

FLEXSTAR

A wide-angle photograph of a large, modern greenhouse. The interior is filled with rows of green plants in red pots, arranged in long aisles. The greenhouse has a high, arched metal frame with a transparent glass or plastic covering. The lighting is bright, suggesting natural light coming through the roof and walls.

For Greenhouse and Vertical Farming

Product Catalog

ADVANCED GROW LIGHTING

GREENHOUSE

VERTICAL FARMING

GROW SYSTEM

CONTROL



LTL
250W 260W
(P1-P2)



NOVA
800W
(P3-P4)



LINEAR
630W
(P5-P6)



INTERLIGHT
100W
(P11-P12)



HPS DE
1000W
(P13-P14)



NOVA
800W
(P3-P4)



T5 BAR
9W 18W
(P9-P10)



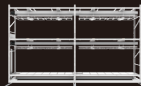
VERTILUX
400W 800W
(P7-P8)



VERTICAL GROW SYSTEM
(P17)



ROLLING BENCH
(P18)



SMART GROW SYSTEM
(P18)



X2A
(P15-P16)



ZEUS PRO
(P15-P16)

GREENHOUSE GROWING SOLUTIONS

With 15 years of experience in the agriculture industry, we offer complete solutions and customized designs for our various greenhouse customers. Our offerings include precise lighting plans, specific spectra for different plants, and fixture designs tailored to various vertical structures. We aim to ensure stable, high-quality yields while saving energy.

Energy Friendly

High-efficiency lights reduce costs and carbon footprint, offering both economic and environmental benefits to growers aiming for more sustainable operations

Professional Growing Solutions

Tailored solutions include selecting the light type, spectrum, power, quantity, and designing the layout to achieve the target PPFD for different plants in diverse greenhouses

Minimal Shadows

Compact design for minimized shadows in the greenhouse and optimizes light distribution for enhanced plant growth

Harsh Climate Design

Reliable products adapted to high/low temperature and humidity in greenhouses

Climate Adaptable

Smart dimming functions adapt to sunlight changes to provide stable lighting for plants

VERTICAL FARMING SOLUTIONS

In addition to indoor growing, we also offer complete customized solutions for vertical farming customers. Our designs focus on high-quality and energy-saving yields.

