

# Stability Studies

## Percival® model RX-3000

Stability Chamber 9.6 ft<sup>3</sup> (272 liters)

### Applications

- Designed to meet ICH guidelines for long-term stability testing conditions.

*Please compare your own requirements to the specifications listed below.*

Standard chamber meets all temperatures and % relative humidity conditions specified in ICH guidelines below:

- 25°C and 60% RH
- 30°C and 65% RH
- 30°C and 70% RH
- 30°C and 75% RH
- 40°C and 75% RH

### Temperature Range

- 2°-44°C ( $\pm 0.5^\circ\text{C}$ ) throughout the chamber
- Temperature control accuracy: +/- 0.1°C

### Humidification

- % RH ranges per specifications above at those specific temperatures
- Humidity control accuracy: +/- 2%
- Humidity uniformity: +/- 5% throughout the chamber
- Humidifier type: Ultrasonic
- Humidifier water supply: Deionized or RO

### Dehumidification

- 25°C and 60% RH
- 30°C and 35% RH
- Control accuracy: +/- 2%
- Humidity uniformity: +/- 5%

### Percival's IntellusUltra Controller

The IntellusUltra (C8) control system adapts to nearly any programming style with a large range of options for optimal control over experiments.

- Robust and reliable, industrial-grade integrated hardware design



### Percival's IntellusUltra Controller (continued)

- Highly flexible programming capabilities for customized configurations and expansion
- Precise, simultaneous control of up to 7 environmental parameters
- Industry-leading experiment protection and system diagnostics
- SCADA/LIMS Port available to provide CFR21 Part 11 or EU GMP Annex 11 compliance

### IntellusUltra Touchscreen Interface

This high-resolution touchscreen displays advanced settings and data for fine-tuning experiments, including graphs and charts.

- 10.1" IPS, high-resolution display with 10-point multi-touch sensitivity
- Tabular and graphical presentation of chamber programs and parameters
- Highly visible process values and alarm notifications
- Enhanced user feedback menus

*Please visit [percival-scientific.com](http://percival-scientific.com) for more information on our control systems.*

### RX-3000 specifications

(subject to change without notice)

| Temp Range     | Relative Humidity | Work Area       |                | Exterior Dimensions |      |      |      |    |       | Shelving Size |             | Tiers |
|----------------|-------------------|-----------------|----------------|---------------------|------|------|------|----|-------|---------------|-------------|-------|
|                |                   | ft <sup>2</sup> | m <sup>2</sup> | in                  | cm   | in   | cm   | in | cm    | in            | cm          |       |
| 2-44 $\pm 0.5$ | up to 75% @ 40°C  | 9               | 0.8            | 31                  | 78.7 | 23.8 | 60.3 | 46 | 116.8 | 26.5 x 16.5   | 67.3 x 41.9 | 3     |

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## Insulation

- Woodless construction using 2" thick foamed-in-place non-CFC Urethane insulation with 97% closed cell-structure density of 2.2 lbs/ft<sup>3</sup>

## Cabinet Construction

- Interior constructed of 22-gauge #304-4 stainless steel
- Interior floor constructed of 24-gauge polished stainless steel
- Exterior constructed of 24-gauge Galvannealed extra-smooth steel
- NSF-compliant seam design
- Chamber is completely self-contained, suitable for stacking one above the other
- Overall wall thickness is 2" (5.1 cm)
- Highly durable and reflective coating

## Door

- One door opening 26.8" x 29.8" (67.9 cm x 75.6 cm) provides full access to the chamber interior
- Magnetic gasket provides a tight seal to door frame
- Door and frame heaters with drip deflector

## Interior Space

- 9.6 ft<sup>3</sup> (0.272 m<sup>3</sup>) with shelf area of 9 ft<sup>2</sup> (0.8 m<sup>2</sup>) provided on three tiers

## Shelving

- Three tiers of stainless steel wire shelving (each shelf is 16.5"D x 26.5"W [41.9 cm x 67.3 cm])
- Shelves are supported by shelf clips allowing ½" vertical adjustments
- Maximum clearance between shelves is 8" (20.3 cm)

## Refrigeration

- Self-contained air-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended life and tight temperature control. Continuous running condensing unit ensures precise temperature control by alternately cycling refrigerant and hot gas to coil; also prolongs compressor life and eliminates risk of ice buildup in coil.
- Extended stem solenoid valves for quiet and long life operation
- Rear chamber wall-mounted evaporator coil incorporates an air circulation fan
- Heat rejection to ambient (standard chamber) = 1,564 BTU/hr

## Options (most popular)

- IntellusUltra Connect (C9)
- Additive CO<sub>2</sub> control
- CO<sub>2</sub> removal system
- Self-contained water-cooled condensing unit
- Dry alarm contacts
- Stacking hardware
- Extended temperature ranges available
- Convenience receptacles

Contact [info@percival-scientific.com](mailto:info@percival-scientific.com) with questions or for additional information about chamber options.

## Electrical Service Requirements

- 115/1/60 with NEMA 5-15P plug provided (with standard chamber)
- RLA=9, MCA=11

## Regulatory Standards

- Electrical Safety: UL-508A, certified and labelled by Percival Scientific under UL file number E340161
- Quality System: ISO 9001:2015, certified under DQS, Inc. under certification number 10017261

## Helping You Create Better Science

Percival Scientific controlled environment systems are the culmination of over 60 years of design and manufacturing experience. Our high-quality products have been developed through direct partnerships with the scientific community and offer platforms that are highly customizable and provide superior performance. We understand that scientific innovation comes from creativity, passion, technical expertise and attention to detail, and we are proud to help you create better science.



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