

Plant Growth Chamber

Scope of Application

This product is a high-precision cooling and heating constant temperature equipment with automatic light and humidity control functions. It can be used for plant germination, seedling cultivation, microbial culture, BOD determination for water quality monitoring and other constant temperature experiments. It is an ideal testing equipment for production, scientific research and teaching departments in biological genetic engineering, medicine, agriculture, forestry, environmental science, animal husbandry, aquaculture and other fields.

Structural Features

Outer Casing

The casing is made from selected cold-rolled steel plate base material, treated with electrostatic baking paint process. This forms a dense protective layer on the surface, which is hard, robust, and offers excellent rust resistance.

Working Chamber

Interior made of stainless steel, mirror-polished. Shelf brackets feature a quick-release design for easy installation, removal, and cleaning of the workspace.

Viewing Glass

Double-door design. The inner viewing glass is made of tempered glass, allowing the user door to be opened directly for observing the contents inside the working chamber. The good seal does not affect the internal temperature.

Air Flow

Strong convection ventilation structure forms an effective air circulation system improving temperature response speed and temperature uniformity.

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Control Panel

Microcomputer-based intelligent touch screen display temperature controller, offering high precision, no overshoot, multi-stage control, temperature calibration function, timer function, and 30-segment program control. Equipped with USB interface for real-time data storage.

Light Source

Utilizes a full-spectrum tri-color LED light source plant lighting, which generates minimal heat inside the chamber while providing optimal illumination for plants.

Humidification System

Uses high-efficiency ultrasonic humidification technology. Ensures stable humidity control with low internal humidity fluctuation.

Safety System

Includes temperature protection, compressor over-current protection, compressor over-pressure protection, water shortage protection, heater over-temperature protection, audible and visual alarm upon fault detection, auxiliary temperature controller, and leakage protection.

Optional Features

Optional remote alarm and remote control functions, needle printing function.

Model	BSPGC-QHX-100L-AC	BSPGC-QHX-180L-AC	BSPGC-QHX-280L-AC	BSPGC-QHX-380L-AC	BSPGC-QHX-580L-AC	BSPGC-QHX-800L-AC	BSPGC-QHX-1080L-AC	BSPGC-QHX-1680L-AC
Door	Single Door					Double door		
Temperature Control Range	With Light 10~80℃ / Without Light 0~80℃							
Temperature Uniformity	± 1℃ (Tested at 25℃)							
Temperature Resolution	0.1℃							
Temperature Fluctuation	± 1℃							
Temperature Deviation	± 1℃							
Humidity Control Range	30~95%RH							
Humidity Fluctuation	± 3%RH							
Light Intensity	0~20000 Lux (Stepless adjustment, standard with two light panels, optional to add more)							
Refrigerant	R134a							
Power Supply	220V 50Hz							
Rated Power	1600W	1800W	2100W	2200W	2400W	4000W	4200W	5500W
Inner Dimension (W×D×H cm)	45x40x56	50x46x78	58x52x94	58x54x122	70x58x125	120x52x129	120x70x130	146x85x136
Overall Dimension (W×D×H cm)	59x67x107	66x77x128	74x81x147	74x85x172	86x91x182	136x93x188	136x101x187	162x116x193
Shelves (Standard / Max)	2/8 pcs	3/10 pcs	3/11 pcs	4/12 pcs	5/10 pcs	8/10 pcs	8/12 pcs	9/13 pcs