



**STELLAR LIGHTING**

[www.stellarlighting.co.uk](http://www.stellarlighting.co.uk)

Black Sparkle<sup>®</sup> LED Grow Lights

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Product manual





## Black Sparkle® - Modular LED Grow Light system Optimised for indoor growing

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Black Sparkle® - Modular LED Grow Lights are a result of years of research and development. They are recommended for places where plants need to be lit from a distance of 50-200 cm, such as:

- Seedling cultivation
- Orchid lighting
- Herbs cultivation
- Chili peppers
- Hobby gardening
- Restaurants
- Aquatic plants
- Indoor growing
- Grow tents' lighting systems
- Hotels, offices without natural lighting
- Green walls



These lights have a special spectrum that radiates extra energy in the blue and red range, but is cold white to the eye looking LED is a good choice for both plants and the human eye to work with. The traditional blue + red LED combination based on new research is no longer worth using because the plants have the rest they also need color for optimal growth.



# Black Sparkle<sup>®</sup> - Modular LED Grow Light system

## Overall benefits

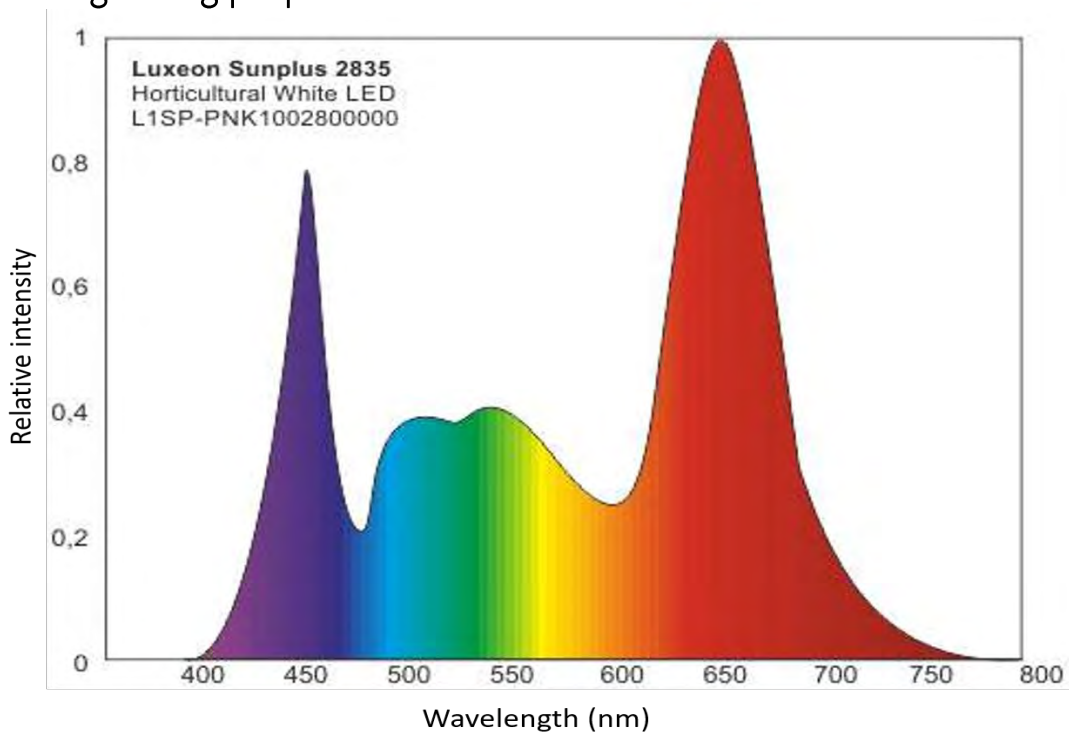
The most important benefits of using our LED grow lights over other lighting systems are:

