

### Fixture Specifications:

PPF: 900  $\mu\text{Mol/s}$

Dimming: 10%

Fixture Efficacy (100% - 50% power): 2.8 - 3.0  $\mu\text{Mol/J}$

Input power: 320W

Input voltage: Options up to 480V

LIGHT HARVESTING SENSORS FOR AUTO-DIMMING

Fixture dimensions: 28L x 4W x 6H in

Weight: 15 lbs

Thermal management: Passive

BTUs/ hour: 1,091

Lens angle: 100°

CRI: 90

Control interface: Wall-mounted OLED panel

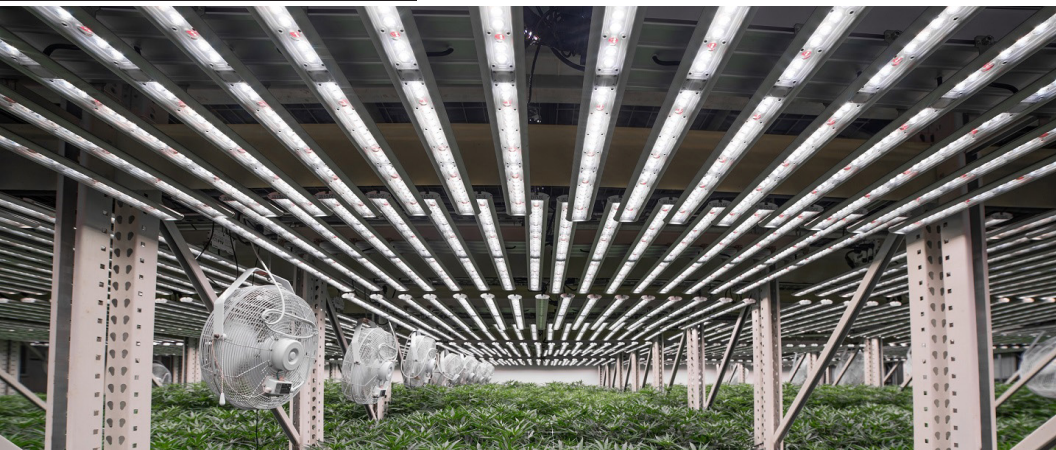
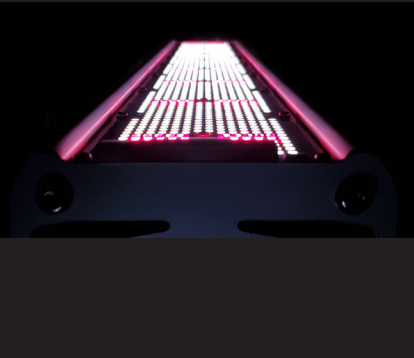
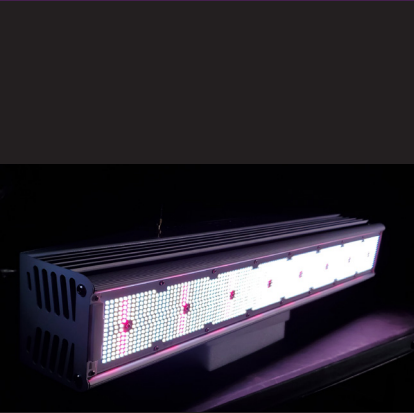
L90: 50,000 hours

Power supply rating: 100,000 hours

Certifications: IP55

Communication protocol: CAN or BACNet

Mounting: Truss-mounting Spring Clip



## O6i 1200W LED

For supplementary, full-cycle light in  
greenhouse cannabis applications



PPF: 3,000  $\mu\text{Mol/s}$

Fixture Efficacy(100% - 50% power): 2.5 - 2.7  $\mu\text{Mol/J}$

Input power: 1200W

Input voltage: Options up to 480V

LIGHT HARVESTING SENSORS FOR AUTO-DIMMING

Fixture dimensions: 16L x 8W x 13H in

Weight: 45 lbs

Thermal management: Passive& Active

Maximum Ambient Operating Temp: 100°F

BTUs / hour: 4,094

Dimming: 10%

CRI: 80

Control interface: Wall-mounted OLED  
panel

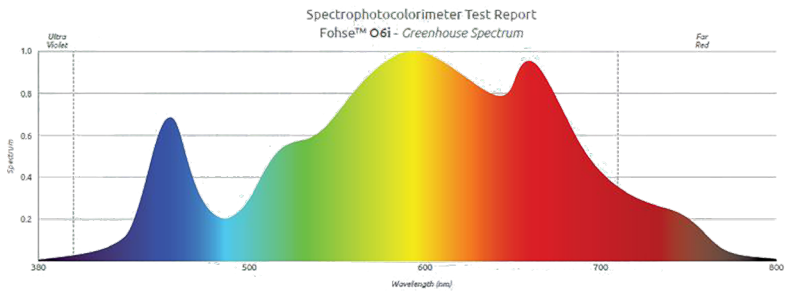
L90: 50,000 hours

Power supply rating: 100,000 hours

Certifications: IP67

Communication protocol: Wireless, 0-10V  
w/converter, Ethernet w/converter, RS485

Mounting: Universal Hanging





### **Gavita CT 1930e LED 120-277V**

The revolutionary new Gavita CT 1930e is the first and only LED that is a direct replacement for HPS. With a footprint designed to fit seamlessly in existing HPS layouts, the CT 1930e is a highly energy efficient LED delivering serious growing power. It's designed to be the true 1:1 replacement for the fixture that helped revolutionize the industry nearly three decades ago, the Gavita Pro 1000e DE HPS. Compatibility with wiring and electrical requirements for most indoor growing environments means this compact tophight is able to dramatically limit the cost and downtime required to convert facilities of every size. The CT 1930e delivers more crop-loving light in a broader spectrum at up to 20% energy savings than Gavita 1000 W DE HPS fixtures (based on average wattage of each fixture). Compatible with Gavita EL Master Controllers (sold separately) and most building automation systems. Patent-pending controller technology embedded within each fixture enables control of up to 2,000 fixtures per EL Master control channel and helps maintain unwavering output from light to light. If connecting to the Gavita EL1 or 2 controller purchase of HGC906717 or HGC906716 is required.





