

# ZEUS 1000W PRO EVO 3.1

MANUAL

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LUMATEK ZEUS 1000W PRO EVO 3.1 LED producing  
a PPF of 3125  $\mu\text{mol/s}$  achieving a VERY HIGH  
EFFICACY of 3.1  $\mu\text{mol/J}$ .



**LUMATEK**

PROFESSIONAL LIGHTING

**3.1 EFFICACY**  
 $\mu\text{mol/J}$

**3125 PPF**  
 $\mu\text{mol/s}$



# LUMATEK ZEUS 1000W PRO EVO 3.1 MANUAL

ENGLISH

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## 1. INTRODUCTION

Thank you for purchasing the LUMATEK ZEUS 1000W PRO EVO 3.1 linear multi-light bar LED fixture. This manual describes how to install and use the ZEUS Pro fixture; please read this manual thoroughly before attempting to install or operate any Lumatek ZEUS Series system. If you are not comfortable with the installation of high performance lighting systems, you should seek the services of a qualified installation professional.

## 2. PRODUCT DESCRIPTION

The LUMATEK ZEUS 1000W PRO EVO 3.1 is an electronic horticultural LED fixture using a linear array design with ten 100W LED light bars and an intelligent driver making the fixture externally controllable & dimmable. The LUMATEK ZEUS 1000W PRO EVO 3.1 fixture is an ultra-high performance full-cycle top lighting solution for commercial horticulture cultivation, with the power and flexibility to scale from propagation and cloning through vegetative growth to higher light intensities in bloom. In this manual the LUMATEK 1000W PRO EVO 3.1 will be referred to as: "the LED fixture".

## 3. PRODUCT INFORMATION AND SPECIFICATIONS

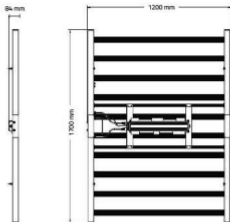
### 3.1 General Product Information

PRODUCT NAME	ZEUS 1000W PRO EVO 3.1
MANUFACTURER	LUMATEK EU
PRODUCT CODE	LUMLED027
EAN	5060560032212

### 3.2 Technical Specifications

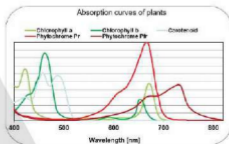
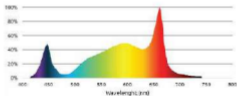
PPF	3125 $\mu\text{mol/s}$
EFFICACY	3.1 $\mu\text{mol/J}$
INPUT POWER at 230V AC 100%	1025W ( $\pm 5\%$ ) @ 230 V AC
INPUT VOLTAGE	220-240 V AC 50/60 Hz
INPUT CURRENT at 230V AC 100%	4.9 A
WORKING TEMPERATURE	-10 °C – +40 °C
WORKING HUMIDITY	20% - 30%
POWER FACTOR	> 0.95
LIFE SPAN	L90 > 60000 h
SPECTRUM	Full-Spectrum F
LIGHT SOURCE	SAMSUNG LM301H EVO   OSRAM 4.24
DIMENSIONS (LxWxH)	1700 x 1200 x 84 mm
WEIGHT	18 Kg
BEAM ANGLE	120°
MANUAL DIM/EXTERNAL LIGHTING CONTROLLER	0 - 10 V analog protocol
WATERPROOF / DUSTPROOF	IP65

### 3.3 Fixture Dimensions

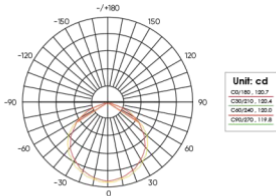


### 3.4 Spectral Quantum Distribution Graph

The ZEUS Pro series use higher spec highly efficient top bin horticultural white & red LEDs to create a balanced full spectrum of quality light ideal for photosynthesis.



### 3.5 Light distribution curve



### 3.6 Environment

The LED fixture is intended to be used in climate-controlled grow rooms and indoor farms. The product may be used in damp environments but may not be used in wet environments or outdoors. The product will operate in ambient temperatures from -10 °C to 40 °C but will function at optimal level between 20 °C to 30 °C. The product will operate in 20% – 90% humidity, non-condensing.

