

Environmental Test Chamber (Plant Growth Chamber)



TOPLAB INDIA'S Plant Growth Chambers are special type of Environmental Test Chambers which are designed to perform plant growth experiments inside laboratory. The aim of a plant growth chamber is to create such atmospheric conditions responsible for effective plant germination and growth. In such chambers or cabinets, humidity, temperature and lights are controlled in such a way that you can create desired environment essential for examining growth of a particular plant.

Applications:

Plant Growth Chambers and plant growth walk-in rooms are widely used in agriculture fields in order to do research on crop productivity. Plant related agriculture research and development are the prime applications of these units; plant breeding, plant nutrition, photosynthesis are some of areas where plant growth chambers play an important role. Plant categories may vary such as cereal, arabidopsis, algae, tobacco, physcomitrella, fungi, medicago, weeds, soybeans, potatoes and other commercial crops and horticulture plants etc.

Plant Growth Walk-in Room:

To perform multiple experiments and for long or large sized plants that require maximum growth height, plant growth rooms prove to be right option. Such units are designed keeping in mind user flexibility, size and future requirements. A plant growth room has enough large and room sized space, where a person can step in easily. These units are completely customized and constructed according to the specific requirements and place available at laboratory. We construct plant growth rooms with different configurations such as short plant and tall plant configurations and 2 tier configurations, horizontal and vertical airflow etc.

Plant Growth Chamber

Technical Specifications:

Models	TL-172EC	TL-300EC	TL-420EC	TL-560EC	TL-864EC
Chamber Capacity (L)	172 Liters	300 Liters	420 Liters	560 Liters	864 Liters
Chamber Capacity (Cu.Ft.)	6 Cu. Ft.	10 Cu. Ft.	15 Cu. Ft.	20 Cu. Ft.	30 Cu. Ft.
Illumination	Max. 23000 Lux			Max. 35000 Lux	
Compressor Capacity	1/3 HP	1/2 HP	1/2 HP	1 HP	1 HP
Number of Doors	Single		Double		
Controller	Microprocessor PID Controller				
Temperature Range	5°C to 60°C				
Temperature Accuracy	±0.5°C at 20°C				
Resolution	0.1°C - 1%RH				
Temperature sensor	PT - 100				
Humidity Range	20 to 95 % RH				
Humidity Accuracy	±3%RH				
RH sensor	Direct capacitance type				
Timer	Digital ON/OFF Timer				
Display	Digital LCD / LED Display				
Cooling	Hermetically sealed Compressor				
Refrigerant Gas	R-134a Eco-Friendly Gas				
Chamber illumination	Fluorescent lamp with door switch				
Construction	Double Walled				
Interior Construction	Stainless Steel 304 Grades (Stainless Steel 316-optional)				
Exterior Construction	MS Powder Coated (Stainless Steel 304 / 316 Grades - Optional)				
Insulation	Glass Wool				
Inner Doors	Tempered Glass Door to inspect specimens w/ Silicone Packing				
External Doors	Solid Doors w/ Magnetic Gum Packing				
Shelves' Construction	Made of Stainless Steel				
Number of Shelves	2 to 8 (Extra Trays on Demand)				
Power Supply	230 / 240 Volts				
Standards	GMP, ISO and CE Certified				
Caster Wheels	Yes (Optional)				
Safety features	Leakage breaker for power supply Over current protector Overheat protector Water - Level Monitoring Auto Control System				

Optional Accessories:

Color touch screen controller	RS 232 port for PC interface	Printer
Chart Recorder	Caster Wheels	DQ,IQ,OQ,PQ Certificates
Extra Shelves or Trays	Audio / Visual Alarm	Calibration Certificate

TOPLAB INDIA

601, 6TH FLOOR, SHAH PRIMA, PLOT-13,
SECTOR-02, KHARGHAR, PIN - 410 218
NAVI MUMBAI MAHARASHTRA, INDIA
Email: info@toplabindia.com
Web: www.toplabindia.com