## Gavita Pro 1700e LED

The Gavita Pro 1700e LED fixture operates at 645 watts with an output of 1700  $\mu\text{mol s}^{-1}$  PAR and an impressive efficacy of 2.6  $\mu\text{mol s}^{-1}$  per watt. The Pro 1700e delivers broad, intense light coverage with its 8 passively cooled LED bars allowing you to use it in low rooms, vertical racks, over benches, or even in tents. This powerful, full-spectrum light source is intended for full-term plant growth from the vegetative stage to the higher-light-requiring bloom and finishing stages. Built with premium Philips drivers, Samsung white LEDs and Osram deep-red LEDs, this fixture uses only the highest-quality components. The fixture is dimmable to 50% without any loss of efficiency using the Gavita E-Series LED Adapter and Gavita Master Controllers. The Gavita E-Series LED Adapter - 120-277 V is required for each fixture when using the controller; non-controlled fixtures simply operate at 100%. The Gavita Pro 1700e LED fixture and Gavita E-Series LED Adapter are FCC compliant, UL8800, and IP66 rated for use in wet environments with a maximum ambient operating temperature of 40°C. Sun Grip® light hangers included. Dimensions: 44.1 in x 43.7 in x 2.3 in. Weight: 28.4 lbs.

### Features & Benefits:

- Power cords sold separately to operate at your desired voltage.
- 8 passively cooled bars eliminate moving parts and provide full-spectrum, broad-coverage light for full-term growth
- High-output 1700  $\mu\text{mol s}^{-1}$  PAR and an impressive efficacy of 2.6  $\mu\text{mol s}^{-1}$  per watt
- Dimmable to 50% when using the Gavita Master Controller and E-Series Adapter
- FCC compliant, UL8800 and IP66 wet-rated for use in wet environments, allowing for versatile placement in growing spaces with low ceilings, vertical racks, benches or even in tents
- Reliably sourced components including Philips Drivers, Samsung white LEDs and Osram deep-red LEDs make the 1700e built to last
- light hangers included for quick, easy installation

## Gavita Pro CMH 315e and 630e SE



The Gavita Pro 315e SE and Gavita Pro 630e SE are available with the Philips 315 watt 3000° Kelvin lamps (for flowering) or 4200° Kelvin lamps (for vegetative or supplemental use). They are a compact fixture with a new type of reflector mounting system: Instead of a bracket which holds the reflector on both sides, the reflector is now clipped on the ballast housing itself. This reduces size and weight, enables easy replacement and provides optimal positioning and stability of the small reflector. Ideal for fixed installation with brackets on Unistrut (C profile) systems, the Repeater Bus cabling system allows you to daisy-chain the fixtures in your installation. A Repeater Bus interconnect cable is included with every fixture. You can connect 5 strings of 100 fixtures per Master controller port. This enables you to control up to 1000 fixtures on one EL2 controller.

- The CMH ballasts can be remote controlled by the Gavita Master Controllers.
- The integration of ballast and reflector results in a compact fixture.
- All Gavita CMH fixtures are FCC tested and compliant.
- Compatible with Gavita EL controllers.
- This reflector is made of Miro® aluminum which provides optimal reflectance to your crop.



## Gavita Slimline 1000E DE 208-240V



- Only 9.7 inch high makes the 'Slim Line' the shortest 240 volt Gavita fixture ever. Highest light output and maintenance over time. It has the HR96 reflector for the maximum efficiency and uniformity. Highly efficient passive cooling of ballast for a longer lifetime of the electronics. Sealed housing with Gore-Tex® ventilation plug and controllable output up to 1150 Watt. Equipped with Repeater Bus interface which is a double-port connector on the ballast that allows you to directly daisy chain 100 fixtures per string and five strings per controller port to connect a maximum of 500 fixtures per controller port.
- 
- Accessories included in box:
- Power Cord US 240 Volt IEC C13 2.5 m/8 ft
- Gavita Kit - Eye Bolts
- Gavita Interconnect Cable for Repeater Bus Gray 6P6C 2 m/6.5 ft
- 
- Accessories sold separately:
- Gavita E-Series 240V IEC Power Cord w/ Ferrite 16 ft
- Gavita 1-5/8 in Mounting Bracket Assembly Kit
- Gavita 2 in Mounting Bracket Assembly Kit
- Gavita Master Controller EL1 - Gen 2
- Gavita Master Controller EL2 - Gen 2
- Gavita Repeater Bus Connection Kit



**Build Y**



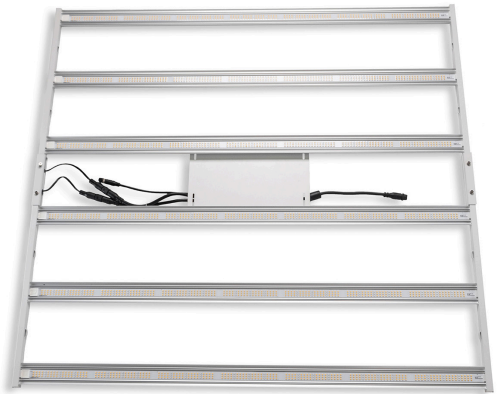
# Your Own Grow

## GrowStation 640W

- Growstation LED is powered by MeanWell drivers
- Excellent lighting performance certified by 3rd party laboratory SGS
- PPF: 1570 micromoles per second & 2.45 micromole/J
- Dimmable: dimmable range from 0 ~ 100% at 10% increments
- FCC Class A certified, ETL certified conforms to UL 1598: 2018 Ed.4 & CSA 02.2#250.0:2018 Ed.4
- The whole fixture is IP65 rated suitable for humid environment & wet location
- Reduce air conditioning usage up to 35% compared with 1,000W HID lighting
- Basic Dimmer: 0,,100% Range, Input Voltage: 11 av, Power Consumption: 2 watt, Operating temperature: 14~104F, Warranty: One year limited.
- Daisy Chain Dimming Cable is IP65 rated