Flexible options	<ul style="list-style-type: none"><li>• Adaptable solution for different growing and lighting requirements</li><li>• Modular setup with 1-2-3 light module options</li></ul>
Full-spectrum colour	<ul style="list-style-type: none"><li>• The lights provide every wavelength available, bringing the plants a light that's as close as possible to natural sunlight</li><li>• The full-spectrum colour temperature is comfortable for the human eyes and won't introduce harsh lighting into the growing area</li></ul>
Energy efficient	<ul style="list-style-type: none"><li>• Energy efficient LED lights</li><li>• Long life expectancy</li><li>• Cooler operational temperature compared to traditional lamps</li></ul>
Easy installation and operation	<ul style="list-style-type: none"><li>• Aesthetic design</li><li>• Plug and paly options available</li><li>• Easy to install with the frame provided</li></ul>
Made in Europe	<ul style="list-style-type: none"><li>• Manufactured in the EU, to the highest quality standards</li><li>• CE certified products</li><li>• 5-year warranty</li></ul>



## Black Sparkle® - Modular LED Grow Light system Full-spectrum lights

Black Sparkle® LED grow lights systems produce all the colour spectrum the plants need physiologically to thrive and flourish and depriving plants of the full spectrum might lead to poor results. We need to provide our plants and crops with the other colours from the standard spectrum for optimal growth, either not at the same intensity level. The best way to do that is through highly efficient, technology-backed, full-spectrum LEDs that produce optimal colours for general growing purposes.



These full spectrum lights provide optimal lighting conditions for any kind of plants using the best Luxeon SunPlus Horticultural White LED. Moreover, they use extra peaks in the 450 nm blue and 660 nm deep red range. This special spectrum looks cool white for the human eye and is more ideal to work under.



# Black Sparkle® - Modular LED Grow Light system

## Main features

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- 65W LED modules with high-quality [Luxeon SunPlus LEDs](#)
- Aluminium-based MCPCB (Metal Core Printed Circuit Board) with black anodised heat sink for optimal heat dissipation] Available as individual light modules or as an integrated lamp with a power supply and a suspension frame.
- IP65 protection so they are safe to use in humid environments as well.
- The optimal output voltage and current on the transformer are already set on our LED grow lights, and you shouldn't modify these settings.
- Black Sparkle® LED grow lights are a piece of high-quality horticultural technology, made in the European Union and supplied with a 2 meter 230V cable with a UK plug for easy installation.
- The lights are provided with 5 years warranty for peace of mind.



# Black Sparkle® - Modular LED Grow Light system

## Modular and customisable options

The Black Sparkle® LED grow light range is available in four options. The modular-0 is the light module only, while the Modular-1 / 2 / 3 options are assembled into a plug-and-play option with power supply and installation frame.

	 Modular-0	 Modular-1	 Modular-2	 Modular-3
Details	Grow light module only	Grow lamp with one module, installation frame and power supply	Grow lamp with two LED modules, installation frame and power supply	Grow lamp with three LED modules, installation frame and power supply
Power	65 W	65 W	130 W	195 W
Power supply	n/a	<a href="#">MeanWell HLG-80H-48AB</a>	<a href="#">MeanWell HLG-150H-48A</a>	<a href="#">MeanWell HLG-240H-48AB</a>
Input / Output voltage	n/a	230 V / 48 V		
Dimming	n/a	Yes*	No	Yes*
Colour spectrum	Horticultural White (PNK)			
Beam angle	90°			
IP rating	65			
PPF	128 µmol/s	128 µmol/s	256 µmol/s	384 µmol/s
Warranty	5 years			
Package weight	0.6 kg	2.8 kg	4.3 kg	5 kg
Package dimensions	62 x 305 x 75 mm	150 x 400 x 260 mm	150 x 400 x 335 mm	150 x 400 x 335 mm

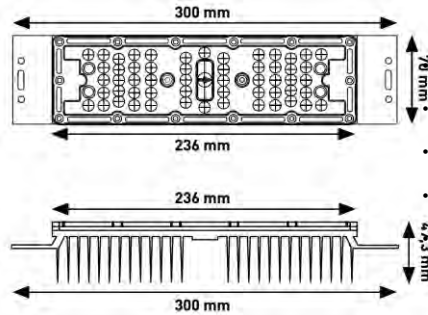
\* 3-in-1 dimming function (1~10Vdc, 10V PWM signal and resistance)



