

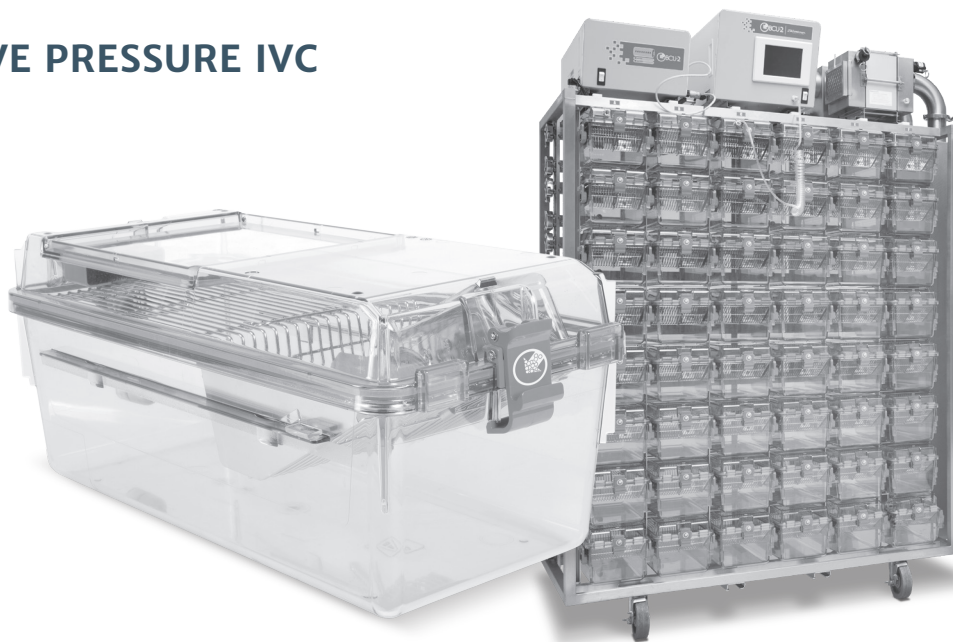


**Your trusted  
global partner  
in life-saving research**

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.

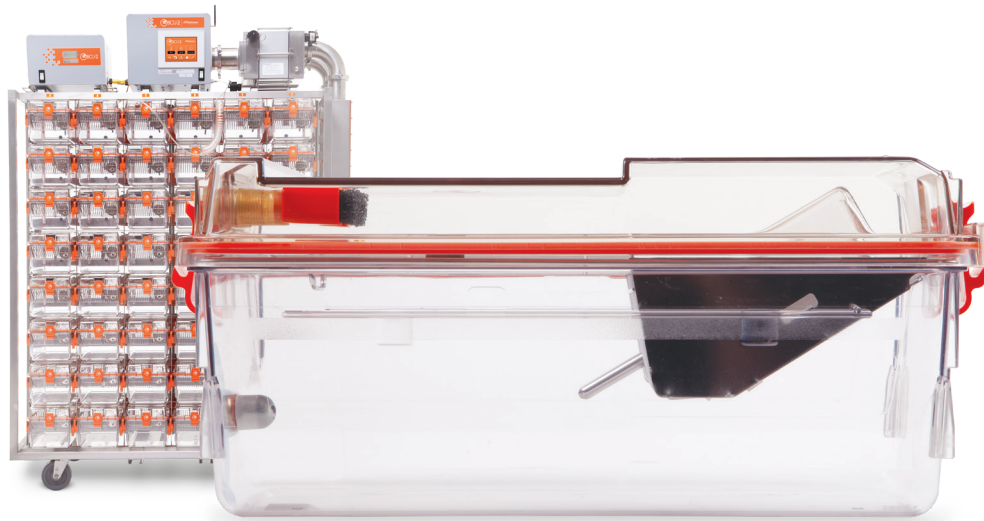
# BCU-2™ Mouse

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 applied them to the BCU-2, creating a new unit that maintains the solid, reliable performance of the original BCU, while providing the light weight, streamlined ease-of-use of the NexGen.

