

HH084 HEATED-HUMIDIFIED INCUBATOR

HH Series Overview

The HH series chambers are designed for performance while utilizing heat and humidity. Darwin Chambers ultrasonic humidification provides excellent humidity control and avoids hot spots during mapping. All HH series chambers incorporate simple serviceability and excellent reliability.

HH09

The HH09 is a bench top heated-humidified incubator designed to fit on 24" benchtops or stacked with optional racking.

HH030

The HH030 is a single-door heated-humidified incubator.

HH055

The HH055 is a 2-door heated-humidified incubator.

HH084

The HH084 is a 3-door heated-humidified incubator.



Featured photo is the HH084 3-door heated-humidified incubator, open door view to show internal racks and optional chart recorder attached.



Featured photo is the HH084 3-door heated-humidified incubator, closed door view.



HH SERIES: HEATED-HUMIDIFIED INCUBATOR

The HH series was introduced in 2003 as the first commercially manufactured large capacity heated and humidified incubator. The HH series incubators are presently in use by research companies around the world. The advantages of these incubators include:

Quiet Operation

The HH chambers utilize quiet and highly efficient DC fans. Locating these chambers in laboratory workspaces is a viable option.

Superior Control and Uniformity

The ultrasonic humidification system provides excellent humidity control and avoids hot spots seen during chamber mapping of steam boiler equipped chambers. Standard control at the sensor in these chambers is $\pm 0.2^{\circ}\text{C}$ and $\pm 0.3\% \text{RH}$.

Options Available

Chart Recorder
Data Loggers
Dryers

Widely Proven, Non-Proprietary Controllers

Standard controllers for the HH series are manufactured by Fuji Electric and are ideal for heated-humidified incubators. Unlike many proprietary controllers, this controller is commercially available and proven in tens of thousands of installations. Standard functions include: autotuning, fuzzy logic, PID control, programmable alarms, calibration capability, offset capability, etc. A touchscreen control interface is optional. Other controller manufacturers are also supported (Watlow, Allen Bradley etc.)

Services and Warranties

We offer 24 hour technical support throughout the lifetime of your chamber. In addition to our standard warranties, we also offer extended warranties for cooling components, parts and labor. We also provide qualifications, validations and preventive maintenance services at an additional cost. Please ask for a quote.

HH084 Heated-Humidified Incubator Specifications

Performance	Standard	Customized Option
Temperature Range	5° C above ambient to 50° C	Up to 70° C
Ambient Temperature	21° C ± 3° C	Available
Temperature Control	± 0.2° C	Available
Control Resolution	± 0.2° C	Available
Temperature Sensor	NIST Traceable Platinum RTD	Available
Humidity Range	Ambient to 90% @ 21° C	2 to 95% @ 21° C
Humidity Control	± 0.8%	Available
Control Resolution	± 0.2%	Available
Humidity Sensor	± 0.8%	Other or Custom

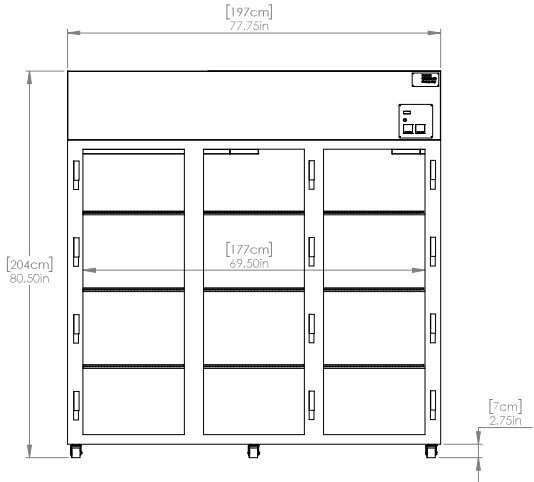
Control System	Standard	Customized Options
Controller	Microprocessor based PID	West EC-44, Future Design Touchpad + More
Control Readout	Actual and Set-Point Values	Trending, Duty Cycle
Calibration Correction Capability	Actual and Set-Point Values	Available
Uniformity Off Set	Standard 0.1 Resolution	Available
Alarm	Audible and Visual	Text, Email, Web Server, Remote Access
Alarm Type	Deviation in 0.1° C or 0.1% RH with Delay	Absolute 0.1 Resolution with Delay
Remote Monitoring	Available	Dry Alarm Contact, RS 485 & Analog Output
Password Protection	Numeric	Numeric, Alpha Numeric
Audit Trail	N/A	Available
Universal Power Supply for Monitoring	N/A	Available

