

# **Small Plant Growth Chamber**



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Touch panel for LH-120PF(D/P)-S



Touch panel for LH-120PF(D/P)-SP

This is a small plant growth chamber (120 liters). Threeposition controller is used for temperature control, which provides energy-saving benefits.

#### **Features**

- LH-120PF(D/P)-S(P) comes equipped with 'PlantFlec,' a straight tube LED lamp designed for energy-efficient plant growth. Its specialized spectral distribution enhances plant growth.
- The operational touch panel is conveniently located on the upper part of the main unit and includes a real-time display, facilitating easy operation.
- The LH-120PF(D/P)-S allows both constant operation at any temperature/light and day/night switching operation.
- The LH-120PF(D/P)-SP allows a program control, utilizing the actual time method with options for 9 steps across 3 patterns or 27 steps within 1 pattern.
- Specimens receive illumination from five sides for comprehensive coverage.
- The forced evaporation system negates the need for drainage hoses and tanks.
- Temperature control is achieved through a 3-position (proportional heating) system, resulting in lower operational costs.
- One of the two colors of luminescence, pink and yellow can be chosen.

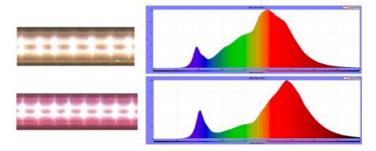
### **Applications**

- Plant cell and tissue culture, germination, acclimation, and growth tests
- Environmental Tolerance Tests for Plants
- Insect breeding
- Thermostatic Storage Experiments
- Environmental Tests

#### **Options**

Measuring holes

#### LED spectrum



## **Specifications**

Model	Yellow LED	LH-120PFD-S	LH-120PFD-SP
	Pink LED	LH-120PFP-S	LH-120PFP-SP
Outer dimensions (mm)		W586 × D674 × H1,571	
Inner dimensions (mm)		W380 × D418 × H773	
Control system		Changeover between constant operation	Step program
		and day/night switching operation	(9 steps/3 patterns, 27 steps/1 pattern)
Repeat		-	1 to 99 times or infinitive
Control methods		Three-position control method: Refrigerator and humidifier, ON/OFF control; heater, proportional control	
Temperature		+5 to 50°C ± 1°C	
Illuminance		Yellow LED: 0 to 16,500 lx,	Pink LED: 0 to 9,000 lx
		Controlled by the number of lamps.	
Photon flux density		Yellow LED: 0 to 224 μmolm <sup>-2</sup> s <sup>-1</sup> Pink LED: 0 to 186 μmolm <sup>-2</sup> s <sup>-1</sup>	
Light	Illumination	Straight tube LED lamp (PLANTFLEC) for plant growth	
source	Number of lamps	Left, right, and rear: 4 lamps (20W) × 4 sides, Ceiling: 4 lamps (10W) × 1 side	
Refrigerator		150 W	
Heater		300 W	
Shelf		4 shelves (adjustable)	
Operation current (maximum)		6A	
Power requirement		Sigle phase 100V 50/60Hz 15A	
Weight (kg)		145	

<sup>\*</sup> Temperature sensor: platinum resistance temperature sensor.

<sup>\*</sup> Power requirement does not include the power-outlet installed inside the chamber. The internal outlet can be used up to 1A.

<sup>\*</sup> These chambers are designed to operate in ambient temperatures 15 to 30°C in general. The specified performance may not be achieved depending on actual usage conditions.

<sup>\*</sup> Depending on the sample, drainage installation may be required.

<sup>\*</sup> Keep 30cm or more clearance at both sides and the back of the product to prevent exhausted heat from being trapped and hindering the cooling function.

<sup>\*</sup> The specified control accuracy for temperature and humidity applies when lights off.

<sup>\*</sup> The specified performance may vary depending on the installation environment, settings, and the placement of samples and other conditions inside the chamber.