### 3.7 Legal

This product is designed with precision and quality in mind, our product complies seamlessly with industry standards, guaranteeing a user experience that meets and exceeds the expected norms.

## 4. SAFETY RECOMMENDATIONS AND WARNINGS

**Warning!** Carefully read the warnings below before using or working with the product!

- Always adhere to the local rules and regulations when installing or using the LED fixture.
- Do not open or disassemble the LED fixture as it contains no serviceable parts inside. Opening or modifying the LED fixture can be dangerous and will void the warranty.
- Do not use the LED fixture when either the LED fixture or its power cable are damaged. Replace the power cable with correctly rated cable only.
- Modifications to the cables can lead to unwanted electromagnetic effects which may make the product not comply with legal requirements.
- Do not expose the LED fixture to:
  - Condensing humidity, heavy mist or direct spray;
  - Ambient temperatures outside the specified range;
  - Dust and contamination;
  - Direct sunlight during use or HID light that may heat up the driver.

- Always disconnect the LED fixture from mains before performing any maintenance.
- Always allow for a cool down period of at least 20-30 minutes before touching the LED light bars. Touching the LED bars when the fixture is lit or immediately after may result in burns!
- Natural convection removes heat away from the heatsink. In order for the system to properly cool itself, at least 5cm of space is required between the fixture and the roof of your grow area. Do not use abrasive materials or aggressive cleaning agents to clean the LED fixture as this may damage the secondary optics. Instead use a clean dry fabric/cloth.
- Do not use the LED fixture near flammable, explosive or reactive substances. The LED fixture can reach temperatures of 40 °C.
- Do not use sulphur vaporizers or water misters.
- The installation and use of the LED fixture is the responsibility of the end user. Incorrect use or installation can lead to failure and damage to the LED fixture. Damage to the LED fixture and electronic circuitry as a result of incorrect installation and use revokes the warranty.

## 5. CONTENTS

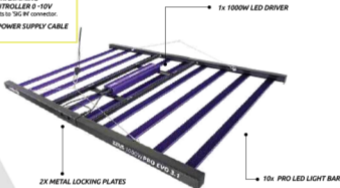
1x USER MANUAL

2X METAL CABLE HANGERS

1x DIMMING  
CONTROLLER 0-10V

Connects to 5IG 8W connector.

1x 240V POWER SUPPLY CABLE



## 6. INSTALLATION

**Warning!** Mounting and installing the LED fixture must be in accordance with the applicable local laws and regulations.

**Warning!** The installer is responsible for correct and safe installation.

**Warning!** Ensure the local cabling can support the voltage and current requirements of the LED fixture.

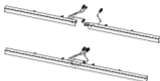
**Warning!** Avoid coiled cables and keep mains leads separated to help prevent electromagnetic interference.

**Warning!** Do not connect or disconnect the LED fixture under load.

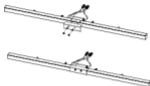
## 6.1 Fixture assembly & installation

The fixture frame consists of various parts included in the packaging. Begin by assembling the frame parts after removing them from the packaging. Two metal locking plates are provided to secure the bar unions.

**Step 1:** Align and join the bars that have the cables. Repeat the process to the other bars.



**Step 2:** Use the two metal locking plates to ensure bar unions.



**Step 3:** Connect assembled bars into frame.



**Step 4:** Connect cables and attach the metal hangers to the fixture. Connect the LED bars.



## 6.2 Connect the LED light bars

**Warning!** The light bars are shipped with protective plastic covers over the diodes. Please ensure these protective covers are removed before use!



Install hook end first;  
insert hook into square hole.



Then insert the other end; align the light bar's magnet connector with the round hole on frame connector and insert male pin into female socket. Ensure magnetic connection is secure.

### 6.3 Changing and replacing light bars and modular use

The LED fixture's modular design uses intelligent LED drivers which can decrease or increase power to match the amount of 100 W light bars installed on the fixture automatically. If not all light bars are required, the drivers will only draw power required for the amount of light bars connected eg if six light bars are connected the drivers will only draw 600 W to power them.

