

Hiacc[®]

HALT/HASS Chamber

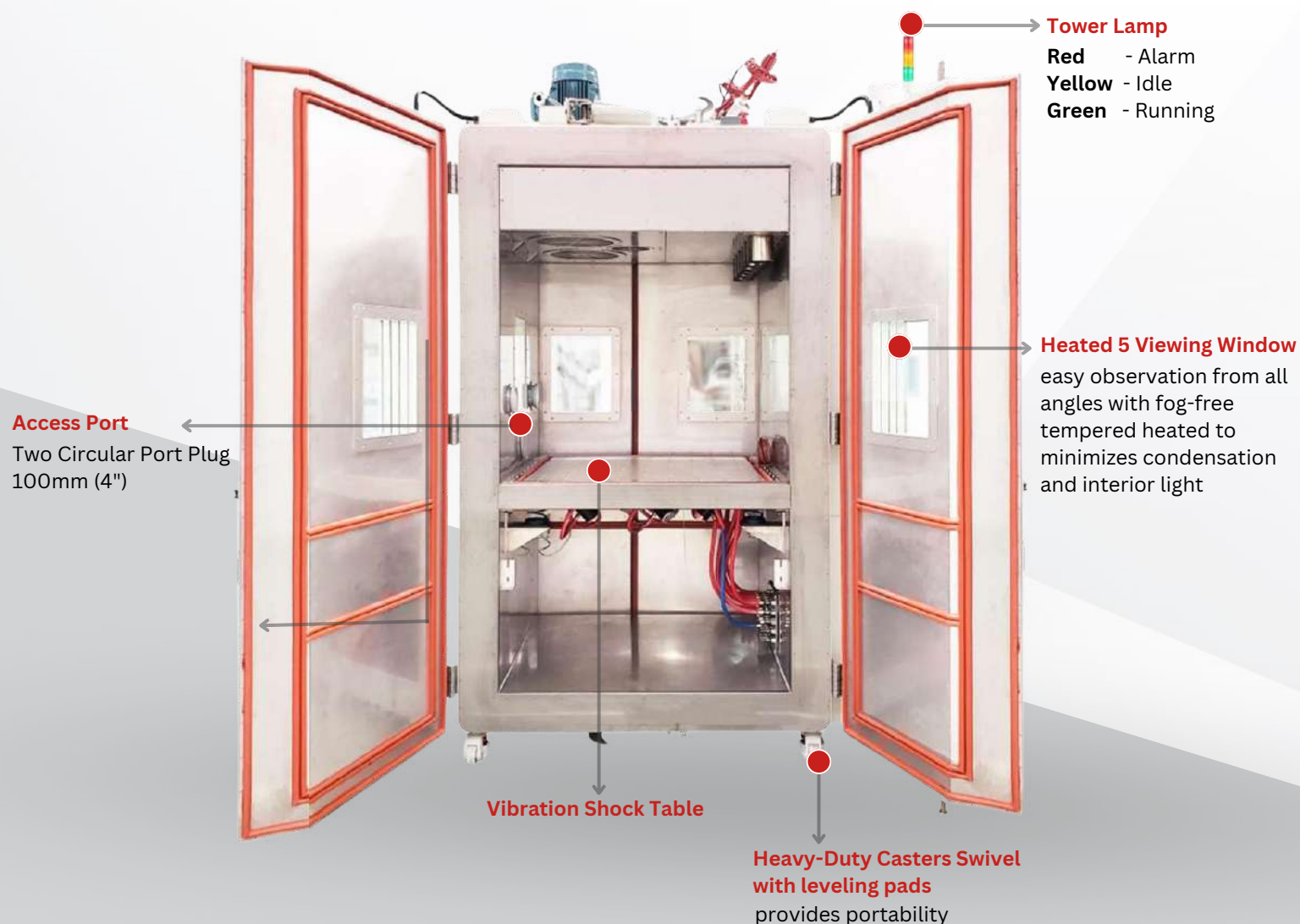
Product Catalogue



HALT/HASS : The All-in-One Solution for Environmental Stress Testing

HIACC's Accelerated Stress Testing climatic chambers are equipped with cutting-edge features specifically designed for effective HALT (Highly Accelerated Life Test) and HASS (Highly Accelerated Stress Screening). These features include change rates of up to 75°C/minute, adjustable air distribution, a multi-functional controller, ergonomic workstation, and various safety features.