Professional Solutions

Tailored design and precise lighting plans

Reliable Products

IP67 Protection, 5-year warranty

High Efficiency

Up to 4.0 $\mu\text{mol/J}$,
DLC listed

Customized Spectrum

From R2 to R9, FR/UV,
spectrally tunable

Smart Control

RS485/0-10V Smart
multi-light controller



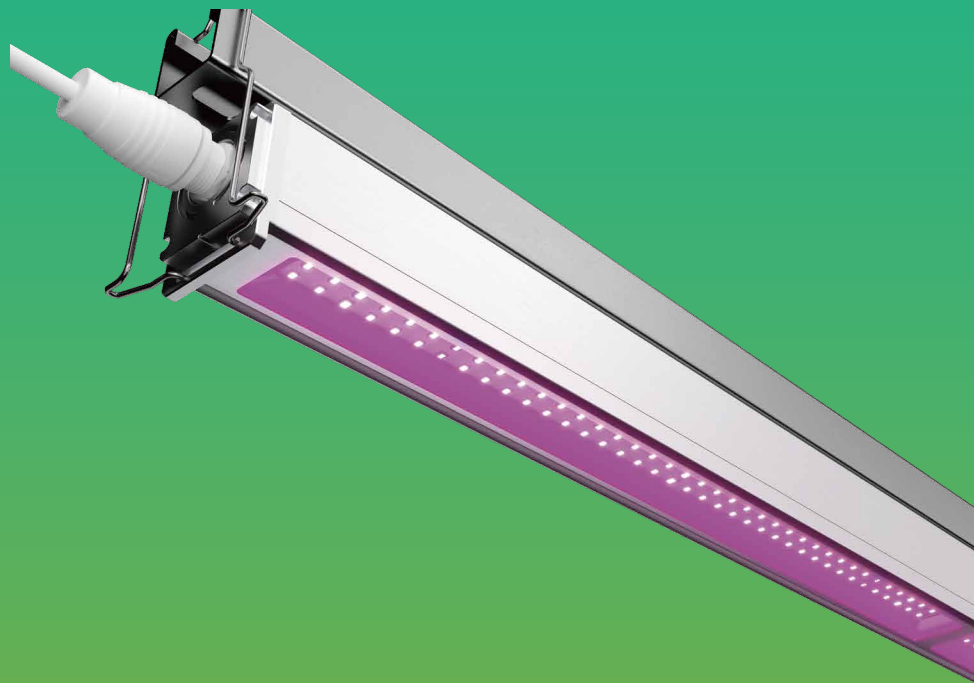
GREENHOUSE LED

THE LTL LINE-UP

LTL 250W DRB/FR

LTL 260W DRBW/FR

**ENGINEERED FOR HIGH-EFFICIENCY
GREENHOUSE PERFORMANCE**



LTL LED FEATURES

- **Exceptional Light Efficiency (PPE 4.0 $\mu\text{mol/J}$)**

Maximizes photosynthetic light output while minimizing energy costs — ideal for high-performance cultivation.
- **Independent Far Red Channel for EOD Treatment**

Provides targeted end-of-day Far Red lighting to improve plant morphology and enhance crop quality; can be controlled via a separate channel.
- **Seamless End-to-End Connection**

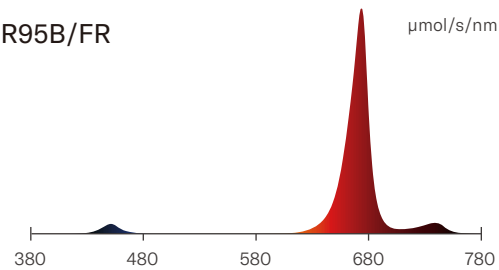
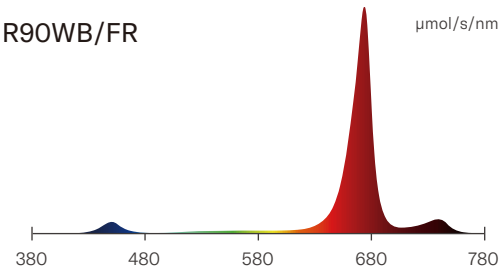
Fixtures connect directly for a clean, continuous lighting layout with minimal gaps.
- **Greenhouse-Optimized Design**

Shadow-free profile preserves natural sunlight exposure; built to withstand greenhouse conditions.

SPECIFICATIONS

Model	Input Power	Input Voltage	PPF (400-700nm)	Efficacy	BPF (380-800nm)	Product Dimensions	Weight
LTL 250W DRB/FR HE	250W (Main 230W+FR 20W)	277-480V	920 $\mu\text{mol/s}$	4.0 $\mu\text{mol/J}$	1000 $\mu\text{mol/s}$	48" $\times$ 2.4" $\times$ 2.7" 121.5 $\times$ 6.0 $\times$ 6.8 cm	8.2 lbs/3.7 kg
LTL 260W DRBW/FR HE	260W (Main 240W+FR 20W)	277-480V	920 $\mu\text{mol/s}$	3.85 $\mu\text{mol/J}$	1000 $\mu\text{mol/s}$	48" $\times$ 2.4" $\times$ 2.7" 121.5 $\times$ 6.0 $\times$ 6.8 cm	8.2 lbs/3.7 kg
LTL 250W DRB/FR	250W (Main 230W+FR 20W)	277-480V	800 $\mu\text{mol/s}$	3.5 $\mu\text{mol/J}$	875 $\mu\text{mol/s}$	48" $\times$ 2.4" $\times$ 2.7" 121.5 $\times$ 6.0 $\times$ 6.8 cm	8.2 lbs/3.7 kg
LTL 260W DRBW/FR	260W (Main 240W+FR 20W)	277-480V	800 $\mu\text{mol/s}$	3.35 $\mu\text{mol/J}$	870 $\mu\text{mol/s}$	48" $\times$ 2.4" $\times$ 2.7" 121.5 $\times$ 6.0 $\times$ 6.8 cm	8.2 lbs/3.7 kg

