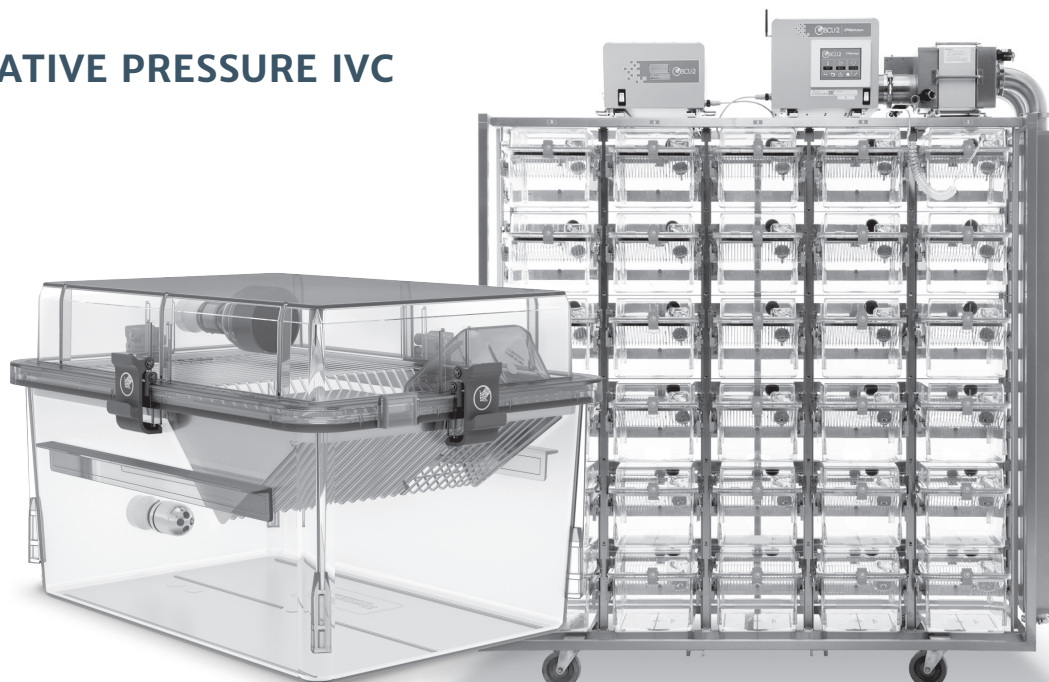


**Your trusted global partner  
in life-saving research.**

For over 50 years, Allentown has provided critical solutions to the biomedical research community. Our high-quality equipment and advanced vivarium systems continue to define and exceed industry standards. Like everything we do, our unparalleled customer service is stamped with the Allentown hallmarks of integrity, dedication and care.

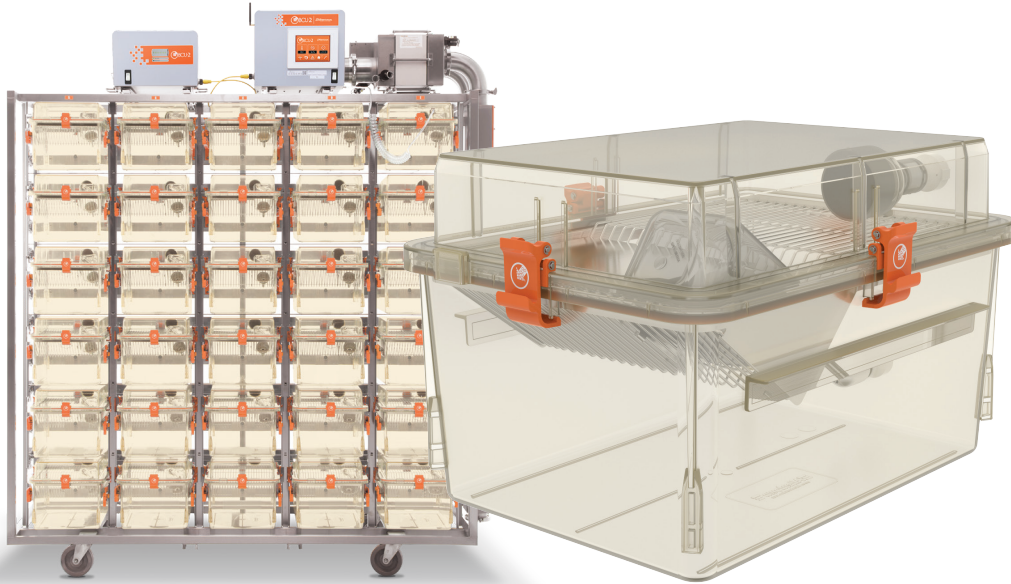
# BCU-2™ Rat

SEALED NEGATIVE PRESSURE IVC



OVERVIEW

Providing critical solutions with integrity and care.



