420 SOLAR Series

45W LED Bar

Technical Specifications

Release Version: V6.0

Release Date: 2026/09/01

Advantages 420 LED Bar

1. High Efficiency & Energy Saving

The 420 LED Bar is equipped with high-quality Samsung LEDs. Compared to traditional HPS grow lights, the 420 LED Bar delivers greater light intensity and improved plant growth while consuming less than half the energy.

2. Extended Lifespan

The LEDs used for the 420 LED Bar are Samsung's LM281B+ LEDs. The Samsung LEDs have been specially developed for the horticultural environment, which ensures that the LEDs can withstand extreme temperatures and exposure to high humidity. This guaranties high light-output, high quality and high reliability with a long lifespan.

3. Waterproof Construction

The 420 LED Bar has an IP66 waterproof rating. The LEDs are attached to the aluminum frame and covered watertight by an optical PC cover with high light transmittance.

4. Plug & Play Simplicity

No installation needed; no reflector or ballast required. The 420 LED Bar is a plug- and play grow light. Simply connect the power cable and plug the power cord directly into a grounded 110- or 230-volt outlet. This makes installation simple and safe.

5. Daisy Chain Connectivity

Each LED Bar includes a 30cm daisy-chain cord, allowing you to link up to 10 units into a continuous lighting system. Compatible to connect with other 420 LED Bars and LED Bars Grow of 30W and 45W.

6. Bar Connecting Kit

Create a powerful modular lighting array with the optional Bar Connecting Kit. Connect up to 7 (BCK7) or 10 (BCK10) 420 LED Bars to two aluminum brackets, forming a scalable and efficient grow light system tailored to your grow space.

7. Advanced Passive Cooling

The 420 LED Bars are passively cooled via their full-aluminum housing. The aluminum PCB is bonded directly to the frame for optimal heat dissipation. This fanless cooling approach is energy-efficient, maintenance-free, and silent - provided the fixture has ample space for airflow.

8. Environment friendly

Unlike HPS or MH lamps, the 4Twenty LED Bars contains no hazardous substances such as mercury. The manufacturing process uses significantly less energy and minimizes the use of harmful materials like iodine or lead, making it a cleaner and greener lighting solution.

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420 LED Bar

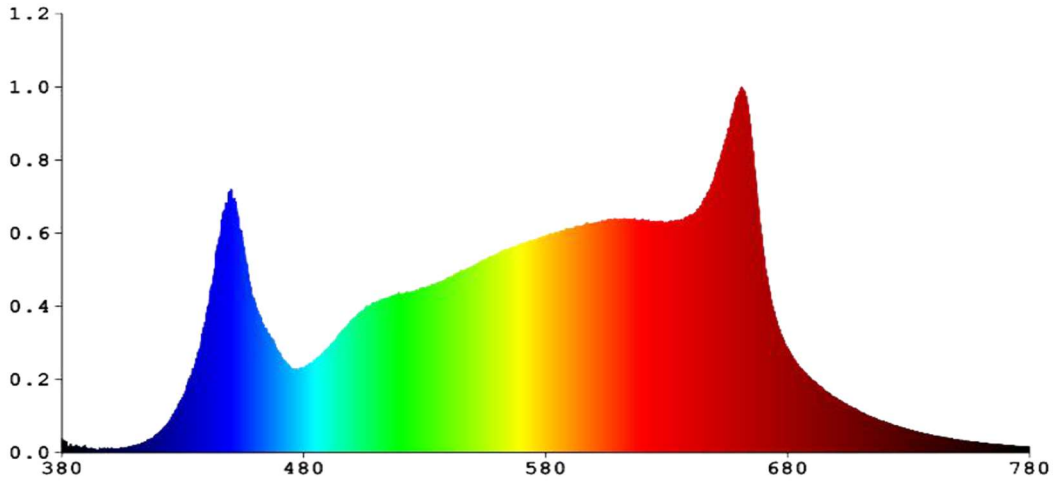


Heatsink LED Cooling



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Spectrum 420 LED Bar



Technical Specifications 420LB45

Item	Value	Item	Value
LED chips	Samsung LM281B+	Power consumption	~ 42,0 Watt
LED amount	148 pieces	HPS equivalent	85 Watt
LED efficacy	2,6 µmol/J	Daisy Chain cord	30 cm
LED beam angle	120°	Bar Connecting Kit	Optional
LED wavelength	Full spectrum	Voltage	100V – 277V
LED lifespan	Up to 50.000 hours	Work frequency	50Hz / 60Hz
Height above plants	> 10 cm	Working environment	-20 ~ + 40°C
Lighting area	0,15 to 1,00 m2	Waterproof level	IP66
Size LED Bar	900*54*41 mm	Weight	0,6 Kg / pc

Certifications and Warranty of 420 LED Bar

Note:

1. *Adjust lighting schedules based on the plant species and growth stage to optimize development.*
2. *Avoid direct eye exposure, always wear protective eyewear when working near the fixture.*
3. *Ensure proper grounding of the power outlet before connecting the fixture for safe operation.*
4. *Certified compliance with FCC, CE and RoHS standards for safety and performance.*
5. *After sales service; 3-year limited warranty.*

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