**Warning!** At least one light bar must be installed in the fixture before switching on.

### 6.4 Installing the fixture

**Warning!** Mount the system to something that can hold the weight of the LED fixture.

Ensure all light bars are installed correctly and are secure.  
Carefully turn the fixture over and attach the metal cable hangers to the mounting hooks.  
Hang the fixture in required position and height.  
For optimal performance; position fixture 50 -100 cm above plant canopy for a 2 x 1.5 m light spread.  
Ensure the fixture is hung horizontally.

Attach cable hangers  
to mounting hooks.



### 6.5 Connecting the manual dimmer or external lighting controller

The dimmer control or lighting controller is connected to the 'SIG IN' connector on the fixture frame. This enables light intensity (PPF output) to be adjusted according to requirement. The LED fixture light intensity can be adjusted without changing relative spectral power distribution or losing efficiency.

Remove dust cap and ensure male & female connectors are correctly aligned and then push together until click-locked. To disconnect, turn twist-lock anti-clockwise and pull apart.

Connect manual dimmer cable or lighting  
controller cable to SIG IN port (left socket).





## 6.6 Connecting fixtures in series for external control

For detailed instructions please refer to the Lumatek Control Panel manual.

Position and hang each fixture appropriately. ZEUS series fixtures use 0-10 V signal protocol for control.

Connect controller output signal cable to fixture 1 SIG IN connector.

Connect daisy-chain control signal cable from fixture 1 SIG OUT connector to fixture 2 SIG IN connector.

Continue to connect fixtures in series for up to 50 fixtures per zone of the controller.



## 6.7 Connecting the LED fixture to the mains

**Warning!** Make sure mains power is switched off.

**Warning!** Ensure the power supply cable is not coiled and does not touch any hot surfaces.

**Warning!** Connect the cables according to local rules, safety regulations and electrical code.

**Warning!** If not using an external lighting controller ensure external switching gear can cope with the inrush current of the LED fixture. Always use a digital timer contactor suitable for switching a capacitive load.

Ensure the LED fixture power supply cable twist-lock connector is correctly aligned to the AC INPUT connector on the fixture frame and push together until click-locked.

Connect mains power plug to switching gear/power supply.  
Switch on mains power.

## 7. PRECAUTIONS WHEN USING THE LED FIXTURE

**Warning!** Always ensure at least one light bar is connected to the fixture before switching on. The Zeus PRO has an intelligent LED driver which will increase or decrease power to match the amount of light bars connected to the system automatically.

**Warning!** Always wait 20 – 30 minutes for the LED light bars to cool down.

## 8. INSPECTION, MAINTENANCE AND REPAIR

**Warning!** Disconnect the LED fixture from mains before performing any maintenance or repairs.

**Warning!** Do not connect or disconnect the LED fixture under load.

**Warning!** Do not open or disassemble the LED fixture, it contains no serviceable parts inside. Opening the LED fixture can be dangerous and will void the warranty.

**Warning!** Always wait 20 – 30 minutes for the LED light bars to cool down.

**Caution!** Do not clean the LED fixture with detergents, abrasives or other aggressive substances.

Regularly check the LED fixture for dust or dirt build up. Clean if necessary. Contamination may cause overheating and decreased performance.

Clean the outside of the LED fixture using a dry or damp cloth.

Regularly check the cables of the LED fixture to ensure it is undamaged.

## 9. STORAGE AND DISPOSAL

Store the LED fixture in a dry and clean environment, with an ambient temperature of 25 °C – 55 °C.

The product must not be discarded as unsorted municipal waste but must be collected separately for the purpose of treatment, recovery and environmentally sound disposal.

## 10. WARRANTY

Lumatek warrants the mechanical and electronic components of their product to be free of defects in material and workmanship if used under normal operating conditions for a period of five (5) years from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use Lumatek shall, at its discretion, either replace or repair the product using suitable new or reconditioned products or parts. In case Lumatek decides to replace the entire product, this limited warranty shall apply to the replacement product for the remaining initial warranty period, i.e. five (5) years from the date of purchase of the original product. For service, return the product to your shop with the original sales receipt.