### GROWStation 640W Specifications

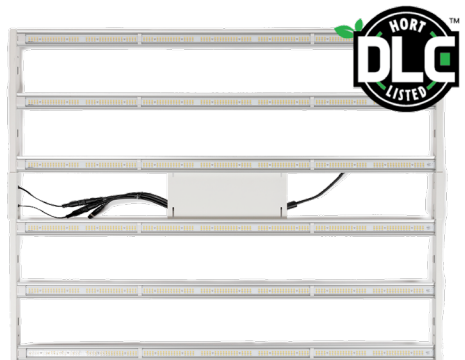
- PPF: 1570 umole/s
- Input Power: 640W
- Efficacy: 2.45 umole/J
- Input Voltage: 110-277V
- Dimensions: 45' L x 42'W x 3' H
- Weight: 33 lbs
- Max. Ambient Temperature: 95 F
- Dimming: 0-10V
- Light Distribution: 120 x 115 Degree
- Average Life Hours: 50,000
- Power Factor: >0.9
- Certifications: FCC, cETL, Wet Location
- Warranty: 3 Years Limited
- Max. Current by 120V 5.6A
- Max. Current by 208V 3.2A
- Max. Current by 240V 2.77A
- Max. Current by 277V 2.42A



## GrowStation 640W Pro 1800

### GROWSTATION 640W PRO 1800 Specifications:

- PPF: 1800 umol/s
- Efficacy: 2.8 umol/J
- Dimensions (inches): 45.4 x 42.4 x 3.4
- Weight (lbs): 30
- Light distribution: 125° x 120°
- Average Life Hours : 50,000
- Power Factor: >0.95
- Input Voltage (V): Max. Current (A)
- 120: 5.60
- 208: 3.20
- 240 : 2.77
- 277: 2.42
- Warranty: 5 years limited
- Certification: DLC, ETL, FCC
- Max. Ambient Temp.: 95°F



Anden has been an innovator in the development of precise humidity control systems for commercial and residential applications since 1954. Trust Anden to deliver the reliable products and expert technical support that are critical to successful harvests. At capacities up to 300 pints per day and up to 500 cubic feet per minute of airflow, our dehumidifiers are the only products on the market specifically designed to pull moisture out of the air at lower temperatures.

### **Industrial Dehumidifiers**

Anden A-Series Dehumidifiers' capacities range from 70–130 pints per day of moisture removal. From the serious hobbyist to medium-sized commercial facilities, Anden industrial dehumidifiers are designed to operate effectively in the extreme conditions of any indoor cultivation environment.



**A70**



**A95**



**A95F**



**A130F**



**A130**



**5 YEAR  
WARRANTY**

# Industrial Grow-Optimized Dehumidifiers

Anden AV-Series Dehumidifiers range from 210-320 pints per day of moisture removal. Components utilize materials designed for the most extreme conditions and demanding enterprises. The included Model 77 remote control relays diagnostics from the dehumidifier, giving you simple control of the conditions in your cultivation space (upgrade options available). Sensors and controls can be custom-configured for each facility. Anden AV-Series are recommended for the large, ultrahigh volume industrial facilities.



**A77 Control**



**A210V1**



**A320V1**



**A320V3**



**A710**



## Anden 8840 Control

The Anden 8840 Control Panel is our most advanced monitoring system, designed for the most demanding, grow-focused environments. It gives you the power to monitor and adjust the most crucial aspects of the indoor growth environment with all-in-one, touchscreen control. You can dial in the optimal temperature and humidity levels to create a healthy, grow-optimized environment. The 7" full color display offers a range of benefits: constant monitoring of temperature and humidity, easy adjustments, notifications when systems are active, and filter replacement reminders. Plus, there's an app for iOS and Android to keep you in control on the go. It provides full access to controls using your mobile device, so you can monitor and adjust conditions anytime, anywhere.

- All-in-One Control – Real-time updates on temperature and humidity, plus notifications when systems are active
- Humidity Control – Optimize the performance of your Anden humidity controls
- Temperature Monitoring – Reach your preferred temperature range for maximum growth
- Ventilation Control – Control the flow of fresh air for ideal growth conditions
- 7 inch Touchscreen – The full color display makes it simple to monitor and adjust indoor conditions
- Large Font Size – The most important information is displayed front and center for easy monitoring
- Backlit Display – Easy to read, even in sunlight and includes a constant low-intensity light option
- Screen Lockout – Prevent inadvertent or unauthorized adjustments
- Permanent Memory – Settings, time, and date are maintained during a power outage
- Built to Last – Dependability is at the heart of what we do. That's why we offer a 5-year warranty on this product—so you can grow with confidence



# Mammoth Grow Tents



Mammoth grow tents offer all options possible to growers from the novice to the advanced.

Quality assured with dual stitching, with reflective and durable Mylar, strong framing with plastic protective cornering.

Easy assembly with interlocking tent options. Mammoth grow tents have been designed for growing all types of plants, even those that require specific conditions (Orchids, Aloe Vera, citrus plants, carnivorous or tropical plants). These indoor grow tents incorporate a hammered effect Mylar in the material which acts as a barrier to toxins generated by PVC and also has a reflectivity value of over 95%.

Whether you are a beginner or a more experienced gardener, Mammoth grow tents will bring you total satisfaction in knowing you can reproduce plants and control the environment in a portable environment.

