

# 7 REASONS

to choose **SPECTRAL INSTRUMENTS IMAGING** as your next preclinical optical solution



*If you're searching for a new In vivo imaging system, here is a quick summary of what makes the Lago X, Ami HTX, and Kino the best-in-class solutions for in vivo small animal imaging.*



## THE TOTALITY OF QUALITY

While often an overlooked element, the multi-faceted feature of reliability should not go ignored. You can have all the bells and whistles in the world, but if your system is not a reliable workhorse, it not only becomes problematic and expensive to service, but your experiments will be compromised.

One of the things that we're very proud of, building all Sii systems completely in house, is that the systems have very little downtime. This is, in large part, because the overall system is a generation II product. Our CTO, Bo Nelson, and his engineering team gained a tremendous amount of experience while developing the first IVIS® 100. Many of the problems that were encountered during the process of engineering the early IVIS® systems are now resolved thanks to a few key re-designs and the use of modern technologies.



## -90°C AIR-COOLED CAMERA

A key feature of all Sii systems is the ultra cold, custom-built camera. It uses a combined air-cool electronic Peltier system to lower the CCD sensor temperature to -90 degrees Celsius within five minutes.

We save investigators time, improve their overall image quality (by reducing noise), and significantly improve the reliability of the system; there is no possibility of the leaks that are common in gas or liquid cooling. [Learn More](#)



## FIELD OF VIEW OPTIMIZED FOR HIGH THROUGHPUT

The native Field of View (FoV) of Ami and Lago are optimized to increase the throughput of laboratory animal scientists. With a FoV of 25cm x 17cm, Ami systems allow you to image 5 mice in a single exposure. Lago systems provide the ultimate, high throughput capability, with a 25cm x 25cm FoV. This 10 mouse imaging capability establishes a new gold standard for large vivariums and imaging cores and is **only available from Sii**. X-ray images do not decrease specimen number.

[See Specifications](#)





## PATENTED FLUORESCENT LIGHT SOURCE

Our patented illumination source provides a significant performance advantage, as LED arrays provide reliable, stable, excitation light. Because these LEDs have a very narrow bandwidth, there is minimal blocking required. In other words, more light can reach your sample and excite the fluorophore you need to detect. By contrast, anyone using a white light source will be using an excitation filter that blocks over 90% of the light emitted from the light source. This puts a great strain on the excitation filter and leads to the leaking of unwanted photons and non-specificity in your fluorescence experiments. [See Data](#)



## FREE SOFTWARE - BUILT FOR PRODUCTIVITY

**Aura** Software is easy to use. Placing a primary emphasis on productivity, Aura maps the user journey from acquisition to analysis, while providing flexibility. All major functions (acquisition, multiple-image, group analysis, and region of interest analysis) are completed with a minimum number of windows and commands, for the sake of simplicity. Aura also allows you to analyze legacy files from Living Image®.

**Aura** Analysis Software is 100% License Free –available for both Mac & PC.

[Click Here to Download](#)



## ABSOLUTE CALIBRATION

To ensure your optical instrument produces quantifiable data, it is important to control for any unwanted image artifacts, regardless of the source. While simple in principle, it cannot be overstated that the differences in intensities that you measure must only result from the experiment itself - not from the instrument or any phenomena associated with light collection.

With our Absolute Calibration technology, it doesn't matter if the time point changes or the camera settings change (exposure time, binning, f-stop, etc.); it doesn't matter if the various noise sources on the CCD, (dark current, cosmic rays, etc.) change from exposure to exposure. Absolute Calibration takes all of these sources of variability into account, resulting in better, more reliable data.



## STATE-OF-THE-ART

All Sii systems are made with modern components, resulting in their robust and stable build. Our systems are factory calibrated to NIST standard. No on-site calibration, or assembly, is required. Simply plug it in and start imaging!

## WANT TO HAVE A BETTER IN VIVO IMAGING EXPERIENCE?

[Sign up](#) for email updates; we'll send you tips and tricks for getting better data.