SPECTRUM OPTIONS



GREENHOUSE LED

THE NOVA LINE-UP

Nova 800W HB DRB/FR

Nova 800W HB DRBW/FR

**HIGH-OUTPUT LED DESIGNED FOR
INDUSTRIAL HIGH-BAY CULTIVATION**



NOVA LED FEATURES

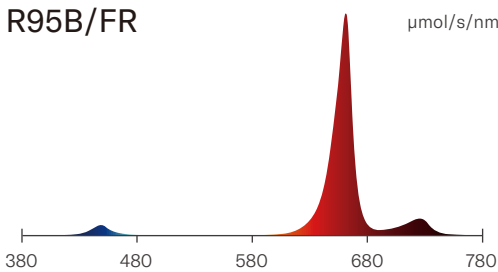
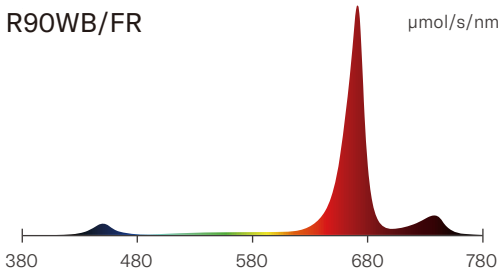
- **High Light Output & Efficiency**
(PPE 3.5 $\mu\text{mol}/\text{J}$, BPF 2800 $\mu\text{mol}/\text{s}$) Delivers powerful and uniform PAR output with excellent energy efficiency, ideal for high-bay cultivation.
- **Independent Far Red Channel for EOD Treatment**
Enables end-of-day Far Red application to regulate plant structure and improve crop quality; can be controlled independently from the main spectrum.

- **Superior 1:1 HPS Replacement**
Fits directly into existing HPS layouts while outperforming 1000W HPS fixtures in output and efficiency — with reduced power consumption and heat.
- **Durable Lens Protection & Long-Term**
Light Output Integrated protective lenses and top-tier diodes ensure Q90 (PPF maintenance > 90%) for over 100,000 hours — delivering reliable, consistent performance over time.

SPECIFICATIONS

Model	Input Power	Input Voltage	PPF	Efficacy	BPF	Product Dimensions	Weight
Nova 800W HB DRB/FR	800W (Main 720W+FR 80W)	277-480V	2520 $\mu\text{mol}/\text{s}$	3.5 $\mu\text{mol}/\text{J}$	2800 $\mu\text{mol}/\text{s}$	23.1"L × 12.5"W × 3.2"H 58.5 × 31.8 × 8.2cm	26.5 lbs/12 kg
Nova 800W HB DRBW/FR	800W (Main 720W+FR 80W)	277-480V	2375 $\mu\text{mol}/\text{s}$	3.3 $\mu\text{mol}/\text{J}$	2640 $\mu\text{mol}/\text{s}$	23.1"L × 12.5"W × 3.2"H 58.5 × 31.8 × 8.2cm	26.5 lbs/12 kg

SPECTRUM OPTIONS



GREENHOUSE LED

THE LINEAR LINE-UP

LTL 630W R8W LTL 630W R9B

WHY GO LINEAR TOPLIGHT?

High Efficiency

up to **3.7** $\mu\text{mol/J}$

Shadow-free

Linear design with minimized shadow in the greenhouse.

BEST USED FOR GREENHOUSES

POWERED BY



LINEAR LED FEATURES

- Linear design with minimized shadow in the green-house
- PPE up to 3.7 $\mu\text{mol}/\text{J}$ with Samsung 301B and Osram diodes
- Multiple spectral options for different plants
- 5-year warranty

SPECIFICATIONS

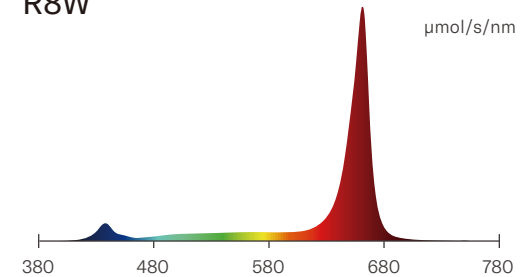
Model	Order Code	PPF	Efficacy	Input Voltage	Fixture Dimensions	Weight
LTL 630W R8W	307710	2016 $\mu\text{mol}/\text{s}$	3.2 $\mu\text{mol}/\text{J}$	100V-277V 347-480V	46.7"L $\times$ 3.3"W $\times$ 3.3"H 118.6 $\times$ 8.5 $\times$ 8.5cm	27.5lb / 12.5kg
LTL 630W R9B	307711	Up to 2330 $\mu\text{mol}/\text{s}$	3.7 $\mu\text{mol}/\text{J}$	100V-277V 347-480V	46.7"L $\times$ 3.3"W $\times$ 3.3"H 118.6 $\times$ 8.5 $\times$ 8.5cm	27.5lb / 12.5kg