<b>Elite• HC</b> (28mm poles, 1680D mylar, waterproof floor, linkable)	Assembled Size (US) WxDxH (ft)
Mammoth Elite• HC 480L	7.9 x 15.8 x 7.9
Mammoth Elite• HC 600L	9.8 x 19.7 x 7.9
Mammoth Elite• HC 900L	14.8 x 29.5 x 7.9
Mammoth Elite• HC 1200L	19.69 x 39.37 x 7.9
Mammoth Elite• HC 1500L	24.6 x 49.2 x 7.9
<b>Pro• HC</b> (22mm poles, 600D mylar)	Assembled Size (US) WxDxH (ft)
Mammoth Pro• HC 120	3.9 x 3.9 x 7.4
Mammoth Pro• HC 150	4.9 x 4.9 x 7.4
Mammoth Pro• HC 240L	3.9 x 7.9 x 7.4
Mammoth Pro• HC 300L	4.9 x 9.8 x 7.4
Mammoth Pro• HC 240	7.9 x 7.9 x 7.4
Mammoth Pro• HC 300	9.8 x 9.8 x 7.4
<b>Elite S.A. (stand alone)</b> (25mm poles, 600D mylar)	Assembled Size (US) WxDxH (ft)
Mammoth Elite S.A. 360S	7.9 x 11.8 x 7.4
Mammoth Elite S.A. 480L	7.9 x 15.8 x 7.4
Mammoth Elite S.A. 600L	9.8 x 19.7 x 7.4
Mammoth Elite S.A. 900L	14.8 x 29.5 x 7.4
Mammoth Elite S.A. 1200L	19.69 x 39.37 x 7.4
<b>Gavita Elite HC</b>	Assembled Size (US) WxDxH (ft)
Mammoth Elite HC G1	3.7 x 5.11 x 7.9
Mammoth Elite HC G2	5.11 x 7.3 x 7.9
<b>Gavita Elite</b>	Assembled Size (US) WxDxH (ft)
Mammoth Elite G1	3.7 x 5.11 x 7.11
Mammoth Elite G2	5.11 x 7.3 x 7.11
<b>Pro•</b> (22mm poles, 600D mylar)	Assembled Size (US) WxDxH (ft)
Mammoth Pro• 80	2.6 x 2.6 x 5.9
Mammoth Pro• 90	3.0 x 3.0 x 5.9
Mammoth Pro• 100	3.3 x 3.3 x 6.6
Mammoth Pro• 120	3.9 x 3.9 x 6.6
Mammoth Pro• 150	4.9 x 4.9 x 6.6

Mammoth Pro• 240	7.9 x 7.9 x 6.6
Mammoth Pro• 300	9.8 x 9.8 x 6.6
Mammoth Pro• 120L	3.9 x 2.0 x 5.3
Mammoth Pro• 240L	7.9 x 3.9 x 6.6
Mammoth Pro• 300L	9.8 x 4.9 x 6.6
<b>Classic•</b> (19mm poles, 600D mylar)	Assembled Size (US) WxDxH (ft)
Mammoth Classic• 60	2.0 x 2.0 x 4.6
Mammoth Classic• 80	2.6 x 2.6 x 5.9
Mammoth Classic• 100	3.3 x 3.3 x 6.6
Mammoth Classic• 120	3.9 x 3.9 x 6.6
Mammoth Classic• 150	4.9 x 4.9 x 6.6
Mammoth Classic• 200	6.6 x 6.6 x 6.6
Mammoth Classic• 240	7.9 x 7.9 x 6.6
Mammoth Classic• 240L	7.9 x 3.9 x 6.6
<b>Propagator &amp; Dryer</b>	Assembled Size (US) WxDxH (ft)
Mammoth Propagator 90	3.0 x 2.0 x 2.0
Mammoth Propagator 125	3.9 x 2.0 x 4.0
Mammoth Dryer 90	3.0 x 3.0 x 5.9
<b>Lite•</b> (16mm poles, 170D mylar)	Assembled Size (US) WxDxH (ft)
Mammoth Lite• 45	1.47 x 1.47 x 3.9
Mammoth Lite• 60	2.0 x 2.0 x 4.6
Mammoth Lite• 80	2.6 x 2.6 x 5.3
Mammoth Lite• 90	3.0 x 3.0 x 5.3
Mammoth Lite• 100	3.3 x 3.3 x 5.9
Mammoth Lite• 120	3.9 x 3.9 x 6.6
Mammoth Lite• 240L	7.9 x 3.9 x 6.6





### **Mammoth Classic+**

A high quality tent for the hobby grower, this mid-range grow room has features normally associated with higher end tents.

- High light proofing (Level 1)
- Equipment tubes are strong enough to hold 20kg
- Large doors - easy to access and work in various intakes and exhausts make setup flexible
- Straps and hooks for easy integration



### **Mammoth Pro+**

A high end range, ideal for the professional grower.

- High light proofing (Level 2)
- Polypropylene corners for maximum rigidity
- Equipment tubes that have 30kg load capacity
- Large doors - easy to access and work in
- Material is washable inside and out
- Straps and hooks for easy integration of equipment
- Light, easy-to-transport material and is easy to assemble



### **Mammoth Elite+**

The ultimate in quality for the professional grower.

- Heavy duty frame, corners and fabric, with stainless steel / aluminium click system
- Dual multiple intake and extraction socks
- Equipment tubes that have a 75kg load capacity
- Wide easy access door, with jam proof / waterproof zipper.
- Waterproof floor
- Large doors - easy to access and work in
- Material is washable inside and out
- Modular: customize your own grow room by combining different Elites sizes - unique linkable panels - your shape, your size

# AIR-POT

For plants to thrive they need healthy roots, but standard pots deform roots which seriously compromises the plant. The Air-Pot system does the opposite, actively enhancing the plant, by making it develop a mass of healthy fibrous roots. This maximises its ability to absorb nutrients and water, leading to a healthier, faster growing plant. Nurseries in many countries are reaping the benefits of the Air-Pot system, from the small to the very large. The Air-Pot system is truly unique in its ability to containerise any size of plant.



Base Color	Litres	Nursery Equiv.	Outside Wall Height (inches)	Outside Diameter (inches)	Recommended applications.
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## Air-Pot Hydro KITS - (includes wall, base, fixing(s))

*Small Cones - 1 cone reservoir - 1 small fixing - base placed up the wall 1 row/.59" (15mm) - volume based on inside measurement*

Prop Cell	1.02	Prop	5.7	4.75	Ideal for germinating seeds and cuttings.
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*Large Cones - 2 cone reservoir - 1 large fixing - base placed up the wall 3 rows/2.36" (60mm) - volume based on inside measurement*

No. 1	3.1	1 gal	8.5	7.5	Great for cuttings & seedlings, full term growth & bloom.
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*Large Cones - 2 cone reservoir - 2 large fixings - base placed up the wall 3 rows/2.36" (60mm) - volume based on inside measurement*

