

nVista Solutions Specifications

BRAIN IMAGING IN FREELY MOVING ANIMALS

nVista is the first end-to-end solution for visualizing large-scale neural circuit dynamics in freely behaving animals. With nVista, you can ask entirely new questions about how neural circuits shape behavior and how behavior shapes neural circuits. Today, nVista systems are generating transformative data sets at leading research institutions worldwide.



KEY FEATURES

Large Field of View with Single-Cell Resolution

- Visualize and record population-scale neural activity with cellular resolution in predetermined cell types.

Robust Longitudinal Studies

- Perform chronic imaging studies in freely behaving subjects.

Natural Animal Behavior

- Plug into standard behavioral assays to perform time-locked imaging and behavioral experiments.

Experimental Flexibility

- Image most brain areas, including deep brain structures and surface brain regions.
- Use fast, genetically-encoded Ca^{2+} indicators.

HARDWARE & ACCESSORIES

nVista Imaging System for Rodents is a platform for visualizing large-scale neural circuit dynamics in freely behaving animals. Based on Inscopix proprietary miniature microscope technology, nVista is optimized for and validated in a variety of biological applications. The complete system includes miniature microscope, data acquisition box and nVista acquisition software.

nVista Imaging System for Rodents

- Miniature Microscope
- Weight: 2 g
- Dimensions: 11 mm x 14 mm x 20 mm
- Modality: Single-channel epifluorescence
- Excitation: 475/10 nm (blue)
- Emission: 535/50 nm (green)
- Data Cable Length: 2.5 m
- Max Field of View: 1440 pixels x 1080 pixels; 900 μ m x 650 μ m
- Temporal Resolution: 30 fps at full field of view with USB 3.0

Data Acquisition Box

- Live HD video streaming
- Hardware synchronization and event tracking
- Multidimensional analyses of circuit activity with digital I/O ports
- Plug and play via USB
- nVista Data Acquisition Software
- Live-time $\Delta F/F$ visualization
- Automated and customizable recording schedules
- HDF5 or multi-stack TIFF outputs

Mouse Applications Module

- Includes 5 base plates, 5 base plate covers, and 1 dummy scope.

ProView™ Lens Probes

- Includes 5 ProView Lenses specifically-designed to target a particular brain region and optimized for imaging with nVista. Choose a lens for your desired brain region from an ever-growing set of lenses.

ProView Implant Kit

- ProView Implant Kit stabilizes and streamlines the lens implant procedure and integrates seamlessly with your surgical setup. It allows for proactive monitoring of global tissue fluorescence during implantation, potentially improving the targeting of a lens probe to your region of interest. Includes a lens holding device, stereotax rod, screw, adjustment tool, and instructions.

SOFTWARE

With 20+ in-built apps, Mosaic software includes spatial and temporal downsampling to speed up data processing, motion correction, independent cellular signal detection using PCA-ICA algorithms, and visualization and export of individual cell dynamics. The software enables you to process

images and movies of large-scale neural activity. Mosaic is designed to get you from raw nVista imaging data to neuronal time traces and events quickly and reliably.

Mosaic Data Analysis Software License

- MATLAB-based, with 20+ apps
- Downsampling and artifact removal
- Image registration
- Motion correction
- $\Delta F/F$ calculation
- Cellular information identification and extraction
- Event detection

TRAINING & SUPPORT

Technical Support

- Prompt, knowledgeable email or phone responses to address product hardware, software and technical questions.

Knowledge Base Access

- This online portal enables 24/7 access to comprehensive training content, protocols, and instructional videos.

Accelerate Training Workshop Seat

- Personalized learning modules on topics such as: *Introduction to Calcium Indicators, Enabling Optical Access, nVista Software, Performing Imaging Experiments, Care and Maintenance of your nVista System, and Data Analysis Workflow with Mosaic Software.*

Validated Applications Scientific Support

- Email, phone, and video conferencing support for established applications from experimental design, biological reagent strategies, lens implantation to data trace extraction with Mosaic software. Please refer to the growing list of established protocols at www.inscopix.com/products.

Novel Applications Scientific Support

- Email, phone, and video conferencing support and customized advice for novel applications for all accessible brain regions from experimental design, biological reagent strategies, lens implantation to data trace extraction with Mosaic software.

EXPANDED WARRANTY & LEASING

iCare Expanded Warranty

- Complete system repair or replacement on a priority basis, with expedited shipment and all cost included. iCare expands coverage to failures caused by an operator or animal subject (such as damaged cables or broken objectives). iCare ensures you experience minimal downtime between experiments, safeguards against unexpected maintenance costs, and helps pave a path toward quality, reproducible data sets.

1000 Neurons Eligibility

- The "1000 Neurons" program allows a laboratory to subscribe (lease) additional systems for as little as \$1,000/month.

