



LAGO X

Ultimate in High Throughput

spectral
instruments
imaging
A BRUKER COMPANY

UNTRIVALED SENSITIVITY

Best-in-class Performance



36% More Sensitive

When comparing minimum detectable radiance for bioluminescence to the leading competitor in its class



Patented LED Excitation

100x more light on target gives you a stronger fluorescence signal with minimal background for superior quantitation



BLI • FLI • X-ray

Advanced preclinical optical imaging: Bioluminescence, Fluorescence & X-ray



10 Mouse Capacity

Industry leading field of view maximizes your productivity



License Free Software

Aura Imaging Software is a robust analysis tool available for PC & Mac users
Import legacy Living Image® files

RAISING THE BAR

-90°C Absolute Air-Cooled Camera

No Liquids • No Chillers • No Leaks
Reliable & ready to use in 5 minutes.

Access Port

Light tight access port for external systems connections *Field Upgradable, non-xray units.

Vertical Door

Saves bench space & reduces waste anesthesia gas exposure.

Patented LED Fluorescence Excitation

High intensity light source generates 100x more light on target. Individual LED colors/wavelengths are used to improve specificity & reduce background.

Anesthesia

Compatible with third party systems.

Animal Friendly Heated Platform

Unique materials & convection method produce even heating & uniform temperature for improved animal comfort & reliable enzyme kinetics.

Automated, X-ray Source

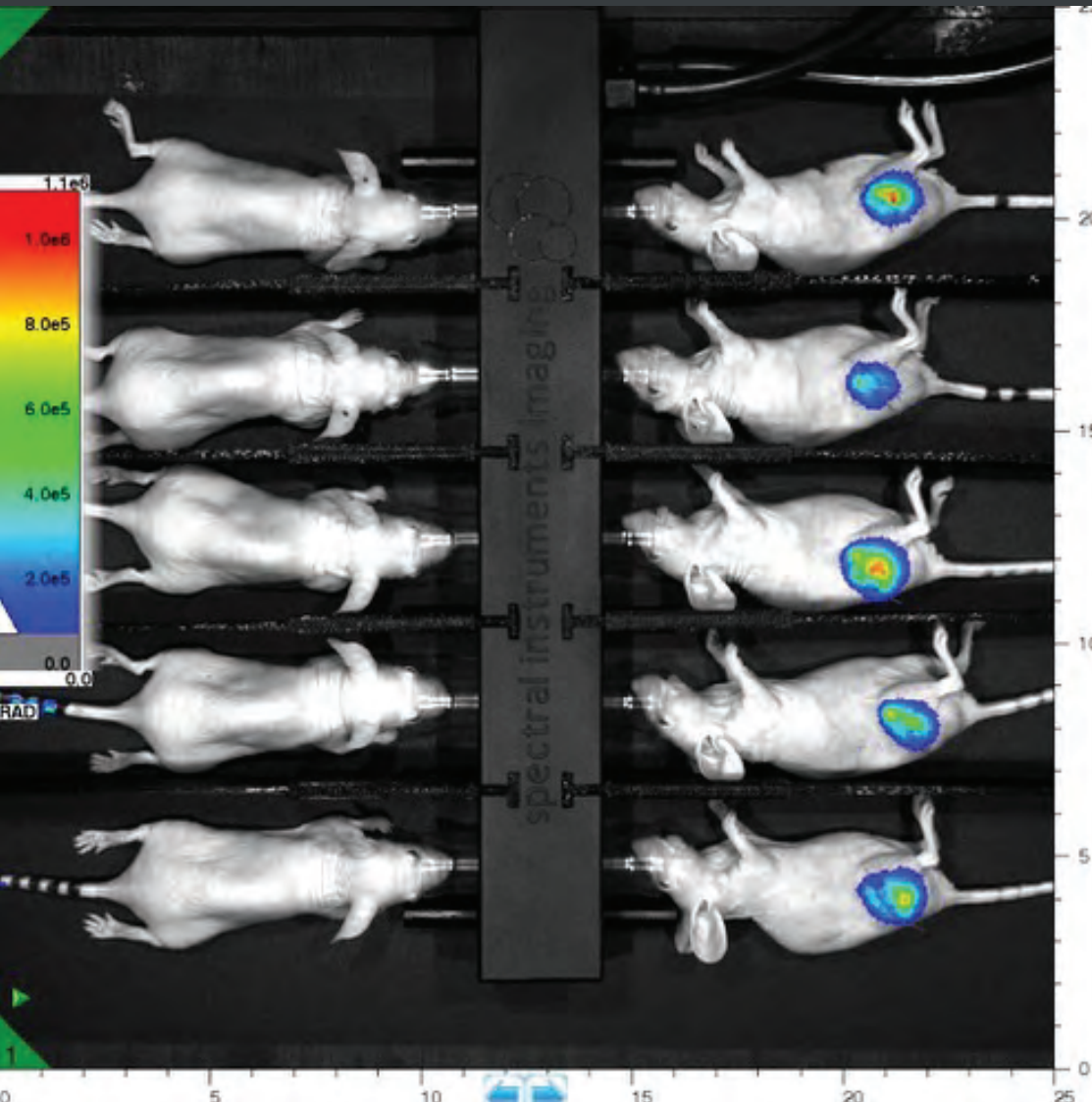
Enables rapid acquisition of X-ray images.
Maintains Specimen numbers between optical & X-ray. *Field Upgradable

