



Environmental Chamber



ACMAS Technologies Inc.

CE An ISO 9001:2000 Company



Environmental Chamber



Environmental chambers are the instrument which design for study and contemplate the effects of different environmental parameters such as humidity, temperature and light in various applications tests involving micro-organisms, plants, tissues, electronic components etc. Apart from various customized industrial and research applications. This test chamber usage in R & D laboratories, research studies (tissue culture applications, enzyme reaction studies, growth observation) and product testing facilities.

Salient Features:-

- Reliable & Energy Efficient
- robust construction
- Low maintenance
- CFC free cooling
- Thermal Efficient Insulation
- Calibrated test Chamber
- Triple walled Microprocessor controlled chamber
- Inner-plexi glass door for inspection
- Customized temperature & humidity
- ISI marked compressor or condensing unit
- Operating Voltage 220 V, 50 Hz, single phase
- CE certified
- Caster wheel mounted for easy portability
- Capacitive Humidity sensor
- PT-100 temperature sensor (PT-1000 sensor)

Construction:-

- Inner chamber is made up of high grade stainless steel SS-304 (SS-316 is optional)
- Outer chamber is made up of epoxy coated mild steel (SS-304 is optional)
- Tray is also supplied to make the shelves inside the chamber.
- Glass Wool Insulation: reduces heat losses in cabinet for better sensitivity and economical operations with minimal impact on the environment.
- Forced air circulation in the chamber by a blower ensures uniform temperature and humidity inside the chamber.
- Door: is provided with magnetic door closer and its outer body are made of powder coated MS and inner is made of SS-304.

Heating: is done with ISI marked strip type heaters placed around the inner chamber. The warm air is evenly distributed throughout the chamber through efficient motor fans ensuring very good temperature sensitivity

Cooling: We use energy efficient ISI marked high end CFC free compressors conforming to latest international standards and guidelines.

Humidity Range: Humidity range according to the humidity temperature graph attached)

Humidification: Humidity is achieved by generating of steam by immersion type water heater in water reservoir & its subsequent condensation in the circulating air.

Humidity Sensitivity: Humidity is controlled by imported Humidstat and is indicated by round hygrometer with an accuracy of + 3%

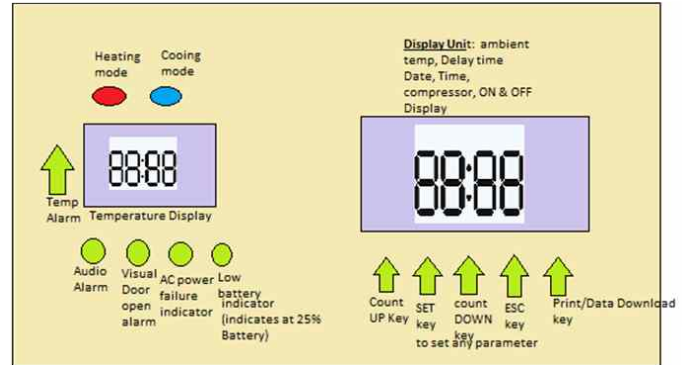
Temperature Control: The temperature inside our chambers is controlled through programmable micro-processor based temperature controller cum indicator.

Temperature Range

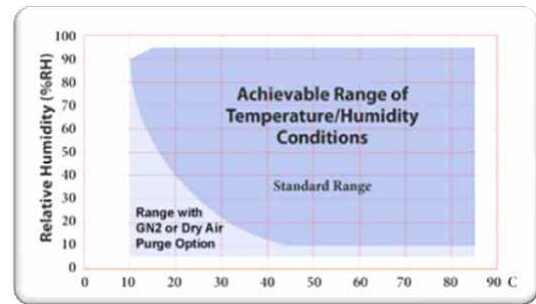
Temperature Sensitivity: Temperature inside our environmental chambers is controlled with a sensitivity of + 0.5°C or better.

Air Circulation: circulated by ISI mark silicon winded motors which are connected to balanced blowers.

Microcontroller Based Control Panel



Temperature Vs Relative Humidity (humidity range is according to the following graph)



Technical Specifications

Construction	Inner	SS-304
	Outer	Powder coated MS
	Door	Inner SS-304 and outer MS
Temperature	Range	5 to 60 deg C (Customizable)
	Deviation	+ 0.5 degree C
	Readability	+ 0.5 degree C
Humidity	Range	3% to 98% RH
	sensitivity	+ 3%
Shelves	Number	2
	Dimension	According to inner size of cabinet
	Maximum load	20 kg
Humidity range		According to Humidity range graph
Controller		PID controller
Display		LED or LCD
Serial Data Port		RS 232
Power consumption		230 V, 50 Hz
Castors		Lockable
Dimensions (Inner chamber)		455 * 455 * 710 mm
Optional Accessories		
	Timer	1-999 hours
	Inspection window	In door
	LCD display	2 * 24 character display
	Adj. alarm limits	Visual and acoustic
	Real time program	

Optional Upgrades (If Desired)

Universal Digital Data Recorder with Computer Data Acquisition and Control System for Environmental Chamber

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