The combination of extremely rapid temperature change rates with repetitive shock vibration testing provides a rigorous testing experience to determine the product's operational and destructive limits. Vibration testing for HALT/HASS is conducted using Hiacc's multi-axis repetitive shock vibration table, configurable to ensure superior uniformity across the entire table with exclusive features.



Test Space Capacity



Experience the timeless elegance of our chambers, boasting the signature HIACC stainless steel test space complemented by a sturdy structure. With the control console conveniently located on the door, the unit's footprint is further optimized for compactness. Plus, the user-friendly door latch ensures simplicity and security like never before.

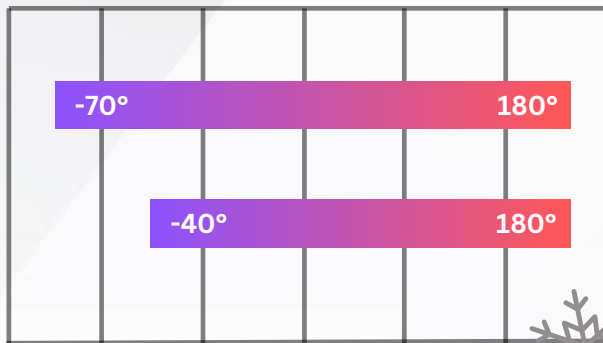
The Klima Series Available in Different Test Space Sizes: 1500 (*All in Liters)

(* Upon customer request, customized sizes are also available.

Temperature Range



(°C) -60° -20° 0° 80° 160° 200°

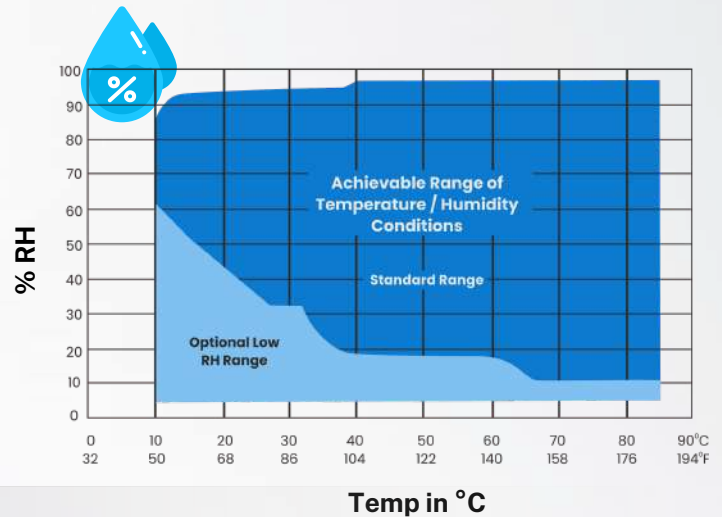


Cascade
(All -70C Model)

Single
(All -40C Model)

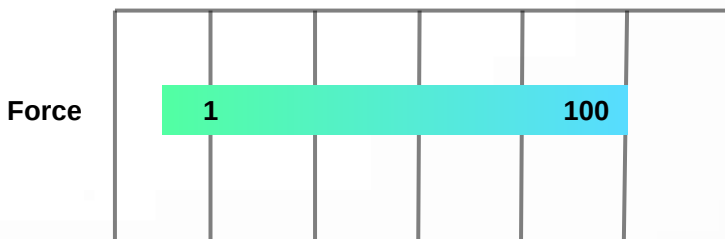


Humidity Performance



Acceleration Range

(g) 1 30 50 70 100 120



Force

Full-Range Humidity Specifications*

Humidity Range	10% to 98% RH
Temperature Range	10°C to 85°C
Humidity Control	<±3% RH

Vibration Shock Table



HALT and HASS testing procedures involve the use of repetitive shock vibration, which is achieved through a shaker table. Pneumatic impact hammers strike the bottom of the table, imparting vibration in 3 axes and 3 rotations simultaneously.

