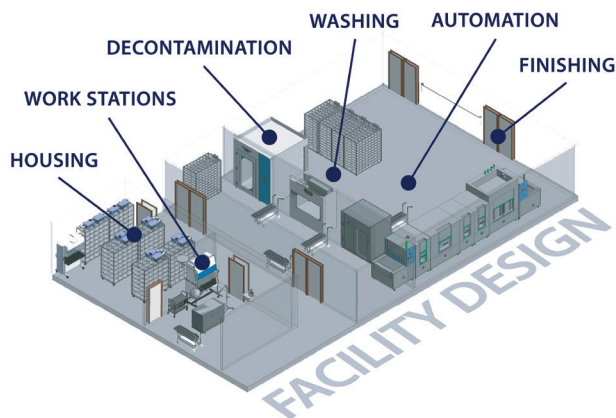


Your trusted global partner providing critical solutions

For over 50 years, Allentown has provided key solutions to the biomedical research community. Our high-quality equipment and advanced vivarium systems continue to define and exceed industry standards. Innovation, quality and service are at the heart of the customer experience.



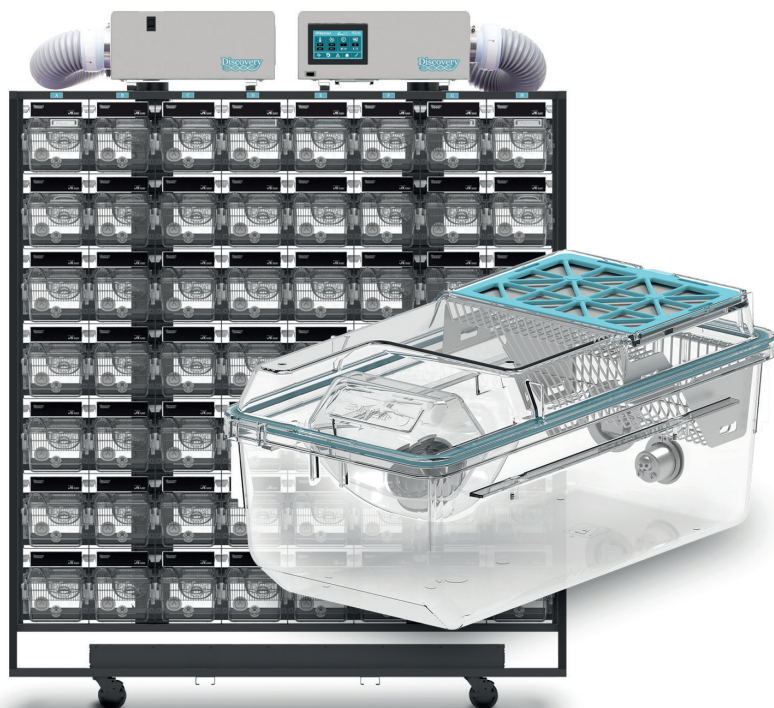
Discovery™ IVC

AI-DRIVEN ANIMAL BEHAVIOURAL MONITORING IN THEIR IVC HOME CAGE

Allentown

The Jackson Laboratory





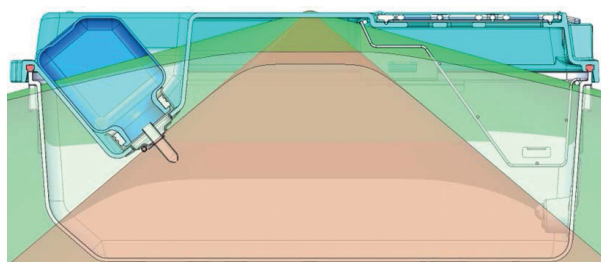
Discovery™



Envision™ Software

Discover More

The Discovery™ IVC System and Envision™ software provide unparalleled insights into animal behavior and cage environments. The future-ready, AI-powered digital in vivo monitoring platform revolutionizes preclinical research by enabling continuous, scalable, and highly customizable monitoring of rodent behavior and health on an individual basis, when housed in groups.