## The Gold Standard in Biocontainment Housing

Designed in conjunction with customers who were looking for an alternative to glove-box isolators, Allentown brought the first BCU to market in 1997, and for more than 20 years it has continued to be the gold standard in biocontainment housing. Now, Allentown has taken the groundbreaking innovations pioneered by the NexGen Easy IVC and the BCU-2 Mouse and applied them to the BCU-2 Rat, creating a new unit that maintains the solid, reliable performance of the BCU-2 family of products, but in a system custom-made for rats and rat research.

**Patented 4-point seal (United States Patent 6,308,660)** – When you remove a cage from the Allentown BCU-2 system, both the cage *and* the rack are sealed from the room.

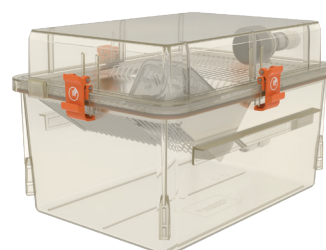
**Cage docking confirmation** – Plastic (polysulfone) cage support runners in every slot have an integrated spring-operated cage lock and a docking indicator that alerts the operator to improperly docked cages.

**Ergonomic, user-friendly cage locks** – Designed to provide consistent pressure along the entire cage perimeter, ensuring that the gasket seals the top to the cage. The locks are designed to easily snap into a raised position to allow for tunnel washing.

**Battery backup** – At least 10 hours of emergency backup power, blower redundancy, and wireless monitoring and alarming.

**Easy cage removal and wellness checks** – No need to fully remove cages from the rack, making animal observation simpler, easier and faster.

**COMPONENTS**



**IVC System**

- Lightweight, compact, and autoclave compatible rack design
- Patented four-point seal system. Upon removal of the cage, both the rack and cage are sealed from the room
- Plastic (polysulfone) cage support runners with integrated spring-operated cage lock with docking indicator
- Ergonomic, single-finger motion docking with auto-locking feature
- Horizontal airflow manifolds with stainless steel sanitary fittings for ease of cleaning
- 127 mm diameter stainless steel casters with gray polypropylene wheels with sealed ball bearings and four foot-operated brakes
- Same-side supply and exhaust plenum configuration
- 76 mm diameter vertical supply and 76 mm diameter vertical exhaust plenums with back and bottom door access
- 304 stainless steel, welded frame construction, utilizing both square and rectangular structural tubing
- Cage air tubes are 304 stainless steel
- At least 10 hours of battery backup with redundant power source
- Weekly cage change capable via single-pass, constant-airflow pattern yielding 45 ACH
- Rack level HEPA filtration – HEPA-filtered air to animal and HEPA-filtered exhaust
- Filter, blower and power alarming via dry contacts
- Blower battery gravity lock system when installed on rack
- Negative cage operation with control loop feedback for constant airflow
- Quick-release fittings for on-site HEPA certification or decontamination of entire rack system
- On-site control board programming of blower alarms, filter alarms, disconnected hose, battery operating airflow point and AC operating airflow point

**Cage System**

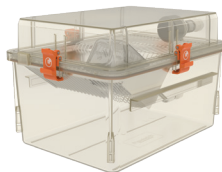
- Cage floor space of 916 cm<sup>2</sup>
- Clear polysulfone plastic
- Gasketed cage lid ensures safety and protection from damage, and maintains cage negative pressure when removed
- Standard, certified cage level supply HEPA filtration
- Standard cage level exhaust filtration
- Optional, certified cage level exhaust HEPA filtration
- Clear cage and flip-up cardholders improve observations
- Compact nesting and stacking for more efficient autoclaving throughput
- Full pocket wire bar lid

**IVC System (continued)**

- Real-time battery charge indicator
- Real-time AC or battery indicator
- Fully autoclavable rack and cages
- Row and column identification labels
- Model number and serial number identification labels
- Optional WiVarium Plus™ tablet-based blower control and rack monitoring
- Optional thimble hookup for the removal of heat and odor