The repetitive shock tables are equipped with a unique thermal isolation system that minimizes thermal loading on the chamber, ensuring a stable condition for impactor operation. Additionally, impactor cooling mechanisms are employed to prolong impactor lifespan and reduce maintenance downtime, resulting in more effective and accurate test results

Technical Specifications

Specification/ Model		HT - 3.0
TEST SPACE DIMENSIONS		
Test space volume	Ltr.	1445
Width	mm	1067
Depth	mm	1067
Height	mm	1270
PERFORMANCE DATA FOR TEMPERATURE		
Maximum temperature	°C	200
Minimum temperature	°C	-100
Rate of temperature change, cooling	°C/min	75
Rate of temperature change, heating	°C/min	75
Temperature deviation, in time	°C	±2
Heat compensation, max. at +20 °C	W	
PERFORMANCE DATA FOR VIBRATION		
Acceleration range	g	1 to 100
Frequency range	hz	2 to 10000
Vibration deviation	%	30
Vibration type		Random
PERFORMANCE DATA FOR HUMIDITY		
Maximum temperature	°C	85
Minimum temperature	°C	10
Humidity range	%RH	10...98
Humidity deviation, in time	%RH	±1...±3
Temperature deviation, in time	%RH	±1
Test Standard Compliance	IEC-60068, IEC-60749, IEC-61747, MIL-STD, ISO16750, ASTM, SAE, BIS & 50 other standards	
TEST SPACE LOADING CAPACITY		
Load, max.	kg	300
Load per grid	kg	
Possible number of insert grids	piece	4
POWER/CONNECTION DATA		
Voltage rating	V	3/N/PE AC 415V±10% 50Hz other voltages and frequencies optional
Connected Load	kW	88
Sound pressure level	dB(A)	73
Total weight	kg	1800
Refrigerant	type	LN2

(*) The performance data refer to an operating room (ambient) temperature of +26 °C, 415 V/50 Hz nominal voltage, without test specimen and without accessories

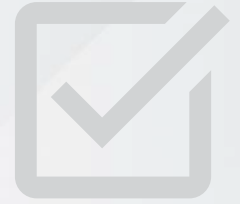
(*) Sound Pressure Level: Using a calibrated instrument, the weighted sound pressure level was measured in free-field environments at a height of 1 meters from the floor and a distance of 1 meter from the equipment surface.

(*) 20 Amp, 32 Amp minimum service Required

Options

(Special accessories on customer request)

- ✓ Additional Port Holes 50MM, 100MM, 125MM& 150MM
- ✓ Floor loading capacity (customizable)
- ✓ Air Dryer for Low RH Applications
- ✓ Heavy duty Customized Shelves
- ✓ Water-Cooled Refrigeration Systems
- ✓ Remote Refrigeration/ Condensing Unit
- ✓ Booster Cooling through LN2 up to -150 Deg C



Safety

Enhanced Electrical Safety

- ✓ Incoming power supply EMF (Electromagnetic interference filter) protection for reduces electromagnetic field radiation.
- ✓ Dedicated MPCB protection for various components, including Refrigeration Compressors, Air Heater, Circulation Fan Motor, Movement Basket Motor Assembly and Condenser Motor.
- ✓ Dedicated MCB protection for HMI, PLC, Test space Lamp, and the Control Circuit to ensure system stability
- ✓ Three Phase Preventer for under voltage and over voltage protection from the main input power.

Comprehensive Temperature Control

Dual safety mechanisms - Mechanical Thermostats and adjustable electronic safety controllers - prevent thermal deviations and protect your samples.

- ✓ **Level 1** - High and Low temperature adjustable electronic safety controllers
- ✓ **Level 2** - High and Low temperature mechanical thermostats

Advanced Refrigeration Safeguard

- ✓ High and Low Refrigeration safety pressure Protection for safeguards the refrigeration system.



Control

Precise Climate Regulation

precisely controls temperature, humidity, and other environmental factors to match your desired test conditions.

Data Logging and Reporting

Track essential data throughout your tests and generate comprehensive reports for analysis.

Easy Set-Up and Operation

An intuitive user interface allows for simple programming and monitoring of test parameters.