PRODUCTS

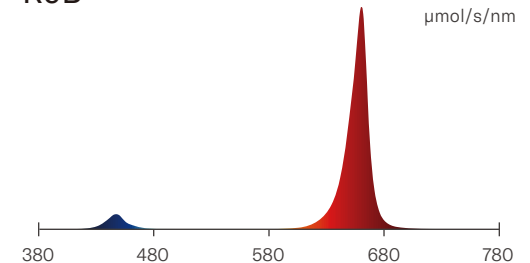


SPECTRUM OPTIONS

R8W



R9B



VERTICAL FARMING

THE VERTILUX LINE-UP

VertiLux 400W Front LED

VertiLux 800W Dual LED

WHY GO VERTILUX?

High Efficiency

up to **3.2** $\mu\text{mol/J}$

Vertical Design

Vertical design specially for indoor farming

BEST USED FOR
VERTICAL FARMING



VERTILUX FEATURES

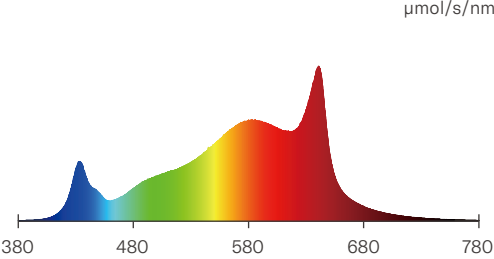
- Front (400W)/Dual (800W) side light emission for vertical farming
- High efficacy 3.2 μ mol/s
- 0-10V smart control
- Vertical design saves space, allowing for the growth of more plants in the same area
- Uniform light distribution ensures consistent coverage across all plants

SPECIFICATIONS

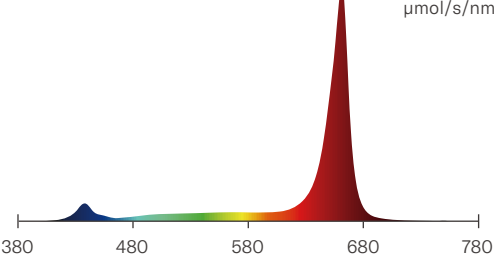
Model	PPF	Efficacy	Input Voltage	Input Power	Fixture Dimensions	Weight
Flexstar VertiLux 400W Front LED	Up to 1280 μ mol/s	Up to 3.2 μ mol/J	120V-277V 347-480V	400W	40.35"L x 66.42"W x 1.26"H 1025 x 1687 x 32mm	38.4lb/17.4kg
Flexstar VertiLux 800W Dual LED	Up to 2560 μ mol/s	Up to 3.2 μ mol/J	120V-277V 347-480V	800W	40.35"L x 66.42"W x 1.26"H 1025 x 1687 x 32mm	36.8lb/16.7kg

SPECTRUM OPTIONS

R5W



R8W



VERTICAL FARMING

THE T5 LINE-UP

9W

18W

36W

WHY GO T5 BAR?

Flexible

Fits different applications

BEST USED FOR VERTICAL FARMING

POWERED BY



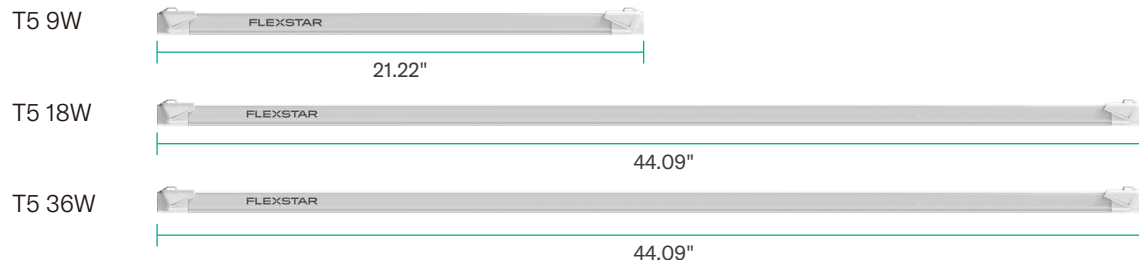
T5 BAR FEATURES

- Different spectrum available for different plants
- Quick extension with simple daisy-chain wiring
- 5-year warranty
- Built in driver and integrated design for easy installation and better operation
- Slim T5 size fits different applications