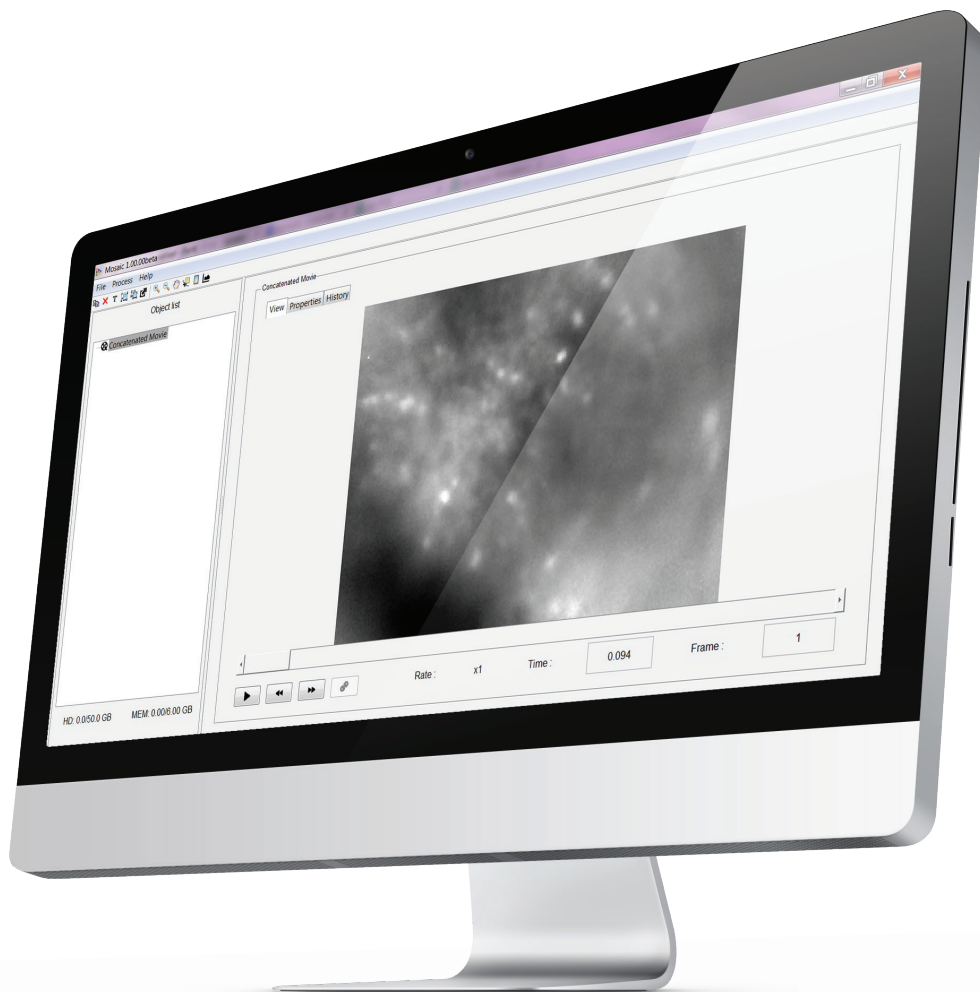
WHICH PACKAGE IS RIGHT FOR YOU?

Our scientists stand ready to guide you every step of the way—from experimental setup through data analysis and publishing assistance—because we care about great data, just like you!

You can access nVista technology through packages that meet your specific research needs. Including single and multiple nVista systems, these packages are coupled with varying levels of customer support and training. Whether you are an early career or advanced investigator, an imaging novice or expert, we have a solution that will satisfy your research requirements. Our nVista offering is mature, going beyond imaging instrumentation to include surgical tools, data analytics, training, and top-tier scientific support.

Commercial Packages	Alumni	Tenure	Tenure Plus	Power
	<i>You are proficient in nVista technology.</i>	<i>You want to image only validated brain regions.</i>	<i>You want an extra hand from our neuroscientists to publish faster.</i>	<i>You want to scale up!</i>
nVista Imaging System for Rodents	1	1	1	4
Mouse Applications Module	1	1	1	4
ProView™ Lens Probes	5	5	5	20
ProView™ Implant Kit	1	1	1	4
Mosaic Data Analysis Software License	1	1	1	4
Standard Warranty	✓	✓	✓	✓
Technical Support	✓	✓	✓	✓
Knowledge Base Access	✓	✓	✓	✓
Accelerate™ Training Workshop Seat	-	1	1	4
Validated Applications Scientific Support	-	✓	✓	✓
Novel Applications Scientific Support	-	-	✓	✓
iCare Expanded Warranty	-	-	✓	✓
1000 Neuron Eligibility	-	-	-	✓





Our solutions are designed to help you map neural circuit dynamics and ultimately advance the understanding of the brain.

We care about the quality of your data, the impact of your research, and the direction of your field, because we're right there with you in the pursuit of neuroscientific knowledge.

SO LET'S FIND DEEPER INSIGHTS, TOGETHER.

Join the community of next generation neuroscientists at www.inscopix.com.

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