Patented Steel Construction

Innovative light tight cabinet - Designed without parts that can wear over time & compromise data quality.



ULTIMATE IN HIGH THROUGHPUT



Sharon S. Hori, Sheen-Woo Lee, Sanjiv Sam Gambhir (Canary Center at Stanford, Stanford University School of Medicine)

Image 10 Mice

Industry Leading 25cm x 25cm FoV

Includes manifolds for 10 & 5 mouse configurations

We really like the SII LAGO imaging instrument because it has several improvements as compared to our previous IVIS[®] instrument. The second adapter with 10 nosepieces allows us to image up to 10 mice at once, which saves us a lot of time when imaging mice. Additionally, the software is very user-friendly and easy to run.

BETTER FLUORESCENCE EXPERIENCE



Patented LED Technology

High intensity fluorescent excitation source results in stronger signals - with less background for Superior Signal-to-Noise & earlier detection.



100x more light on target

*than traditional white light sources

LEDs have a direct path to targets.
No use of fiber optic cables that can contaminate & attenuate excitation light.



Stable & Linear Excitation Light

Long life LED's - Rated for 100,000 hrs of imaging.
Lasts 1000x longer than tungsten bulbs, never fading or compromising your data.
Fine tune adjustable power of every LED.
No warm up time.



Engineered for non-stop imaging

14 excitation LED's | 20 emission filters |
Custom options available

We have found the NIR fluorescence to be of high sensitivity with the ability to differentiate signals at 680nm, 715nm, 750nm, and 800nm.

Multiplex FLI: **GFP** & **ProSense 750**

100% LICENSE FREE ANALYSIS SOFTWARE



Aura Software is comprehensive & provides a seamless, end to end workflow – from acquisition to analysis.



SI supports open collaboration by providing analysis copies of Aura 100% license free for both Mac & PC.



Aura Software supports legacy files by opening & analyzing IVIS® Living Image® optical data.