No. 3	9.2	3 gal	10.8	10.5	Will accommodate a 2' to 6' plant through vegetation and full
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No. 5	14.6	5 gal	12.4	11.5	Great for full term growth up to 6', also for long term growing.
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No. 7	22	7 gal	13.2	13.5	Great for full term growth up to 6', also for long term growing.
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*Large Cones - 3 cone reservoir - 3 large fixings - base placed up the wall 3 rows/2.36" (60mm) - volume based on inside measurement*

No. 10	30.9	10 gal	16.5	16.5	Great for indoor and outdoor growth up to 8', also for long term
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LARGER SIZES AVAILABLE UPON REQUEST



Rambridge Wholesale Supply 2021



PRO

**CHIKAMASA**

SINCE 1910

Chikamasa CO. is a family owned pruner and garden scissor company located in Osaka, Japan. Chikamasa scissors hand crafted in Japan are the highest quality garden scissor available to trimmers and pruners. If your product is grapes, herbs or any agriculture, you are need of an efficient harvest tool that will help prevent wrist aches and pain caused by conventional garden scissors. Chikamasa is designed with bonsai sculpting in mind. Chikamasa has developed the perfect scissor for specialty gardeners who work long hours with attention to detail.

100 years ago founder SHOJIRO WADA (grandfather of current president) followed the family business of manufacturing flower shears when he was 15 years old at Zaimokucho, Sakai, Osaka. The idea was to produce high quality products. Chikamasa has more than 80 types original shears and scissors for agriculture use, gardening, handicrafts and office works etc. They have been developing useful products for users. Their products are supported overwhelmingly by professionals and amateurs.



### **Chikamasa B-220S**

Total Length: 130mm

Blade Length: 33mm

Weight: 42g

Blade: high-quality carbon steel

Grip: elastomer resin



### **Chikamasa B-300**

Total Length: 157mm

Blade Length: 35mm

Weight: 47g

Blade: high-quality carbon steel

Grip: ABS



### **Chikamasa B-300S**

Total Length: 157mm

Blade Length: 35mm

Weight: 47g

Blade: high-quality stainless steel

Grip: ABS



### **Chikamasa B-300SF**

The Chikamasa B-300SF is yet another creation from Chikamasa Japan's quality craftsmanship. Stainless steel coated with sap resistant Fluorine, the B300SF cuts with ease and efficacy.

Total Length: 157mm

Blade Length: 35mm

Weight: 48g

Blade: high-quality stainless steel / high-quality fluorine coating

Grip: ABS



### **Chikamasa B-500H**

Total Length: 155mm

Blade Length: 35mm

Weight: 42g

Blade: high-quality carbon steel

Grip: ABS



### **Chikamasa B-500S**

Total Length: 155mm

Blade Length: 35mm

Weight: 42g

Blade: high-quality stainless steel

Grip: elastomer



### **Chikamasa B-500SL**

Model B-500SL has a blade angled, which makes them convenient for working at high places.

Total Length: 155mm

Blade Length: 35mm

Weight: 42g

Blade: high-quality stainless steel

Grip: elastomer



## Chikamasa B-500SF

Total Length: 157mm

Blade Length: 35mm

Weight: 47g

Blade: high-quality stainless steel / fluorine coating

Grip: ABS



## Chikamasa B-500SLF

Total Length: 155mm

Blade Length: 35mm

Weight: 42g

Blade: angled, high-quality stainless steel / fluorine coating

Grip: elastomer



## Chikamasa B-500SKF

Total Length: 155mm

Blade Length: 35mm

Weight: 42g

Blade: antibacterial, high-quality stainless steel / fluorine coating

Grip: elastomer



## Chikamasa JP-2000

JP-2000 are gardening shears for wide range of uses. The jagged blade allows you to cut branches without sliding

Total Length: 195mm

Blade Length: 45mm

Weight: 150g

Blade: high-quality carbon steel

Grip: PA+GF, elastomer





### **Chikamasa CRI-160SP**

Total Length: 160mm

Blade Length: 38mm

Weight: 45g

Blade: high-quality stainless steel

Handle: elastomer/ CAP: PP



### **Chikamasa CRI-360SFW**

If you are looking for the perfect snip that will last you a life-time, consider the CRI360 for a sharp tip to pick a flower for your loved one or some fresh herbs from your garden. Equipped with a unique wire cutting groove to snip thin plant wire without damaging the scissors. The CRI360 series are ideal for wet trimming, cloning, de-leafing, as well as general harvest plant preparation.

Total Length: 160mm

Blade Length: 45mm

Weight: 60g

Blade: high-quality stainless steel / high-quality fluorine coating

Handle: PVC / CAP : PP



### **Chikamasa CRI-550SRF**

With ergonomic comfort of the curved Chikamasa scissor, the NEW CRI550! Made from the highest quality stainless steel, this scissor offers a true curved blade! The CRI550 from Chikamasa features the innovative Fluorine Coating, a sap resistant layer, which prevents buildup on the scissors blades. This means longer use of scissors between cleanings, to allow for more proficiency for even the most elite user.

Total Length: 157mm

Blade Length: 35mm

Weight: 47g

Blade: high-quality stainless steel / fluorine coating

Grip: ABS



### **Chikamasa T-550**

Total Length: 185mm

Blade Length: 48mm

Weight: 105g

Blade: high-quality carbon steel

Grip: steel plate / non slip coating



### **Chikamasa T-550S**

These unique and durable torsion spring loaded Chikamasa trim scissors boast a sharper point, as well as a lasting stainless steel blades. Equipped with a medium tension torsion spring, the T550 will outlast and outperform cheaper traditional spring loaded trim scissors.

