

## Jeio Tech Plant Growth Chambers (GC Series)

**Brand: Jeio Tech**

Gain guaranteed photosynthesis conditions with Jeio Tech's Plant Growth Chambers (GC Series).

With a maximum capacity of 1000 litres, each plant growth chamber delivers an innovative performance of low and high temperature along with humidity control. This is attained by altering the humidification tank exterior to the chamber, giving a joined advantage for carrying out frequent tests.

### Features:

#### Performance:

##### General Control System

- 5°C to 50°C (lamp off)/10°C to 50°C (lamp on).
- Max. to 35,000 Lux for GC-1000.
- Max. to 20,000 Lux for GC-300 models.
- 40 to 80% RH for GC-300TLH (at 20 to 35°C).
- 50 to 90% RH for GC-1000TLH (at 20 to 35°C).
- Max. 5000ppm CO<sub>2</sub> on/off system (optional).
- Microprocessor PID control/temperature calibration/automatic tuning.
- 10 step programmable temperature, humidity, and illumination profiles and repeatable steps of up to 999 cycles.
- Advanced performance of low and high temperature and humidity control, achieved by adapting the humidification tank exterior to the chamber, added benefit for long term test.

##### Illuminance Control System

- Uniformed luminescence distribution.
- Broad distribution of side lamps for hastening the growth of plants.
- High intensity illumination of upper lamp for hastening the growth of plants (for GC-1000TLH).
- Unique construction for minimization of heat increase from surrounding lamps. Tempered glass door blocks heated air from lamps. Designed to exhaust heated air through upper vent holes (for GC-1000TLH).
- Stable and long lasting lighting through introduction of high frequency electronic ballast lamps.

##### Convenience:

- Ergonomically designed door construction. Inner glass door with silicone and external door with magnetic sealing for dual airtight packing. Well designed providing a smooth open for minimization of damage to plants.
- Wide inner tempered glass door for clear observation of plant growth without affecting inner chamber's environment.
- Tall plants can be grown inside of the chamber with adjustment of shelf level.
- Maintenance of water supply are easily performed with a front water tank (GC-1000TLH). Water level check indicated by water level bar in the tank.
- Water supply during operation is also available for long term test purposes.
- Adjustable water tank position (for GC-300TLH).
- Detachable condenser air-filter for easy maintenance of refrigerating efficiency. Maintenance of air filter no longer cumbersome with our detachable condenser air filter.
- Casters for easy mobility during installation or relocation.
- Eco-friendly CFC-free refrigerant use.

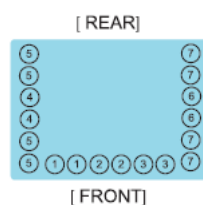
##### Safety:

- Automatic shut off after overheat alarm.
- Low and empty water level alarm.
- Power supply leakage breaker.
- Over current protection.
- Open door alarm.

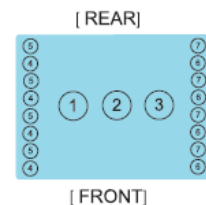


#### Lamps Setting:

- Control illumination values with the below lamp setting arrangements.



GC-300 lamp arrangement



GC-1000 lamp arrangement

## Specifications:

Model		GC-300TL	GC-300TLH	GC-1000TLH
Product Code		AAHA1012K	AAHA1022K	AAHA1032K
Chamber Volume (litres)		300		1000
Controller		Microprocessor PID controller		
Temperature	Range (°C)	5 to 50 (lamp off)		
		10 to 50 (lamp on)		
		20 to 50 (with humidity)		
	Fluctuation at 25°C	± 0.4 (without humidity)		
	Variation at 25°C	± 1.0 (without humidity)		
Illumination	Range (Lux)	0 to 20,000		0 to 35,000
	Control (steps)	10		11
Humidity (RH%)	Range	-	40 to 80 (at 20 to 35°C) 70 to 90 (at 36 to 50°C)	50 to 90 (at 20 to 35°C) 60 to 90 (at 36 to 50°C)
	Fluctuation at 60% RH	-	± 3	
Carbon Dioxide (optional)	Range (ppm)	Max. 5000		
	Sensor	NDIR Carbon Dioxide Sensor		
Refrigerant (Hp)		1/2		3/4
Temp. Heater Power (W)		750 x 2ea		1500 x 2ea
Dimensions (w x d x h)	Internal (mm)	510 x 540 x 1100		1200 x 800 x 1080
	External (mm)	700 x 805 x 1900	700 x 920 x 1930	1410 x 1068 x 2160
Net Weight (kg)		250		550
Electrical Requirements (230V)		50Hz/15A		50Hz/17A

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