**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.

**SmartDock™ technology** – Prevents cages from docking incorrectly, ensuring the health and well-being of valuable research animals.

**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.

**BCU-2 Animal Transfer Unit (ATU)** – A mobile animal transport / housing unit designed to provide a secure microenvironment for animals in transport or temporarily removed from the main population.

**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
- 5-inch diameter stainless steel casters with gray polypropylene wheels with sealed ball bearings and four foot-operated brakes
- Same side supply and exhaust plenum configuration
- 3-inch diameter vertical supply and 3-inch 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 40 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**

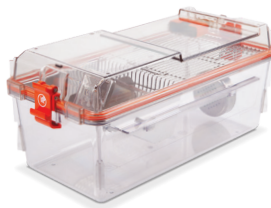
- Species: Mouse, Hamster (with PFT feeder)\*
- \* 6 in of internal height for use with hamsters – per *The Guide for the Care and Use of Laboratory Animals*
- Cage floor space of 83 in<sup>2</sup> (Mouse / Hamster)
- Rat cage sizes available
- Clear polysulfone plastic
- Gasketed cage lid ensures safety and protection from damage, and maintains cage negative pressure when removed
- Standard cage level exhaust filtration
- Optional, certified cage level exhaust HEPA filtration
- Optional, certified cage level supply HEPA filtration
- SmartDock™ prevents cages from docking incorrectly
- Clear cage and flip-up cardholders improve observations
- Compact nesting and stacking for more efficient autoclaving throughput
- Front pocket wire bar lid or PFT

**IVC System (continued)**

- 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
- 12-cage Animal Transfer Unit (ATU) available

**COMPONENTS**

**Cage System with Standard Filter Top**  
7.625 in x 7.027 in x 16.483 in  
Floor space: 83.31 in<sup>2</sup>



**Bottle**



250 mL | .62 lbs (filled)  
Item # PC250BCL+SLC

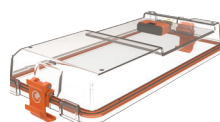


430 mL | 1.07 lbs (filled)  
Item # PC430BHT+SLC



**PFT Bottle**  
500 mL | 1.20 lbs (filled)  
Item # 122798-1

**Top**



**Standard Filter Top Assembly**  
7.615 in x 2.150 in x 15.607 in | 1.30 lbs  
Item # 226376

**Cardholder**



**3 in x 5 in Vertical**  
Item # VH35P3-8  
(also available in 3 in x 4 in  
Item # VH34P3-8)

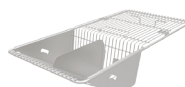


**3 in x 5 in Horizontal**  
Item # HH35P3-8  
(also available in 3 in x 4 in  
Item # HH34P3-8)

**WBL / Feeder**



**Dual Pocket Wire Bar Lid**  
Food capacity: 907 g  
7.000 in x 2.990 in x 14.750 in | 2.00 lbs  
Item # 413750



**Full Pocket Wire Bar Lid**  
Food capacity: 426 g  
7.000 in x 2.909 in x 14.750 in | 1.10 lbs  
Item # 412483



**PFT with Stainless Steel Grate**  
(Can be used with Hydropac® or PFT Bottle)  
Food capacity: 426 g  
7.026 in x 4.563 in x 8.664 in | .60 lbs  
Item # 225664-1