Total Length: 185mm

Blade Length: 48mm

Weight: 105g

Blade: high-quality stainless steel

Grip: steel plate / non slip coating



### **Chikamasa T-710GDX**

Total Length: 220mm

Blade Length: 63mm

Weight: 145g

Blade: high-quality carbon steel / hard-chrome plating

Grip: steel plate / non slip coating



### **Chikamasa PSA-G8**

Total Length: 210mm

Blade Length: 52mm

Weight: 255g

Blade: high-quality carbon steel upper blade / high-quality fluorine coating under blade / hard-chrome plating

Handle: die-cast aluminium



### **Chikamasa PST-8**

PST-8 blade makes sharp cut and the reinforcing rib is given near the rivet to enhance strength

Total Length: 190mm

Blade Length: 45mm

Weight: 150g

Blade: high-quality carbon steel

Handle: steel plate / non slip coating





## Tropf Blumat (Drip Irrigation Systems)

The Tropf-Blumat (Drip-Blumat) is a sensor that supplies plants with drips of water via thin tubing. As the soil dries its natural suction power triggers the opening of the Tropf Blumat allowing the water to flow. When the soil is sufficiently moist, the Tropf Blumat automatically stops. The system functions fully automatically.

Every plant, every container or group of plants requires at least 1 Tropf-Blumat adjusted to the individual needs of the plant. Larger containers or surfaces require longer or more than one sensor. All Tropf-Blumats are connected using one supply tube, this allows for flexibility in the layout and is changeable at any time.

- Automatically waters individual plants and only when needed
- Connects directly to your hose tap or rain barrel
- Easily installed with a pair of scissors
- Inexpensive and works for years
- Ideal for small or larger grow areas



## Blumat Digital Moisture Meter

The Blumat Digital is a professional moisture sensor to accurately determine soil pressure, which shows you have thirsty your plans are at the press of a button. In this way, sensitive plans can be given just the right amount of water. Also helpful in successfully overwintering your pot plants. Plants need less water at this time and Blumat Digital helps to prevent damaging overwatering.

### HOW BLUMAT-DIGITAL WORKS:

As roots absorb water from the soil, soil moisture tension increases. Water moves out through the ceramic tip, creating a sub-pressure that is displayed on the LCD. The ability of the soil to withdraw water from the tensiometer increases continuously as soil dries (high value). Irrigation reverses this action. Sub-pressure in the tensiometer draws water back from the soil into the sensor (low value).

The Blumat Digital Sensor functions in the same way as the Tropf-Blumat, however, it does not control watering, but rather serves as a device for measuring the levels of moisture and/ or dryness. It operates using the tensiometer principle and indicates the amount of force necessary for a plant to absorb water, by dryness the values will be correspondingly higher. The sensor should remain stationary for some time for observation purposes.

This method of measurement allows for very accurate recognition of the level of moisture near the roots and therefore, a more exact application of water - whether by hand in large container plantings, for example, for the over- wintering of plants, where it is often necessary to keep a moderate moisture level, or also for use in the summer for monitoring and adjusting the Blumat system. Assessing the moisture level in large containers is no longer a matter guesswork and experience, but rather of concrete numerical data.



## Bluelab Conductivity Pen (EC or PPM)



The Bluelab Conductivity Pen simply tells you that your plants have the right amount of nutrient in your solution and lets you know if adjustments are needed. To feed plants well, we need to know what we're feeding them. Start with a quality nutrient.

Measuring the conductivity every day is the best way to avoid over-diluting or over-concentrating your nutrient solution. Completely change the reservoir solution every 7 days. Top up the nutrient level between changes - so your plants always have the right amount of food.

The Bluelab Conductivity Pen also measures the temperature of the solution, as root health is vital to the success of a crop. Temperature affects the growth rate and structure of a plant so a solution temperature of 18 - 22 °C or 65 - 72 °F is recommended.

## Bluelab pH Pen

The Bluelab Conductivity Pen simply tells you that your plants have the right amount of nutrient in your solution and lets you know if adjustments are needed. To feed plants well, we need to know what we're feeding them. Start with a quality nutrient.

Measuring the conductivity every day is the best way to avoid over-diluting or over-concentrating your nutrient solution. Completely change the reservoir solution every 7 days. Top up the nutrient level between changes - so your plants always have the right amount of food.

The Bluelab Conductivity Pen also measures the temperature of the solution, as root health is vital to the success of a crop. Temperature affects the growth rate and structure of a plant so a solution temperature of 18 - 22 °C or 65 - 72 °F is recommended.



## Bluelab Soil pH Pen

The Bluelab Soil pH Pen provides a pH and temperature reading of soils and media, so you know that the right nutrients will be made available to your plants.

In soils or growing media, pH strongly influences the availability of the microorganisms to plants in the soil. Now you can closely monitor and adjust the pH levels to optimize plant health and performance. It will also measure solutions too... Now isn't that Handy!



## Bluelab Guardian Monitor Connect

The Bluelab Guardian Monitor Connect is not only a constant indicator of the desired levels of pH, conductivity, and temperature of your nutrient solution, it also data logs these critical parameters to your computer for you. It does not stop there. You can access the data via the cloud from a remote mobile device or computer to check for extreme variances to ensure these critical parameters are hitting the mark for crop success.

Just one Bluelab Connect Stick is required to receive wireless data from one or more Guardian Monitor connects. For remote or cloud access, the computer you are already data logging to will need permanent internet access.



# Commercial Cannabis

Rambridge is proud to be an industry leader in the development and planning of commercial cannabis production. With over 35 years of experience in all facets of commercial production, we are dedicated to providing high quality products and service. We work closely with horticultural experts to provide our customers with consultation, design and installation of commercial cannabis system.

Our partners include leading experts in:

- Application Engineering
- Horticultural Lighting
- Environmental and Climate Control Solutions
- Ventilation / HVAC
- Benching Systems
- Cloning Solutions
- Growing Substrates
- Fertilizers and Additives
- Testing /Monitoring - PH / EC Solutions
- Composting
- Clean Entrances
- Professional Consultation
- Vertical Farming



## Composting Greenhouse Residues and Destroying Grow Waste

For greenhouses and for other types of agricultural producers, managing plant waste is a key issue that can result in added operating costs. This is even more true for licensed cannabis producers, who must ensure the complete destruction and denaturation of their plant waste in order to conform to government regulations. An industrial composting system, composed of a BROME composter, a shredder and other complimentary equipment, is both a simple and an effective solution for the management of harvested plant waste.

In greenhouse, composting offers several benefits.

