

SPECTRABOX DRONE SERIES

200W Spectrabox Drone

Technical Specification

**200 W**

POWER

~3.1 $\mu\text{mol/J}$

EFFICACY

110°

OPTICAL LENS

IP65

PROTECTION

Full-spectrum LED grow light • 4-step dimming • external controller & daisy-chain ready

Document version 1.0 | August 2026

PERFORMANCE

Designed for efficient, controlled cultivation

The Spectrabox Drone combines high-efficacy horticulture LEDs, optical light control and flexible dimming in a compact fixture designed for demanding grow environments.

01 High efficiency & energy savings High-efficacy LED technology is designed to deliver strong plant lighting with substantially lower energy demand than traditional discharge lighting.	02 Optimal lighting performance Ledestar horticulture LEDs deliver approximately 3.1 $\mu\text{mol/J}$. A 110° optical lens supports penetration and uniform distribution; red and far-red LEDs are positioned asymmetrically.
03 Long lifespan Horticulture-grade LEDs and the thermal design are intended for reliable operation in warm, humid cultivation environments.	04 Control panel Integrated 4-step dimming adjusts intensity through the crop cycle. RJ12/RJ14 connectivity supports external control and daisy-chain operation.
05 Plug & play No separate reflector or ballast is required. Connect the fixture directly to a grounded compatible AC outlet.	06 IP65 protection The LED assembly is protected by a polycarbonate lens cover and an IP65-rated housing for dusty and humid grow environments.
07 Dual LED cooling A large aluminium heat sink provides passive cooling, supported by an active fan to improve thermal performance.	08 SMT & SPC technology Computer-controlled SMT assembly and SPC design support stable operation; a single LED failure does not interrupt the remaining LEDs.

APPLICATION

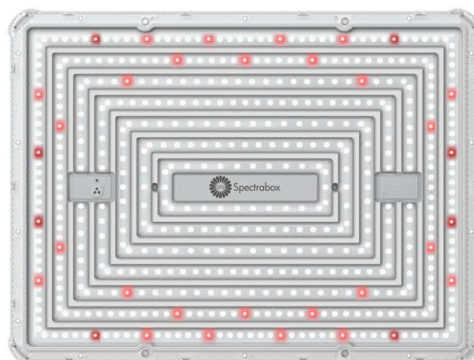
Suitable for indoor greenhouse and dark-room lighting, hydroponic and soil cultivation, and all phases of plant growth.

ENVIRONMENT

The Drone series avoids mercury, iodine and lead used in some traditional lamp technologies and reduces energy demand through LED operation.

PRODUCT ARCHITECTURE

Compact design. Integrated control.



CONTROL & THERMAL DESIGN

Integrated 4-step dimmer • RJ12/RJ14 controller port • aluminium heat sink • active cooling support

WATERPROOF LENS COVER

Polycarbonate protection • asymmetric red / far-red LED placement • high light transmission

CONTROL

Light intensity matched to each growth phase

4-STEP

Integrated dimming

Quick manual adjustment of light intensity.

RJ12 / RJ14

External control

Connect a compatible smart plant controller.

DAISY CHAIN

Multi-light control

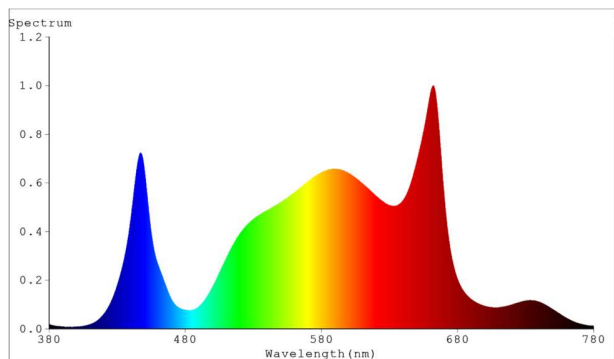
Link multiple fixtures for integrated operation.

INSTALLATION & SAFETY

- Connect only to a grounded electrical outlet.
- Do not look directly into the operating fixture; use appropriate eye protection.
- Set lighting duration and intensity according to crop species and growth phase.

LIGHT & SPECIFICATION

Spectrum and technical data



FULL PLANT SPECTRUM

3000K + 5000K

660 nm + 730 nm

Designed to support the complete cultivation cycle with broad white light plus red and far-red wavelengths.

ITEM	VALUE	ITEM	VALUE
LED chip	Ledestar Horticulture	Power consumption	~ 200 Watt
LED type	2835, 3535 LEDs	Power factor	> 97%
LED wavelength	3000K + 5000K, 660 + 730 nm	Dim controller	4-step dimmer
Efficiency	~ 3.1 µmol/J	Voltage	120–277 V
Optic lenses	110° beam angle	Frequency	50/60 Hz
Height above plants	> 100 mm	Working environment	-20 to +40 °C
Estimated lifespan	50,000 hours	Waterproof level	IP65
Fixture size	405 × 305 × 77 mm	Net weight	2.10 kg

CERTIFICATIONS & WARRANTY



**3 YEAR
WARRANTY**

www.ledflowergrowlights.nl