**Filters**



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



**Intra-Cage Extract Filter Housing**  
Item # 216716-2



**Intra-Cage Extract Filter**  
Item # FH1000PF

**Cage**

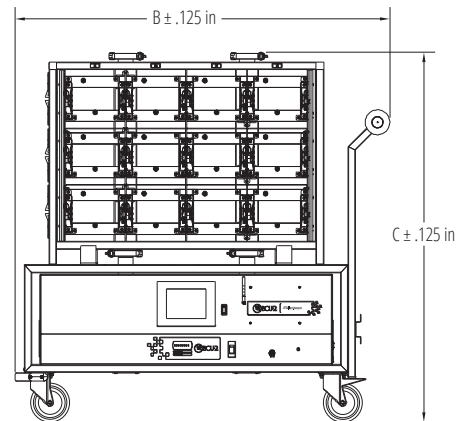
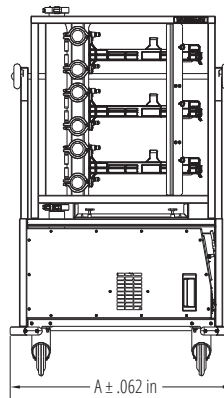
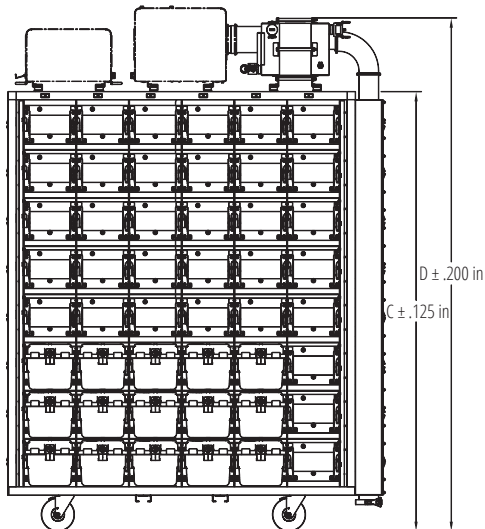
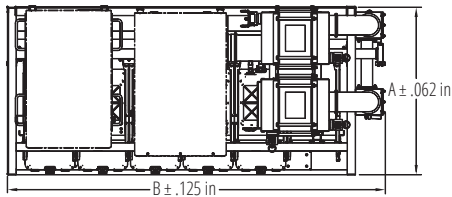


**Cage Assembly**  
7.625 in x 5.130 in x 15.106 in | 1.44 lbs  
Item # 227422

**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	Exhaust Air	Thimble	Energy Use	Heat Load	
	in	in	in	in	Col.	Row		lbs	lbs			CFM	CFM	Watts	Watts	
<b>BCU-2</b>																
48	25.625	57.710	67.258	78.535	6	8	1	523	326	240	40	9	11	28.0	25.0	
<b>BCU-2 ATU</b>																
12	29.500	49.764	48.181	N/A	4	3	1	131	83	60	40	2.25	-	21.7	20.0	

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

Power: 28 Watts

Current: 0.29 A @ 120 Vac (0.18 A @ 230 Vac)

Operating pressure: 0.300 inches H<sub>2</sub>O at the supply HEPA

Noise (ISO 7779): 43 dBA @ 1.0 meter (clean filter)

HEPA filter: H14

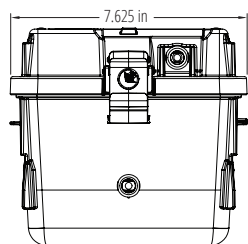
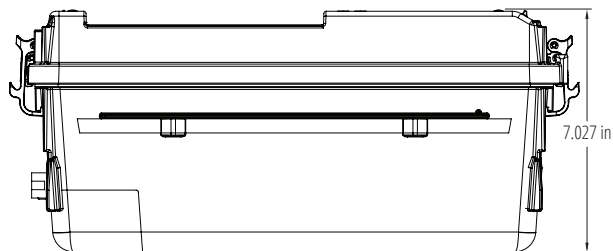
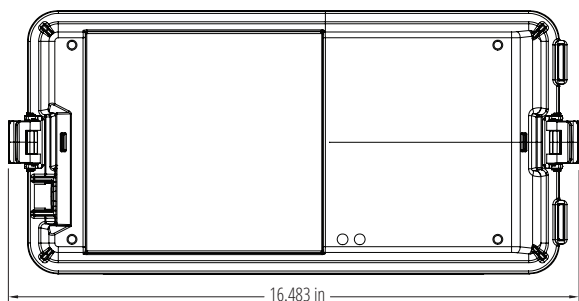
Audible alarm: Option, trigger on blower and power fail