Improve greenhouse grow waste disposal operations:

- All plant parts can be composted;
- Reduction of operating costs in comparison with other destruction methods;
- Better greenhouse production when finished compost is added to the substrate;
- Heat recovery from the composter for use in the greenhouse;
- Disposal of diseased plants through composting;
- Possible partnership with neighbors, allowing for the implementation of a resource pool for carbon or nitrogen feedstocks;
- Resale opportunity for surplus compost.

Conform to disposal standards

- Breakdown and denaturation of plant residues;
- Low cost compared to waste collection;
- Social acceptability of composting.

Easy operation

- Cleanliness;
- Minimal operating costs;
- Few workers needed;
- Simple installation;
- Better control over the composting process;
- Better control over odor management;
- Better control in all weather conditions : air temperature, precipitation, evaporation and the risk of unpleasant odors.

BROME Compost offers different composter models and complementary equipment as well as services to adapt to the composting needs of your greenhouse. For a growing facility, a made to measure composting system is a simple and efficient method to ensure the destruction and denaturing of plant residues in compliance of regulations.





## aluminium Growing Benches

All our growing benches are customer made and exist of an aluminium bench top, mounted on hot dip galvanised steel legs. The aluminium bench top can be supplied in an assembly model (which is very useful for export) or in a welding model. We can supply both designs with several side profiles and with any kind of bottom. Our benches are available in rolling or static design. Installation of our benches system belongs, of course, also to the possibilities.

### Supports of the growing benches

The supports of our various models are made of hot dip galvanised steel tubing. As standard the supports are provided with adjustable cross rails. It is very easy to set the benches on waterlevel or under a small angle of inclination. Also delivering of aluminium supports belongs to our skills. If desired we provide the supports with a special host-guide-system. It is also possible to deliver special supports for easy mounting in the "full ground".

### Aluminium bench top of welding model

The aluminium bench top of the welding model will be supplied in parts of aprox. 6 -7 meters long and are mounted by means of couple joints. To give support for the bottom we weld special I-profiles in the bench top. As standard our rolling benches are provided of a anti-tipp construction. The more wider static tables are provided, as standard, with extra profiles to guaranty a stable construction. Standard side profiles of the welding model: 10,13,16 cm. Specifications on request.

### Aluminium bench top of assembly model

The aluminium bench top of the assembly model exists of loose aluminium profiles, with a length of 6 - 7 meter, which have to be connected by screws right on the job. Owing to this the assembly model is very easy to transport and quite suitable for export. The I-profiles which give support to the bottom are mounted very easily by the customer. The rolling benches of this model are also provided, as standard, of an anti tipp construction. The more wider static tables are provided, as standard, with extra profiles to guaranty a

stable construction. Standard side profiles of the assembly model: 6, 9, 12, 18 cm. Specifications on request.

### Cultivation bench bottoms

For each type of cultivation we provide your bench system with the correct bottom. Here is a selection of the bottoms on offer:

- ebb/flow bottoms in aluminium or plastic
- galvanised wire, extended metal bottoms
- tempex flat plate bottoms
- tempex bottoms with ventilation holes
- eternite plate bottoms
- plasticol, shinplay bottoms
- cultivation gutters
- aluminium bottoms

Various bottoms can be provided with heated top system and/or aluminium foil.



K O S T E N B E S P A R E N D M A A T W E R K V O O R U W B E D R I J F !



## STRUCTURE

Light source	LED
LED Thermal Management	Passive or Water cooling
Estimated annual power consumption	59 MWh
Power peak	23 kW
Circuit breaker	40 A
Dimensions	8 m W x 6 m L x 3 m H
Required space	10 m W x 8 m L x 3.5 m H
Facility requirements	Insulation and utilities
Required utilities	Water, Sewage, Electricity, Internet
Rack material	Aluminium
Gutter material	PVC
Collector gutters material	Stainless steel

## VERA AUTOMATION

Interface	Touch screen panel and remote VPN access via HTML compatible device
Controls	Light levels, Light cycles, Mobile gutters, Irrigation, Nutrients, Dosing, Humidity, Temperature, CO <sup>2</sup>
Method	Fully automatic with recipes or set values manually
Data	Includes for example histograms of growing conditions and data export for example to ERP

## HARVEST AND IRRIGATION

Irrigation solutions	2 – 3 fertilizer solutions, pH agent, recirculating solution, control by EC and pH sensors
Capacity	5700 pots with 15 cm spacing
Growing time	27 – 35 days* *Varies depending on plant, variety and growing recipe

## GROWING CONDITIONS

PPFD	Set between 0 – 190 $\mu\text{mol}/\text{m}^2/\text{s}$
Day cycle	Day and night length can be adjusted
CO <sup>2</sup>	Adjustable 200 – 2000 ppm
Relative humidity	Adjustable 55 – 85 %
Growing temperature	Adjustable 15 – 30 °C



Suitable for growing leafy greens, flowers and seedlings



### MODULE STRUCTURE

Light source	LED
LED Thermal Management	Passive
Annual power consumption	222 MWh (7300h and 6 layers)
Module dimensions	6 m W x 6 m L x 6,75 m H (6 layers)
Modularity	2-6 layers, 1-16 modules in series, any amount in parallel
Facility requirements	Insulation and utilities
Required utilities	Water, Sewage, Electricity, Internet
Frame material	Aluminium
Gutter material	PVC
Collector gutters material	Stainless steel

### VERA AUTOMATION

Interface	Touch screen panel and remote VPN access via HTML compatible device
Controls	Light levels, Light cycles, Mobile gutters, Elevators, Irrigation, Nutrients, Dosing, Humidity, Temperature, Processing, CO <sup>2</sup>
Method	Fully automatic with recipes or set values manually
Data	Includes for example histograms of growing conditions and data export for example to ERP

### HARVEST AND IRRIGATION

Irrigation solutions	2 – 3 fertilizer solutions, pH agent, recirculating solution, control by EC and pH sensors
Capacity	14 500 pots each module with 15 cm spacing
Growing cycle length	27 – 35 days* *Varies depending on plant, variety and growing recipe

### GROWING CONDITIONS

PPFD	Set between 0 – 250 $\mu\text{mol}/\text{m}^2/\text{s}$
Day cycle	Day and night length can be adjusted
CO <sup>2</sup>	Adjustable 200 – 2000 ppm
Relative humidity	Adjustable 55 – 85 %
Growing temperature	Adjustable 15 – 30 °C



**Suitable for growing leafy greens, flowers and seedlings**





MOBILE STORAGE SYSTEMS INC.