Construction	Standard	Customized Options
Exterior	Stainless Steel Door & Front, Aluminum Sides	Stainless Steel Door, Front & Sides
Interior	Aluminum Side Walls & Back, Stainless Steel Floor & Ceiling	Stainless Steel Side Walls, Back, Floor, Door Liner & Ceiling
Shelving	9 Gray PVC Coated, Adjustable 1" Increments	Stainless Steel, Chrome Plate or Custom
Casters	2.75" Total Weight Capacity is 300 lbs per Castor, Not Including the Weight of the Chamber	5" Casters or Seismic Legs

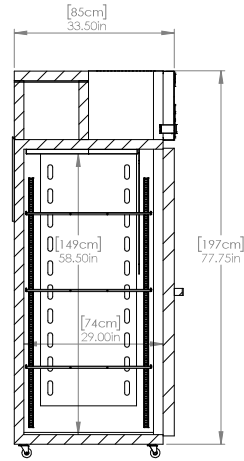
Capacity & Dimensions	US Standard	Metric
Interior Capacity	70.4 ft ³	1994 liters
External Dimensions	77.875"W x 33.5"D x 77.75"H	197.803cm W x 85.09cm D x 197.485cm H
Internal Dimensions	71.625"W x 29"D x 58.5"H	181.928cm W x 73.66cm D x 148.59cm H
Shelf Dimensions	22.25" W, 26.25" D	55.68 cm W x 66.68 cm D
Crated Weight	1220 lbs	554 kg

Electrical	US Standard	International
Voltage	115v / 60HZ	230 / 50 / 1
RLA	10.3	5.8 With Step Down Transformer
Cord Length	9 ft	2.74m (specify plug)

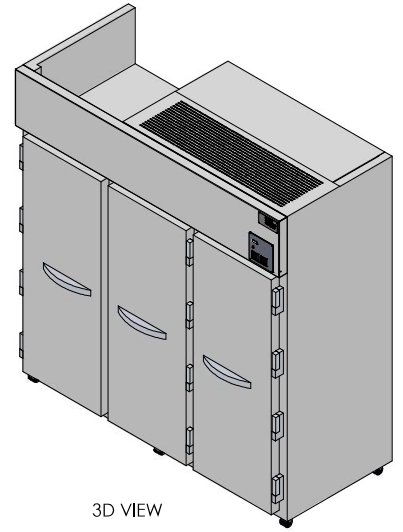




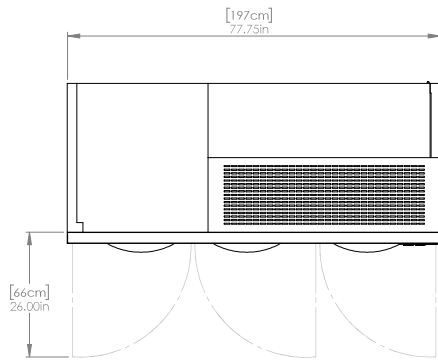
FRONT VIEW
(DOORS REMOVED)



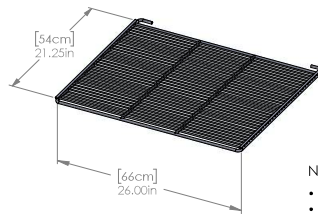
SIDE VIEW
(SECTION)



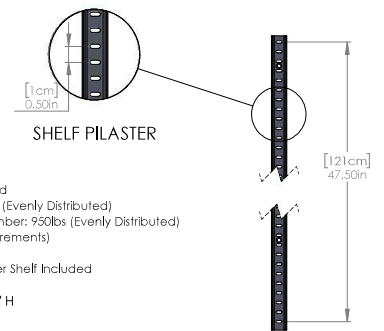
3D VIEW



TOP VIEW



WIRE SHELF



SHELF PILASTER

Notes:

- Shelf Finish: Gray PVC Coated
- Max Weight per Shelf: 150lbs (Evenly Distributed)
- Max Load Capacity of Chamber: 950lbs (Evenly Distributed)
- Pilaster Height: 47.5" (1/2" Increments)
- Minimum Spacing: 2"
- 4 Stainless Steel Shelf Clips per Shelf Included
- 2" I.D. Access Port Included
- Door Opening: 21" W x 58" H

Note: Tolerances are 0.25" unless otherwise stated.
*Dimensions and components are subject to change without notice.