# Black Sparkle<sup>®</sup> - Modular LED Grow Light system

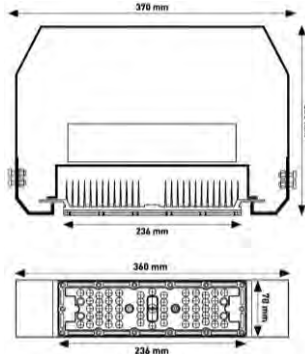
## Modular and customisable options

### Modular-0



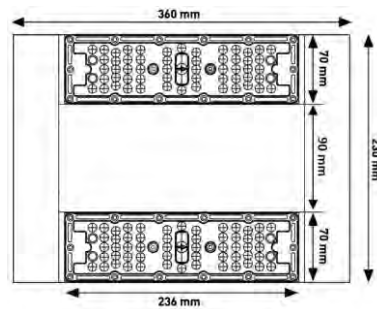
- Single module unit
- IP65 waterproof connector
- Without power supply
- Power: 65 W
- PPF: 128  $\mu\text{mol/s}$

### Modular-1



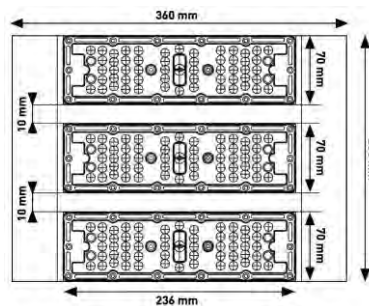
- Single module unit
- With power supply
- Adjustable angle installation frame for hanging or wall-mount
- Power: 65 W
- 3 in one dimming function
- PPF: 128  $\mu\text{mol/s}$

### Modular-2



- Double module unit
- With power supply
- Adjustable angle installation frame for hanging or wall-mount
- Power: 130 W
- PPF: 256  $\mu\text{mol/s}$

### Modular-3



- Triple module unit
- With power supply
- Adjustable angle installation frame for hanging or wall-mount
- Power: 195 W
- 3 in one dimming function
- PPF: 384  $\mu\text{mol/s}$



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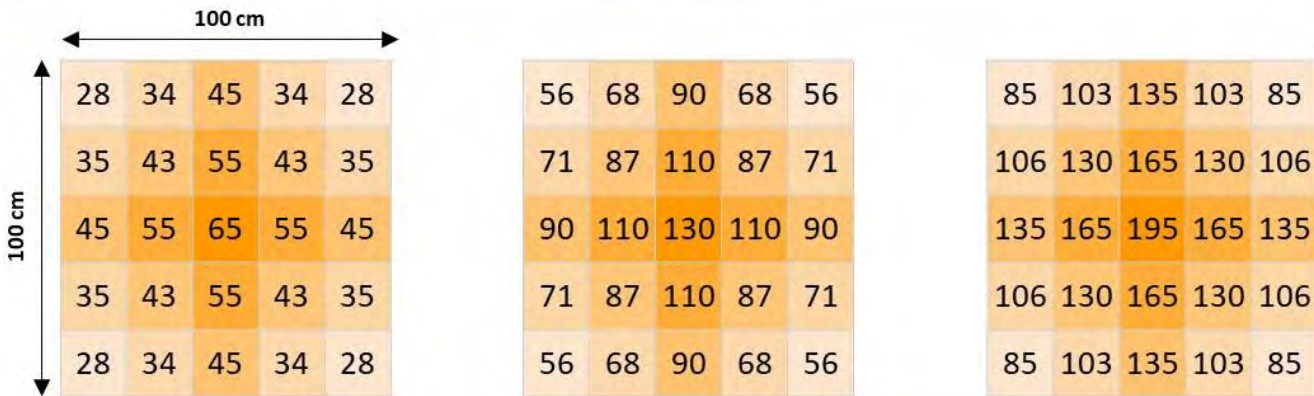
## PPFD heatmap

The PPFD value determines the photosynthetic photon flux density within a certain area. The unit is given in  $\mu\text{mol}/(\text{m}^2\text{s})$  and indicates how many photons which contribute to photosynthesis impinge on the plant per second.