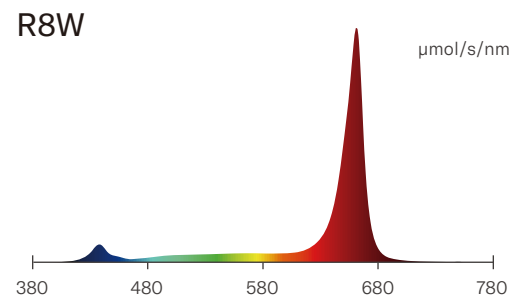
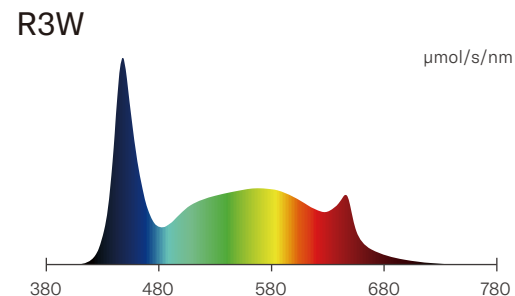
SPECIFICATIONS

Model	PPF	Efficacy	Input Voltage	Input Power	Fixture Dimensions	Weight
T5 Bar 9W	26 μ mol/s	Up to 2.8 μ mol/J	120V-277V	9W	21.22"L $\times$ 1.15"W $\times$ 1.46"H 58.3 $\times$ 2.9 $\times$ 3.7cm	1.32lb / 0.6kg
T5 Bar 18W	51 μ mol/s	Up to 2.8 μ mol/J	120V-277V	18W	44.09"L $\times$ 1.15"W $\times$ 1.46"H 112 $\times$ 2.9 $\times$ 3.7cm	2.07lb / 0.95kg
T5 Bar 36W	101 μ mol/s	Up to 2.8 μ mol/J	120V-277V	36W	44.09"L $\times$ 1.5"W $\times$ 1.65"H 112 $\times$ 3.8 $\times$ 4.2cm	2.4lb / 1.1kg

PRODUCTS



SPECTRUM OPTIONS



GREENHOUSE LED

THE INTERLIGHT LINE-UP

InterLight LED

WHY GO INTERLIGHT LED?

High Efficiency

3.3 $\mu\text{mol/J}$

**Vertical-Sideways
Illumination**

Bring light inside your canopy
of high-wired plants with a
sideways light distribution

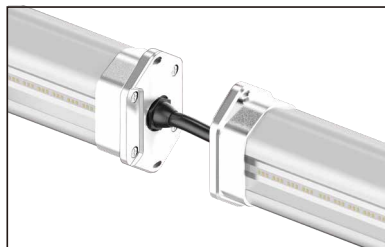
BEST USED FOR
GREENHOUSE & INDOOR
INTERLIGHTING



INTERLIGHT LED FEATURES

- OSRAM LED chips offer highest efficiency in the industry
- Convenient set-up, quick plug-and-use system, low heat, high light emission
- Daisy chain up to 20 fixtures together
- PC cover that is both water- and moisture-proof
- IP66 Waterproof
- 5-year warranty