Communications: Bluetooth® or Wi-Fi

Battery life: At least 10 hours @ ½ pressure

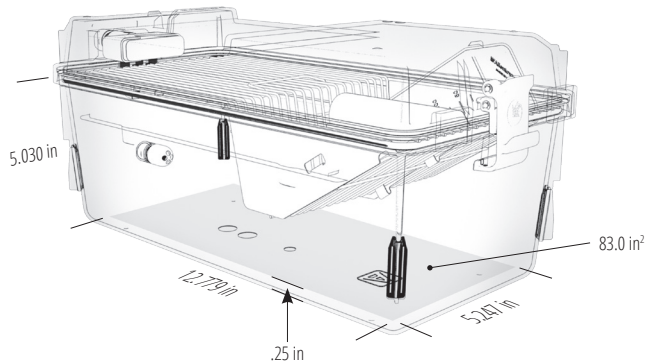
**SPECIFICATIONS**

**External Dimensions**

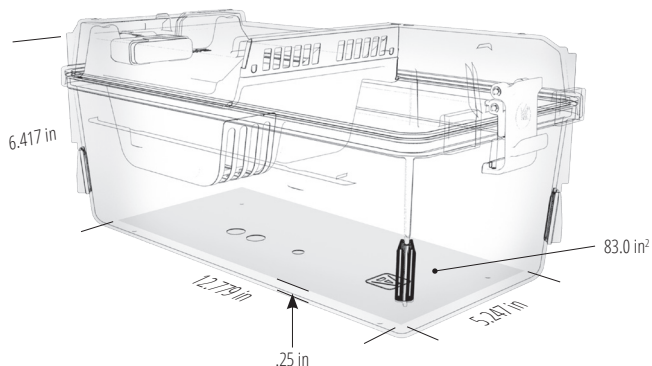


**Internal Dimensions**

**Full Pocket**



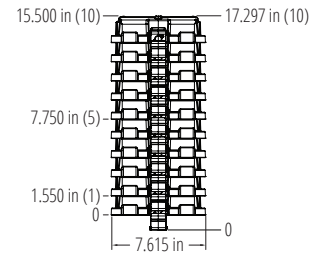
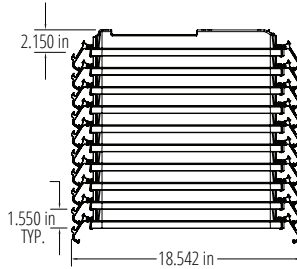
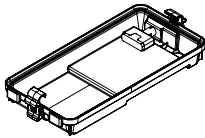
**PFT\***



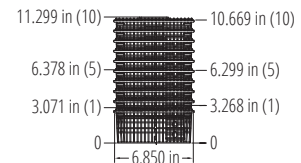
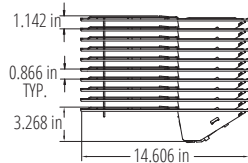
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**SPECIFICATIONS**

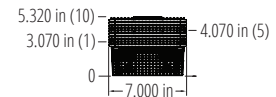
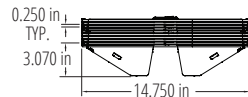
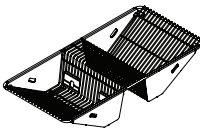
**Standard Filter Top**



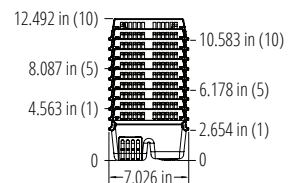
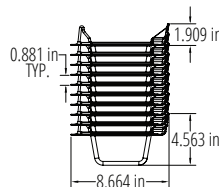
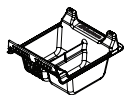
**Full Pocket Wire Bar Lid**



**Dual Pocket Wire Bar Lid**



**PFT**



**Cage**