Lumatek products sold in the territory of the Swiss Confederation are manufactured with a separate serial number series and labelled as exclusively for sale in the Swiss Confederation market, and available only for licensed Swiss distributors. If you are an end customer resident or domiciled in the Swiss Confederation, the Lumatek Warranty is only valid for products marked with the serial number series used exclusively in this market.

# LUMATEK ZEUS 1000W PRO EVO 3.1 LED MANUAL

ESPAÑOL

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## 1. INTRODUCCIÓN

Muchas gracias por comprar la luminaria LED de barra multiluz lineal LUMATEK ZEUS 1000W PRO EVO 3.1. El presente manual describe cómo instalar y usar la luminaria Zeus Pro; por favor lea este manual detenidamente antes de intentar u operar cualquier sistema de la serie Zeus de Lumatek. Si usted no se siente cómodo con la instalación de sistemas de iluminación de alto rendimiento, por favor busque los servicios de un profesional de instalación calificado.

## 2. DESCRIPCIÓN DEL PRODUCTO

La LUMATEK ZEUS 1000W PRO EVO 3.1 es una luminaria LED hortícola electrónica que incorpora un diseño de matriz lineal con diez barras de luz LED de 100W y un controlador inteligente que hace que la luminaria sea controlable y regulable de forma externa. La luminaria ZEUS ZEUS 1000W PRO EVO 3.1 es una solución de iluminación superior de ciclo completo de ultra alto rendimiento para el cultivo de horticultra comercial, con la potencia y la flexibilidad para escalar desde la propagación y la clonación a través del crecimiento vegetativo hasta mayores intensidades lumínicas en floración.

En este manual, el LED LUMATEK ZEUS 1000W PRO EVO 3.1 se denominará "la luminaria LED".

## 3. INFORMACIÓN Y ESPECIFICACIONES DEL PRODUCTO

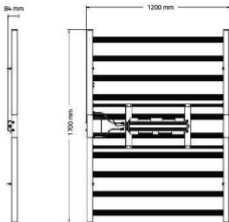
### 3.1 Información general del producto

NOMBRE DEL PRODUCTO	ZEUS 1000W PRO EVO 3.1
CÓDIGO DE PRODUCTO	LUMLED0027
FABRICANTE	LUMATEK EU
EAN	5060560032212

### 3.2 Especificaciones técnicas

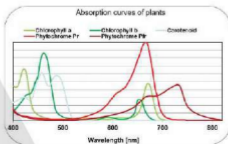
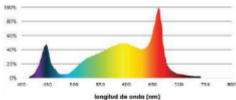
PPF	3125 $\mu\text{mol/s}$
EFICACIA	3.1 $\mu\text{mol/J}$
POTENCIA DE ENTRADA a 230VAC 100% o/p	1025W ( $\pm 5\%$ ) @ 230 V AC
VOLTAJE DE ENTRADA	220-240 V AC 50/60 Hz
CORRIENTE DE ENTRADA a 230V AC 100% o/p	4.9 A
TEMPERATURA DE FUNCIONAMIENTO	-10 °C – +40 °C
HUMEDAD DE TRABAJO	20% - 30%
FACTOR DE POTENCIA	> 0.95
ESPERANZA DE VIDA	L90 > 60000 h
SPECTRO	Espectro completo F
FUENTE DE LUZ	SAMSUNG LM301H EVO   OSRAM 4.24
DIMENSIONES (LxWxH)	1700 x 1200 x 84 mm
PESO	18 Kg
ÁNGULO DE HAZ	120°
ATENUADOR MANUAL / CONTROLADOR DE ILUMINACIÓN EXTERNA	0 - 10 V Protocolo analógico
IMPERMEABLE / A PRUEBA DE POLVO	IP65

### 3.3 Dimensiones del accesorio

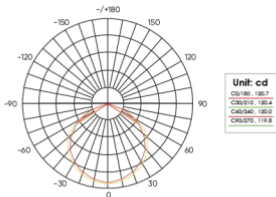


### 3.4 Gráfico de distribución cuántica espectral

La serie Zeus Pro utiliza LEDs blancos y rojos hortícolas altamente eficientes de alta eficiencia para crear un espectro completo equilibrado de luz de calidad ideal para la fotosíntesis.



