

## Programmable Temperature & Humidity Chamber



A programmable temperature humidity chamber simulates different climatic conditions through automatically controlled temperature and humidity cycles. It helps manufacturers identify product weaknesses, assess material stability, and maintain consistent product quality.

Presto Enviro provides innovative programmable temperature-humidity chambers for applications in testing labs, research centers, and quality control in different industries. The top features of the programmable machines are adjustable test criteria, secured automated operating procedures, and high standards in environmental control to conduct consistent tests according to users' product specifications.

Programmable temperature humidity chamber machines are an integral part of the modern manufacturing industry and they are used to test the reliability of a product under different moisture, heat and cold levels. The primary purpose is to identify faults in materials, analyze product stability and guarantee product quality in production. The common applications of these programmable chambers are in electronics, automobiles, electrical devices, plastics, polymers, pharmaceutical packaging and aircraft.

## Key Features

- **Easy to Use:** Set the temperature and humidity from the control panel. The settings can be changed as per the test requirements.
- **Temperature and Humidity Control:** The chamber maintains the required conditions for testing products in hot, cold, and humid environments.
- **Programmable Testing:** Users can set different temperature and humidity levels for a test. The chamber follows the programmed cycle.
- **Control Panel:** The display shows the temperature and humidity inside the chamber, so users can check the readings during testing.
- **Consistent Test Conditions:** It helps maintain the same conditions during a test, which is useful when checking multiple samples.
- **Test Data:** Test readings can be saved for future reference, depending on the controller provided.
- **Stainless Steel Chamber:** The inner chamber is made of stainless steel. It is strong and easy to clean.
- **Sample Shelves:** The shelves provide space to place samples inside the chamber during testing.
- **Industrial Use:** It can be used for testing electronic parts, automotive components, plastic products, packaging materials, and other samples.
- **Different Configurations:** Chamber size and temperature range can be selected based on the testing needs, subject to available options.

## Technical Specification

| Parameter               | Specification                                  |
|-------------------------|------------------------------------------------|
| Product Name            | Programmable Temperature Humidity Test Chamber |
| Model                   | PTH-225                                        |
| Chamber Capacity        | 225 Litres                                     |
| Temperature Range       | -40°C to +150°C                                |
| Humidity Range          | 20% to 98% RH                                  |
| Temperature Uniformity  | 12°C                                           |
| Temperature Fluctuation | ±1°C                                           |
| Humidity Uniformity     | ±3% RH                                         |
| Humidity Fluctuation    | ±2% RH                                         |
| Temperature Sensor      | PT100                                          |
| Heating Rate            | 1°C to 3°C per minute                          |
| Cooling Rate            | 0.7°C to 1°C per minute                        |
| Cycle Programming       | Up to 999 cycles                               |
| Inner Chamber Material  | SUS304 Stainless Steel                         |
| Insulation              | Polyurethane (PU) Foam                         |
| Compressor              | Tecumseh or equivalent                         |
| Cable Port              | 50 mm                                          |
| Standard Shelves        | 2                                              |
| Power Supply            | 220 V AC, 50 Hz                                |