**COMPONENTS**

**Cage System with Standard Filter Top**  
324 mm x 264 mm x 432 mm  
Floor space: 916 cm<sup>2</sup>

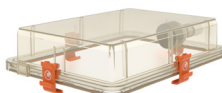


**Bottle**



450 mL | 508 g (filled)  
Item # PC450BCL+SLC

**Top**



**Standard Filter Top Assembly**  
297 mm x 81 mm x 406 mm | 1084 g  
Item # 317439-1

**Cardholder**

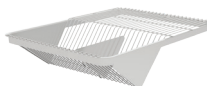


**76 mm x 102 mm Vertical**  
Item # VH35P3-8  
(also available in 76 mm x 127 mm  
Item # VH34P3-8)



**76 mm x 102 mm Horizontal**  
Item # HH35P3-8  
(also available in 76 mm x 127 mm  
Item # HH34P3-8)

**WBL / Feeder**



**Full Pocket Wire Bar Lid**  
Food capacity: 771 g  
275 mm x 88 mm x 383 mm | 590 g  
Item # 231578

**Filters**



**Certified Intra-Cage HEPA Exhaust Filter (Option)**  
Item # 230876-CS



**Intra-Cage Extract Filter Housing**  
Item # 115402-1



**Intra-Cage Extract Filter**  
Item # BCU2000PF

**Cage**



**Cage Assembly**  
285 mm x 194 mm x 384 mm | 1429 g  
Item # 232143

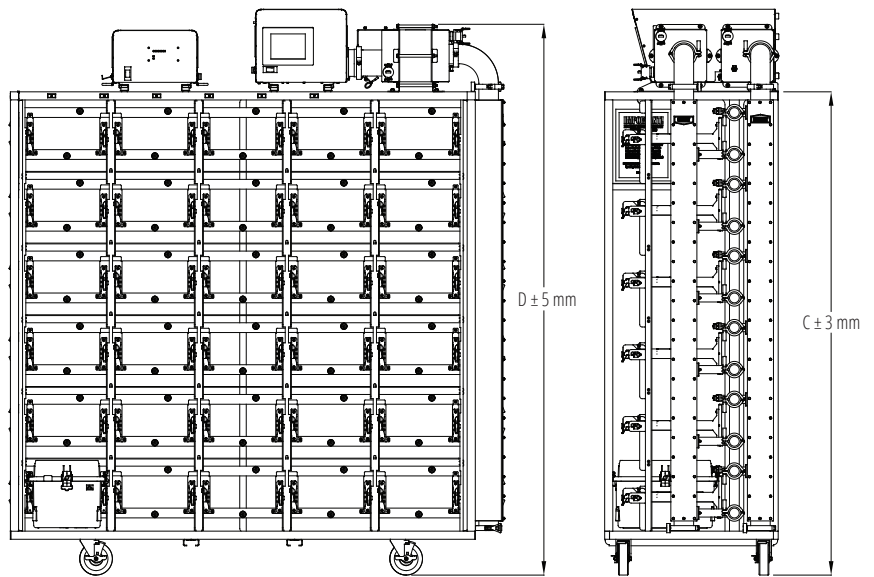
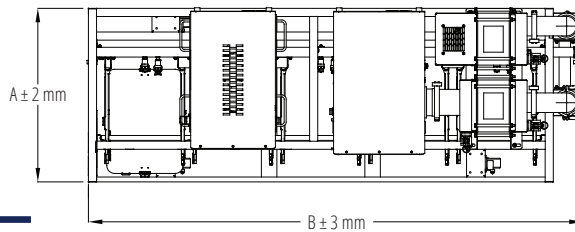
**SPECIFICATIONS**

Size	Depth (A)	Width (B)	Height <sup>1</sup> (C)	Height <sup>1</sup> (D)	Matrix		Sides	Weights <sup>2</sup> (loaded)	Weights <sup>2</sup> (unloaded)	Animal Capacity	ACH	Supply Air	Thimble	Energy Use	Heat Load
	mm	mm	mm	mm	Col.	Row		kg	kg			m <sup>3</sup> / hr	m <sup>3</sup> / hr	Watts	Watts
<b>BCU-2 Rat</b>															
30	676	1928	1883	2170	5	6	1	289	157	60	45	27.2	32.3	39.0	35.0

Note: a.) Airflow at sea-level b.) Airflow tolerance ±10% <sup>1</sup> Height includes casters. <sup>2</sup> All weights are approximations.

