

Plant Growth Chamber (INV-PGC434)



Innova INV-PGC434 Plant Growth Chamber is a precision-controlled chamber designed for optimal plant growth and research experiments. It offers precise temperature, humidity, and light intensity control, along with a range of safety features and a durable construction.

The **Innova INV-PGC434 Plant Growth Chamber** is a versatile laboratory equipment designed to provide a controlled environment for plant growth, tissue culture, and various research experiments. It has 3-side illumination light system for proper growth of plants. High-precision digital PID microprocessor for precise control of temperature, humidity, and lighting.

Key Features:

- ❖ **Precise Temperature and Humidity Control:** The chamber maintains accurate temperature and humidity levels within a specified range, ensuring optimal conditions for plant growth.
- ❖ **Flexible Lighting Control:** 3-side illumination light system for proper growth of plants with fluorescent lamps offers adjustable light intensity up to 25,000 LUX (Customizable upto 40000) with 20eaX36 watt, allowing for photoperiodic day-night simulations.
- ❖ **Programmable Operation:** The chamber can be programmed for various climatic conditions and time durations, enabling automated experiments with time duration upto 11 segment 999 cycle.
- ❖ **Safety Features:** Over-temperature cut-offs, over-cooling cut-off, sensor disconnection alarm.
- ❖ **Durable Construction:** The chamber is constructed with durable materials, including stainless steel and tempered safety glass, ensuring long-lasting performance.
- ❖ **User-Friendly Interface:** The easy-to-use 4-line back-lit LCD display interface allows for simple operation and monitoring of chamber conditions.
- ❖ It has Built-in (8 step light intensity) LUX Meter in chamber to measure and display light intensity and has Lamp-on-Delay System by trim on lamp one by one which provides gradual increase of light to eliminate sudden light intensity change
- ❖ It has Auto-defrost system, user settable interval and time.

Design Features:

- ❖ The exterior, of the machine is Durable epoxy powder coated metallic casing. Corrosion resistant Stainless Steel 304 chamber, Durable Stainless Steel 304 Sheath Heater and Copper-Aluminium fin evaporator.
- ❖ It has 8 No's of and height adjustable shelf by 25mm spacing and has Built-in humidifier arid automatic water supply.
- ❖ **Ceiling:** Double-layer vacuum-tempered safety glass ceiling on the light bank.
- ❖ **Inner Door:** Tempered safety glass inner door.
- ❖ **Heating and Cooling:** Separate heating and cooling compartments to prevent contamination and reduce maintenance.
- ❖ **Cooling System:** Hermetically sealed compressor in the cooling system.
- ❖ **Outer Door:** Outer door with self-adhesive magnetic packing and an inner glass door with an airtight gasket for easy observation of samples during experiments.
- ❖ **Casters:** Built-in casters for easy mobility

Specification:

Model	INV-PGC434
Internal Volume	850L
Temperature Range	+0°C - +70°C (light off) / minimum. +10°C (light on)
Temperature Accuracy	±0.3°C at +20°C, 70% RH (light off)
Temperature Uniformity	±1.0°C at +20°C, 70% RH (light off)
Temperature control	within 0.1 °C resolutions.
Humidity Range	30% - 90% RH
Humidity Accuracy	±2.0% at 70% RH
Humidity Uniformity	±5.0% at 70% RH
Humidity Control	Within 1% RH resolution (Humeral Sensor)
Temperature sensor	Integrated with Class a Pt-100 ohm
Light Intensity	25,000 LUX (Customizable upto 40000)
Light Source	Fluorescent lamps
Safety Features	Dual over-temp cut-offs, max temp cut-off, over-cooling cut-off, sensor disconnection alarm, low water level alarm, humidifier dry-burn protection, over current cut-off
Electrical Requirement	220 ± 10% VAC, 50/60Hz, 1-Phase Heater Capacity 6.0 kW
Dimensions (Inner)	1300 x 600 x 1250 mm
Dimensions (Outer)	1700 x 1200 x 2350 mm
Warranty	1 year after installation

Accessories:

- PVC Coated Wire Shelf: 8 EA.
- Self-Support: 30 EA.