## HORTICULTURE

Pipp Horticulture is the leading provider of movable vertical racking systems that maximize cultivation space.

With 40 years of experience serving the nation's top retailers, PIPP has engineered lower-cost solutions that can exponentially grow your production without adding an inch to your footprint. Double or triple your canopy by maximizing your cubic grow space with more efficient workflow. Their mobile multi-level rack and tray system is the most cost-effective investment you can make.

- NSF Certified
- Efficient
- Easy to Clean
- Lightweight
- ADA & Seismic Compliant
- Sustainable
- Safe & Durable



Wachsen carts and racks are a masterpiece of engineering and manufacturing. They are designed in Canada and manufactured specifically for cannabis producers. Every feature, every material is engineered to give ultimate performance. With its unsurpassed reliability, Wachsen carts are built to last. Wachsen carts are backed with a lifetime warranty to ensure a high return on investment. Increase your efficiency with the best carts out there; Wachsen Professional Cannabis racks and carts. Wachsen carts are made from 304 food grade stainless steel and treated with an electropolishing process for improved corrosion and abrasion resistance. This same process also makes our carts easy for cleaning and sanitizing. As Wachsen carts are built for commercial cannabis growers, they come standard with large, sealed bearing swivel casters for easy movement and hitch & pin brackets for trolley and automated system transport.

- No stagnant water after washing; all parts are built with drain angles
- Full stainless steel 304 construction; Food grade stainless steel and treated with an electropolishing process for improved corrosion and abrasion resistance
- 5" Sealed bearing casters – Front wheels swivel and lock
- Sealed poles prevent dirt and microbial build up
- Polished welds
- Reinforced corners
- Tow bar and tow pin, towable carts
- "Cart washer" friendly
- Limited lifetime warranty

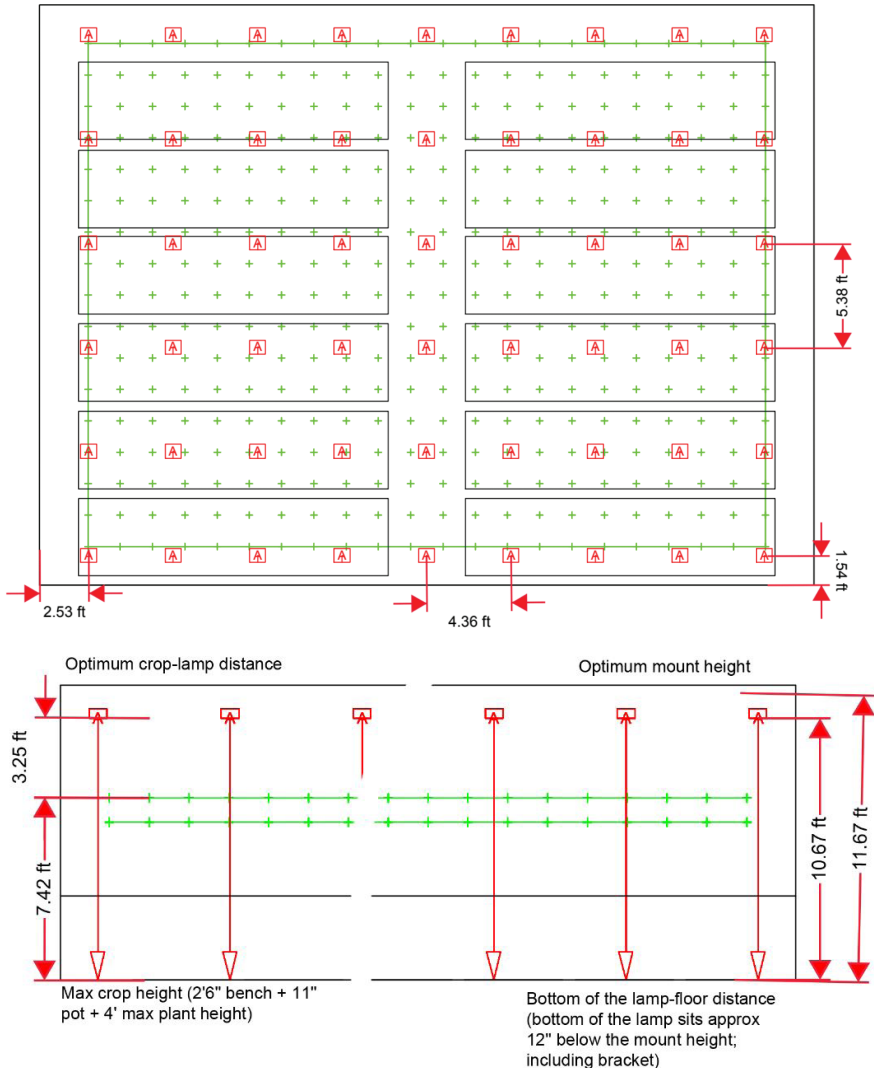


## Custom Lighting Layouts

When considering supplemental lighting for your greenhouse operation, it is important to evaluate the following four factors:

1. Quantity (light intensity)
2. Duration
3. Quality (spectrum)
4. Distribution (uniformity)

When light is insufficient, it could hinder crop development and yields. Find out how much light is needed, how to measure existing light levels and the amount of light missing from your operation. Start your FREE personalized lighting layout today!





Dehumidifier placement is crucial to the efficient performance of your grow space.

It's all about creating predictable conditions, which are achieved by being intentional and specific about the placement and capabilities of your equipment.

Whether one unit is getting the job done, or you're up to 15 dehumidifiers and counting, take these tips into account so you can maximize predictability, efficiency, and growth.

- **Even Distribution**
- **Maximize Airflow**
- **Remote Control**
- **Placement Options**
  - o Suspended
  - o Freestanding
  - o Ducted
- **A Helping Hand with Installation**
- **For full specs visit [rambridge.com](https://rambridge.com)**



[illegible]