Advanced Energy Saving

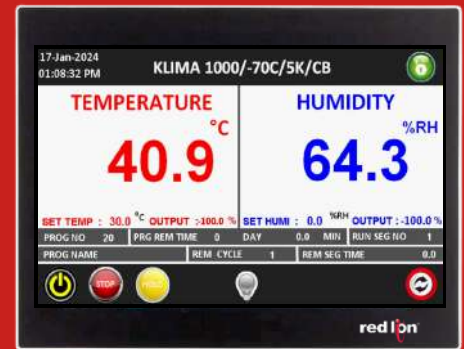
The KLIMA features a solenoid valve for advanced cooling control, which modifies proportionately depending on demand to save energy and improve temperature stability. A smart forward-looking algorithm improves and smoothest temperature ramping. It also improves test accuracy and energy efficiency. Combined with further advancements in refrigeration and heater performance, these superior features are unique to HIACC and make the most energy efficient HIACC KLIMA chambers to ever.



Touchscreen Controller

HIACC's flagship touchscreen controller provides ease for doing complex testing. It is equipped with USB access and Ethernet, with a range of flexibility. Following are some of the features of the controller with 10" color touchscreen, makes chamber operation and data collection easy and reliable. Quick navigation buttons provide shortcuts to user-selected screens. With this Controller, receive:

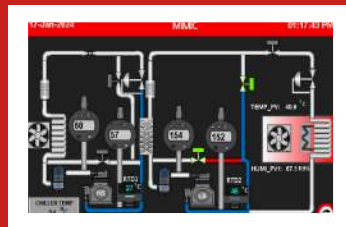
- Multi-level, password-based security system to protect data
- Test data that can be downloaded to .CSV formats
- The MIMIC to detect excessive refrigeration pressures and temperatures and notify users when problems occur
- Remotely Connect Chamber
- Graphical trend view of actual/set temperature values
- Easy to Program 40 Profiles up to 50setps each, with battery backup and real time clock.



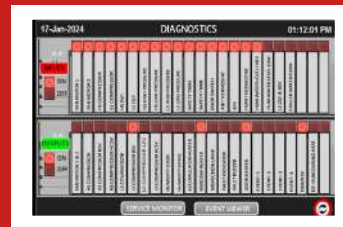
Chamber Home



Chamber Menu



Process Mimic



Chamber Diagnostics



Alarm Status



How Our Support Works

Call Our Support
Hotline Number +91 98848 88149

E-Mail Us
support@hiaccengineering.com

Register on Website
www.hiaccengineering.com



We Raise a Ticket for Your Issue in Less than 24 hrs. You'll Receive an E-mail Confirming Receipt of the Issue Raised.



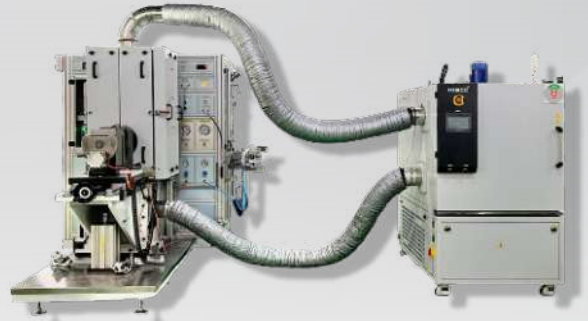
Our Support Engineers Will Respond, Usually Resolving Your Issue Remotely



if not. A Visit to Your Premises Will Be Arranged (Based on Your Service Plan)



Integrated Temperature Chamber with Force Calibration System



Remote Cooling / Heating Customized Temperature System for Automotive Testing



Environmental Chamber with Ultra-Low Humidity Control



Custom Size Environmental Chamber with Vibration Integration (AGREE)



Walk in/ Drive in Chamber (Customizable)



Customized Thermal Shock System

Related Products

Expand your testing horizons with our diverse range of complementary equipment, ensuring comprehensive, accurate, and reliable testing outcomes. your ultimate destination for environmental testing solutions, we provide cutting-edge products to elevate your testing capabilities to new heights.



Climatic Test Chamber



Temperature Test Chamber



Bench Top / Table Top Test Chamber



Thermal Shock Test Chamber



Stress Screening Test Chamber



Altitude Test Chamber



Hiacc[®]

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