Designed to optimize Intra-Cage Vision.

Enhanced Study Accuracy, Efficiency and Repeatability.

Advanced Behavioural Insight and Improved Lab Animal Welfare: The system can track behaviors of each mouse from group housed environment.

24/7 Video Monitoring and Alerts.

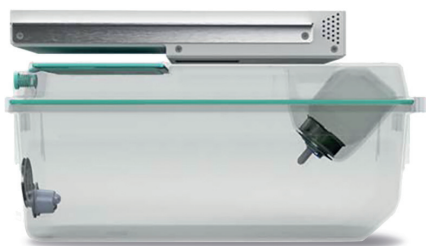
Fully Validated Digital Measures¹.

Intuitive Data Management.

Secure Cloud Data Access.

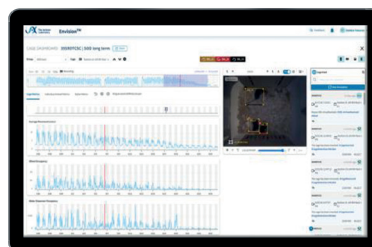
¹ Goldsack JC, et al., Verification, analytical validation, and clinical validation (V3): the foundation of determining fit-for-purpose for Biometric Monitoring Technologies (BioMeTs). NPJ Digit Med. 2020 Apr 14;3:55.

The industry-leading NexGen IVC system powered by advanced artificial intelligence technology developed by The Jackson Laboratory, world-renowned provider of mouse models of human disease.



Discovery™ IVC System by Allentown

- 48-cage digital NexGen IVC rack collecting video data 24/7.
- Fitted with an In Vivo View module (IVV) located above each cage, whose quantity is scalable.
- The IVV module contains a high-resolution large-angle infrared camera, which allows to identify each animal housed in group.
- The IVV provides uniform lighting to every cage.
- Data is transmitted from the Discovery rack to cloud based Envision software.
- Renowned high-performance EcoFlo ventilation unit.



Envision™ Software by The Jackson Laboratory

- Enables study analysis and cage monitoring.
- Cloud-based AI and ML (Machine Learning) software.
- AI enables individual mouse activity captured by the camera to be tracked and interpreted into usable graphical data.
- Generates real-time digital measures and alerts.
- Developer Environment – Leverage foundational capabilities of Envision to develop custom digital measures.

Benefits

Advanced Behavioral Insights – Leverage machine learning to capture intricate rodent behavior, precise data, and group dynamics for deeper analysis: Activity (locomotion, active state, inactive state), Respiratory rate, Loss of upright posture.

AI-Driven Analysis:

- Correlate cage level and individual animal digital measures to activities and events.
- Compare treatment groups to control, identify outliers.
- Look for significant change in digital measures.
- Helps with labor challenges: monitors food and water levels and minimizes the need for direct observations.

Intuitive Data Management Software to:

- Customize digital measure.
- Monitor studies.
- Replay video sequences at will.
- Export video and digital measures for external analysis and document your study.
- Collaborate on study progress, observed phenotypic changes, animal welfare issues, and more.

Automated alerts for critical events:
Receive notifications for food/water levels, cage change events, as well as conduct remote health checks.

24/7 monitoring.

Full remote access to cage views, metrics, and analysis capabilities.

Reduced Stress for Animals:
Foster a less disruptive group-housing environment, improving animal welfare and study integrity.

Secure Cloud Data Access: Secure storage from any environment, Data Encryption, Segregation, Organization and Role-based Access Controls.

Easy to update app with the latest features and benefits.

Technical specifications

Size	Depth (A)	Width (B)	Height (C¹)	Height (D¹,²)	Matrix (A)		Sides
	mm	mm	mm	mm	Col.	Row	
3.5-inch Casters							
48 cage	622	1722	1701	1730	8	6	1



Note: a) 1 Height includes casters. Add 9.72 – 11.7 inches for rack mounted blowers.
2 Height includes removable runners and collars.