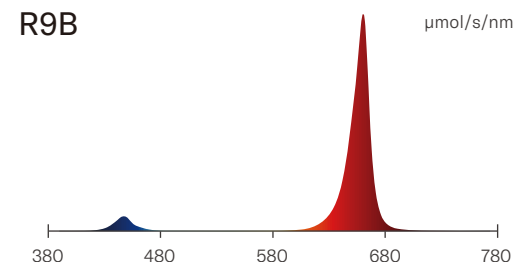
PRODUCTS



SPECIFICATIONS

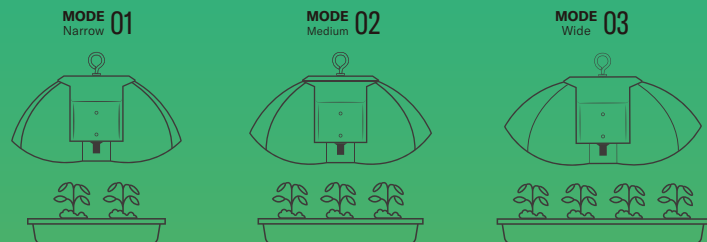
Model	Order Code	PPF	Efficacy	Input Voltage	Input Power	Fixture Dimensions	Weight
INTERLIGHTING LED Grow Light	307110	330 μ mol/s	3.3 μ mol/J	220V-277V 347-480V	100W	2.56"L x 8.6"W x 98.42"H 6.5 x 8.6 x 250cm	7.85lb / 3.57kg

SPECTRUM OPTIONS



GREENHOUSE HPS

1000W DE



WHY GO 1000W DE?

Adjustable

Adjustable beam angle
and patented design

Dimmable

Output adjustable to 600,
750, 1000 or 1150 Watts

BEST USED FOR GREENHOUSES



PROPRIETARY DESIGN
PATENT NUMBER 9,810,400



1000W DE FEATURES

- A 3-Mode adjustable function, Beam angle and light spread area can be easily adjusted for different usage
- Patented design only offered by FLEXSTAR
- Vega-embossed aluminum; 95% reflective
- Hammered surface design enhances the diffuse reflectance and ensures uniform light output
- 10 ft power cord for flexible positioning
- Compatible with Flexstar controllers
- 3-years warranty

SPECIFICATIONS

Model	Order Code	Input Voltage	Input Current	Input Power	Fixture Dimensions	Weight	Reflective Material
1000W DE	303833	208V-277V/ 347V/480V	4.8A-3.6A /2.9A/2.1A	1000W	25.1"L × 10.5"W × 4.9"H 63.7 x 26.6 x 12.5cm	14.1/18.7lb 6.4/8.5kg	95% reflective vega aluminum

Dimming Voltage	0-10V	Max.Allowable	75°C/167°F
Min Power Factor	50/60HZ	Lamp Type	Double Ended HPS/ MH LAMP
Voltage range(+/-10%)	208-277V/347V/480V	Lamp Voltage	230V
Min Power Factor	0.99	Operation Frequency	100-120kHz
THD	<10%	Dimming Options	600/750/825/1000/ 1150/EXT

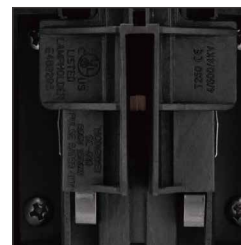
FLEXIBLE SETTINGS



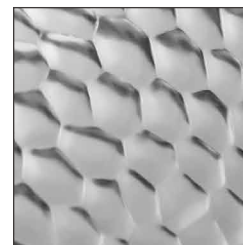
Adjustable Beam Angle



Innovative DE System



UL Listed Socket



High-reflectivity
Vega Aluminum

CONTROLLER

ZEUS CONTROLLER

X2A

Zeus Pro

WHY GO ZEUS?

Intelligent

Intelligent control of lights based on grow stage and environmental data

BEST USED FOR LED & HID GROW LIGHT CONTROL



ZEUS FEATURES

- Intelligent control of lights based on grow stage and environmental data
- Complete light control including spectrum tuning and sunrise/sunset, with 10.1" touchable screen
- Dual channel with independent control for lights and sensors
- Supports Flexstar LED and HID lights with RS485 and 0-10V