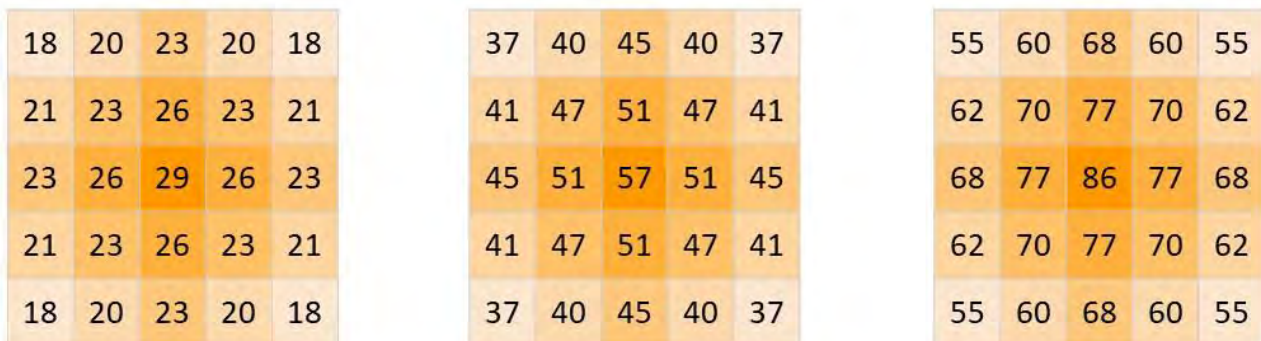
### 1 module                      2 modules                      3 modules



### 1 m height



### 2 m height




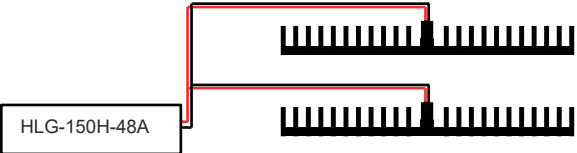
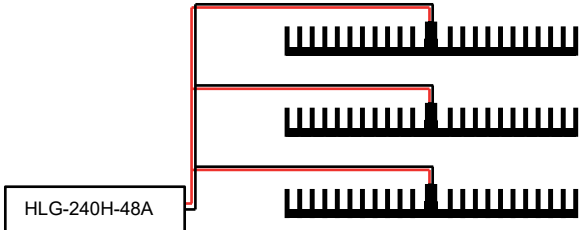




# Black Sparkle<sup>®</sup> - Modular LED Grow Light system Installation

The Modular-1 / Modular-2 / Modular-3 units are pre-installed with the appropriate power supply and come with a three-pin UK plug. These units are mounted on an adjustable-angle installation frame that can be easily hung or secured to the wall or ceiling.

The Modular-0 unit does not include a power supply and can only be operated by an AC-DC Single output Constant Current LED driver. This needs to be purchased separately.

To operate a single module, we recommend the MeanWell HLG 80H-48A power supply.	
To operate two modules, we recommend the MeanWell HLG-150H-48A power supply.	
To operate three modules, we recommend the MeanWell HLG-240H-48A power supply.	

Only connect the exact number of lights according to the recommendations. Connecting less light modules can cause the LED modules to overheat and malfunction, while connecting more will not provide sufficient light intensity and the power supply can overheat.

Output voltage and current must be set when using HLG series power supplies. If you intend to connect more than three modules, please contact us so we can advise you on a compatible power supply.



# Black Sparkle<sup>®</sup> - Modular LED Grow Light system

## Safety notices

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### DIY tips and safety advice

- Personal protective equipment. Make sure that you are equipped with suitable and sufficient personal protective equipment. This could include eye protection, face mask, protective overalls, safety footwear and gloves.
- Consider your safety! Think about the potential risks and dangers of the work and the steps you should take to avoid them.
- Ensure that the work area is sufficiently illuminated.
- Check that the tools you will be working with are in a good operating condition.

### Electrical work safety advice and tips

- Ensure that a 220-240 V AC power source is available.
- An appropriate protective device e.g. fuse or miniature circuit breaker should be installed at the consumer unit. We recommend a 6 A type B MCB for this purpose. If the supply circuit to the stair lights is not dedicated, your electrician can advise on protection arrangements.
- Before undertaking any electrical connection work, ensure the circuit is isolated at the consumer unit by turning off the MCB and, if practicable, locking it in the OFF position. Working live can cause injury and can damage components of your Intelligent Stair Lighting.

If you have any questions, problems or comments regarding the installation or the operation of your LED grow lights, please contact us on

[info@stellarlighting.co.uk](mailto:info@stellarlighting.co.uk)

