

# Plant Growth Chamber BPC2000H



ONE-STOP SOLUTION
FOR ARTIFICIAL ENVIRONMENT



#### **Plant Growth Chamber**

The various models of plant growth chambers from JIUPO can be adjusted for temperature, humidity, and light intensity to suit the growth needs of a wide range of plants, including rice, corn, soybeans, rapeseed, tobacco, tomatoes, pumpkins, watermelons, strawberries, Arabidopsis, and more. Regarding light sources, custom spectra can be designed to meet the specific needs of special plants. Additionally, high, and low temperature and humidity stress experiments can be conducted.



#### **Product Advantages**



Customizable Supplemental Lighting Solutions
 Spectral Ratio: Proprietary continuous visible spectrum

developed to meet the needs of most plants at different growth stages, making one unit versatile for multiple uses;

Light Intensity: Infinitely adjustable from 0-100%, allowing for different light intensities at different times of the day to simulate gradual sunlight changes;

Rich Spectrum: Single spectrum at 450nm, 660nm, 735nm, three-spectrum, four-spectrum, and eighteen-spectrum options;

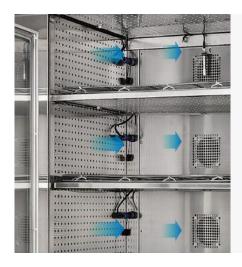
Eye Protection: Uses composite LEDs to avoid separate red, green, and blue spectra, reducing harm to human eyes.

## Heat Recovery Patent Technology

Adjust light intensity according to the needs of different plants and growth stages to save energy. Proprietary environmental control system and heat recovery technology patents save more than 50% energy compared to similar products.







#### Horizontal Circulation for Even Airflow

JIUPO's patented circulation design uses horizontal airflow from both sides with return air in the middle, ensuring more uniform temperature, humidity, and gas concentration across all levels of the chamber.

#### Smart Control

Environmental Simulation: Any time period can be set for temperature, humidity, light intensity, and CO2 concentration; Precise Control: PID system adjustment allows temperature and humidity to reach set values quickly;

User Programming: Various protection measures and energy-saving measures can be set, as well as independent operating units;

Remote APP: Standard mobile app allows for convenient remote control and management.





#### Aesthetic and Durable

Piano paint exterior, all stainless-steel internal structure, and polyurethane foam one-piece molding ensure good insulation and sturdy structure;

Meticulous workmanship with minimal dimensional error and exquisite craftsmanship; built-in insulated door, aesthetic and elegant;

Reliable quality, capable of continuous operation for ten years after one start-up, with a one-year warranty and lifetime periodic on-site maintenance.



# **Technical Specification**

BPC 2000H	
External dimensions W*D*H[mm]	2400*1000*2010mm
Internal dimensions W*D*H[mm]	1650*720*1800mm
Volume[L]	2138L
Default lighting layers	5
Shelf height[cm]	34cm
Cultivation area [m²]	7.1m <sup>2</sup>
Temperature	Temperature range: 3 ~ 45 °C, Low temperature option: -10 ~ 45 °C, Temperature accuracy:0.1 °C, Temperature fluctuation:≤0.5 °C, Temperature uniformity:±2 °C
Humidity	Humidity range: 50 ~ 90%RH, Low humidity option: 30 ~ 90%RH, Humidity accuracy:1%RH, Humidity fluctuation:≤3%RH, Humidity uniformity:±5%RH
Default lighting	LED Cool White(380~760nm) & 300μmol/m²·s (@10cm from the lights)
Upgrade lighting	Blue (450nm±5nm)、Red (660nm±5nm)、Far Red (735nm±5nm)、Three colors RBIR (450nm±5nm, 660nm±5nm, 735nm±5nm)、Four colors RBIRW (660nm±5nm, 450nm±5nm, 735nm±5nm,380~760nm continuous spectrum)、Eighteen colors\UVA\UBC\UVC
Peak Power (220V)	5.4KW
Working voltage	220VAC / 50HZ
Working environment temperature	5 ~ 35℃
Other options	CO2 Control module: Ambient concentration ~ 2000ppm/5000ppm, Accuracy: 70ppm, Observation window



# **Planting Cases**





## **Product Picture**



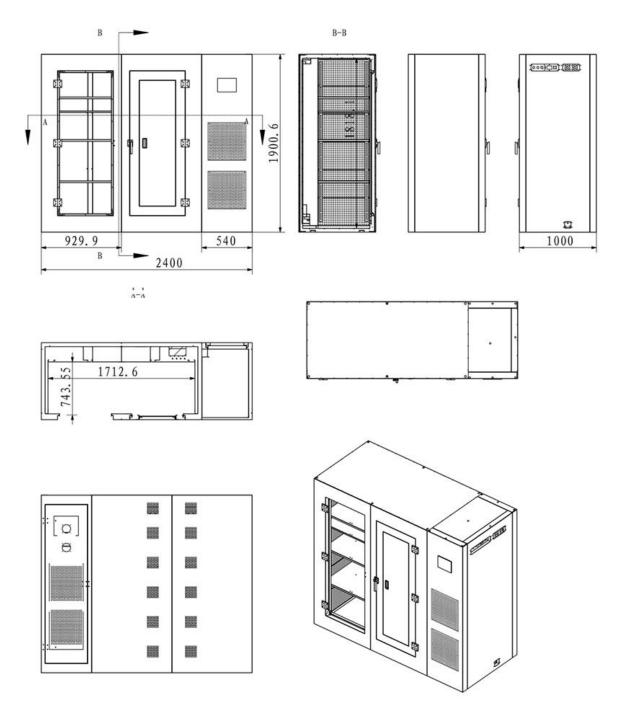








### **Product Structure**



Due to the continuous improvement and innovation of JIUPO products, the product model, specifications, and parameters listed in this information are subject to change.