SPECIFICATIONS

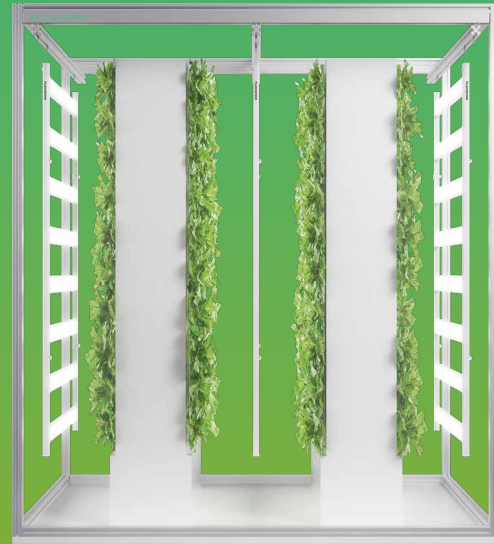
Product	Order Code	Screen	Compatible Light	Channels	Dimming Range	Number of Light Fixtures	Sensors	Temp. Range	Humidity Range	CO2 Range	Communication	Dimensions	Additional Features
	301168	LCD 4.0"	Flexstar LED&HID	Light Channels: 2 Sensor Channels: 2	OFF/25%-100% (LED) OFF/25%-115% (HID)	Up to 80 per Channel	Temp./Humidity CO2 (Optional)	-20-80°C (-4-176°F)	0-100%	10-5000 PPM	RS485/0-10V	138x86.5x25mm 5.43"x3.33"x1.04"	Sunrise/Sunset Auto Dim/Shutdown VPD/LVPD data Spectral Switching Data Dashboard OTA Update* Wi-Fi Remote Control* Full-Cycle Light Recipe*
	301169	LCD 10.1" Color, Touch	Flexstar LED&HID	Light Channels: 2 Sensor Channels: 2	OFF/25%-100% (LED) OFF/25%-115% (HID)	Over 500 per Channel	Temp./Humidity CO2 (Optional)	-20-80°C (-4-176°F)	0-100%	10-5000 PPM	RS485/0-10V (Light) RS485 (Sensor)	275x174x54mm 10.83"x6.85"x2.13"	Sunrise/Sunset Auto Dim/Shutdown VPD/LVPD data Spectral Tuning Full Data Dashboard OTA Update* Wi-Fi Remote Control* Full-Cycle Light Recipe* Local Data Saving HVAC Device Control*

* Under development

GROW SYSTEM

VERTICAL GROW SYSTEM

- All-In-One vertical grow system
- High efficacy LED grow lights
- Rolling racks save space
- System Includes: VertiLux Grow Lights, Rolling Grow Rack, Irrigation System



GROW SYSTEM

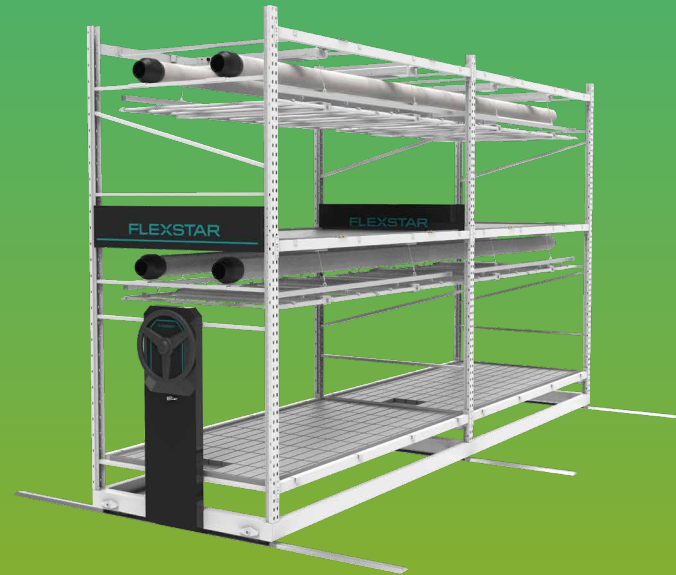
ROLLING BENCH

- Flood tray: ABS plastic tray
- Leg: galvanized steel
- Frame: aluminum alloy
- Vertical bar: aluminum alloy
- Customizable to suit your needs



SMART GROW SYSTEM

- Integrated ventilation and lifting system.
- Smart lifting system: The height of the LED light fixtures is allowed to be adjusted up to 1.1 meters.
- Modular design, with the standard model upgradeable to an intelligent lifting version.
- Height can be extended and upgraded.
- Compatible with Flexstar Zeus Pro smart controller.
- Flexible light options





TOTAL SOLUTION

A wide ranging product portfolio that fits every need



PROFESSIONAL

Over 16 years of experience rich in hydroponics with strong R&D competences



SUPERIOR SERVICE

Competitive warranty program and local warehouses for reliable, timely customer service



QUALITY

Top quality standards develop the highest quality products



CUSTOMIZABLE

Flexible design capabilities to provide OEM/ODM options



FACTORY-DIRECT

Direct from factory to customer for the best cost

FLEXSTAR

Product Catalog

ADVANCED GROW LIGHTING

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