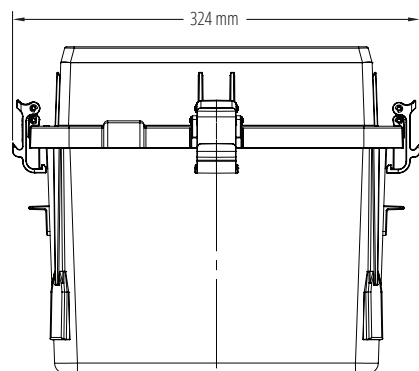
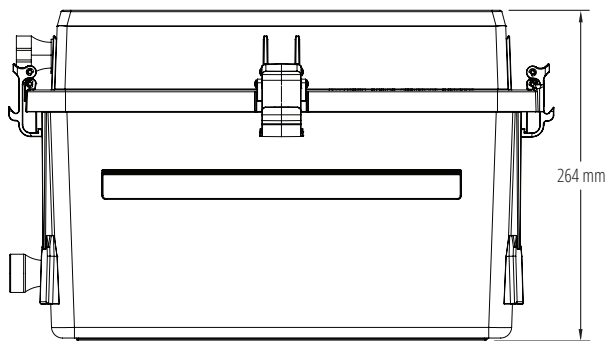
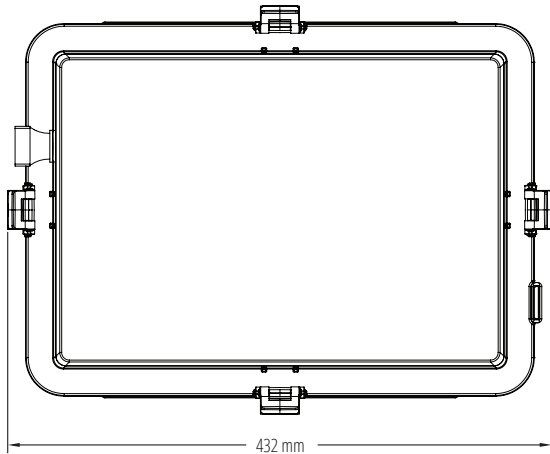
**Notes**

- Voltage: 90 – 264 Vac, 50 / 60 Hz, 1 Ph
- Current: 0.37 A @ 115 Vac (0.20 A @ 230 Vac)
- Operating pressure: 13 mm H<sub>2</sub>O at the supply HEPA
- Noise (ISO 7779): 43 dBA @ 1.0 meter (clean filter)
- HEPA filter: H14
- Audible alarm: Option, trigger on blower and power fail
- Communications: Bluetooth® or Wi-Fi
- Battery life: At least 10 Hours @ ½ pressure



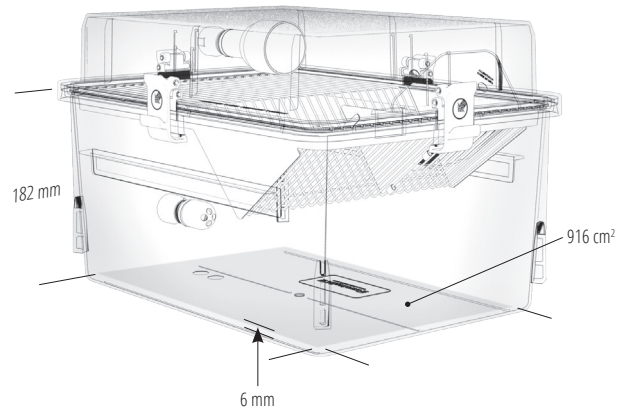
**SPECIFICATIONS**

**External Dimensions**



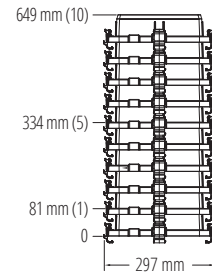
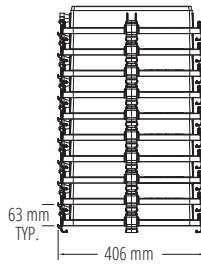
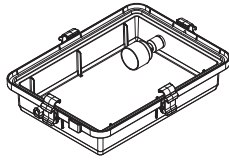
**Internal Dimensions**

**Full Pocket**

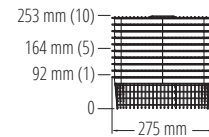
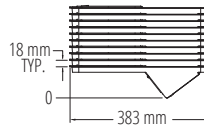


**SPECIFICATIONS**

**Standard Filter Top**



**Full Pocket Wire Bar Lid**



**Cage**