### 3.5 Curva de distribución de luz



### 3.6 Medio ambiente

La luminaria LED está diseñada para ser utilizada en salas de cultivo con clima controlado, granjas interiores e invernaderos. El producto puede usarse en ambientes húmedos, pero no en ambientes mojados o al aire libre. El producto funcionará a temperaturas ambiente de -20°C a 40 °C, pero funcionará a un nivel óptimo entre 20°C y 30°C.

El producto funcionará en 20% - 90% de humedad, sin condensación.

### 3.7 Legal

Este producto está diseñado con precisión y calidad en mente, cumpliendo perfectamente con los estándares de la industria, garantizando una experiencia del usuario que cumple y supera las normas esperadas.

## 4. RECOMENDACIONES DE SEGURIDAD Y ADVERTENCIAS

**[Advertencia]** Por favor lea atentamente las siguientes advertencias antes de usar o trabajar con el producto!

- Siempre siga las reglas y regulaciones locales al instalar o usar la luminaria LED.
- No abra ni desmonte la luminaria LED, ya que no contiene piezas reparables en su interior. El abrir o modificar la luminaria LED puede ser peligroso y anulará la garantía.
- No utilice la luminaria LED cuando la luminaria LED o su cable de alimentación estén dañados. Reemplace el cable de alimentación solo con un cable con clasificación correcta.
- Las modificaciones en los cables puede dar lugar a efectos electromagnéticos no deseados, lo que hace que el producto no cumpla con los requisitos legales.
- No exponga el dispositivo LED a:
  - Humedad condensada, neblina intensa, neblina o rocío directo;
  - Temperaturas ambiente fuera del rango especificado;
  - Polvo y contaminación;
  - Luz solar directa durante el uso o luz HID que podría calentar el balasto.

- Siempre desconecte el dispositivo de la red eléctrica antes de realizar cualquier mantenimiento.
- Siempre permita un período de enfriamiento de al menos 20-30 minutos antes de tocar las barras de luz LED. ¡El tocar las barras LED cuando el dispositivo está encendido o inmediatamente después puede provocar quemaduras!
- La convección natural elimina el calor del disipador térmico. Para que el sistema pueda enfriarse bien, se requiere al menos 5 cm de espacio entre la luminaria y el techo de su área de cultivo.
- Por favor no utilice materiales abrasivos o agentes de limpieza agresivos para limpiar la luminaria LED, ya que esto puede dañar la óptica secundaria. En su lugar, use una tela limpia y seca.
- No utilice el dispositivo cerca de sustancias inflamables, explosivas o reactivas. La luminaria LED puede alcanzar temperaturas de 40 °C.
- No use vaporizadores de azufre o agua pulverizada.
- La instalación y el uso del dispositivo son responsabilidad del usuario final. El uso o una instalación incorrecta pueden provocar fallos y daños en la luminaria LED. El daño a la luminaria LED y a los circuitos electrónicos como resultado de una instalación y uso incorrecto revocará la garantía.

## 5. CONTENIDO

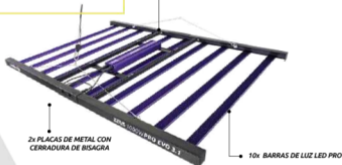
1x MANUAL DE USUARIO

2x PERCHAS METÁLICAS PARA CABLES

1x CONTROLADOR DE REGULACIÓN 0-10V  
Connects to 'SIG IN' connector.

1x CABLE DE FUENTE DE ALIMENTACIÓN 240V

1x CONTROLADOR LED DE 1000 W



## 6. INSTALACIÓN

**¡Advertencia!** El montaje e instalación de la luminaria LED debe realizarse de acuerdo con las leyes y regulaciones locales aplicables.

**¡Advertencia!** El instalador tiene la responsabilidad de una instalación correcta y segura.

**¡Advertencia!** Por favor asegúrese que el cableado local pueda soportar los requisitos de voltaje y corriente del dispositivo.

**¡Advertencia!** Evite los cables en espiral y mantenga los cables de alimentación separados para ayudar a evitar interferencias electromagnéticas.

**¡Advertencia!** No conecte ni desconecte el dispositivo LED bajo carga.