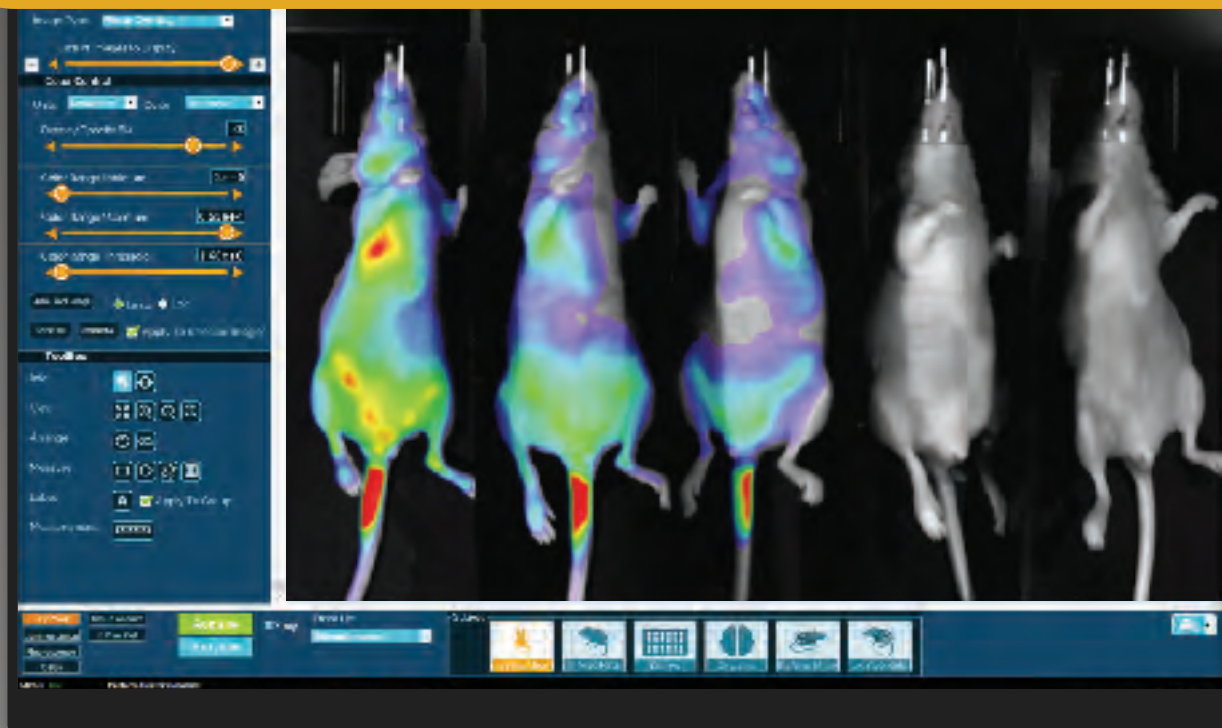
3 Clicks to Acquisition



Easy Mode makes capturing data faster than ever before.

Simply select your probe & subject & acquire your data!

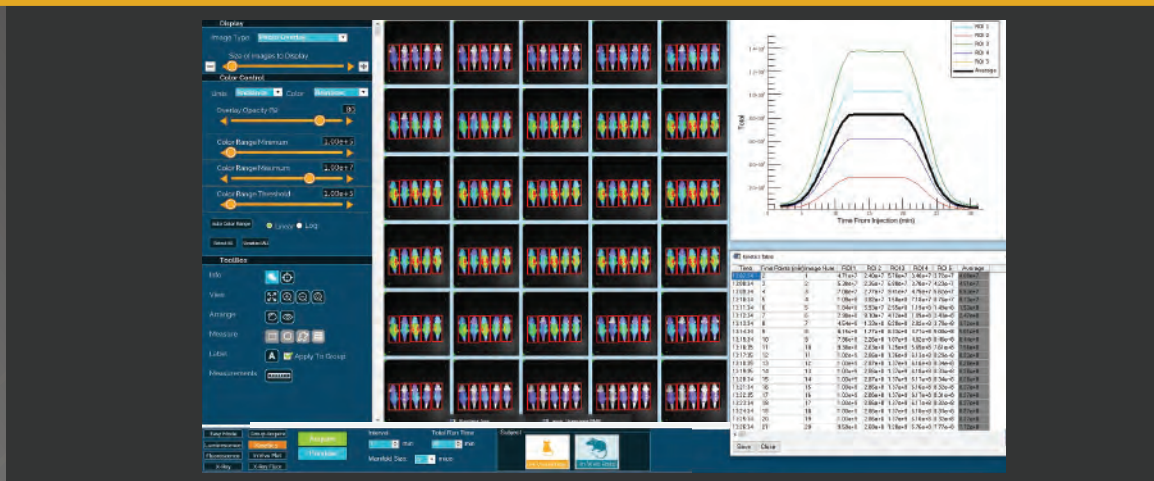
Smart AutoExp with proprietary **SmoothBlend** technology enables rapid data acquisition at maximum sensitivity without compromising image quality.



Automatic BL Kinetic Curves



Quantifying data captured at peak signal is critical to ensuring data accuracy & reproducibility. **Kinetics** enables automatic, real-time acquisition of bioluminescent kinetic curves. Quickly & accurately acquire & present BL kinetic curve data of up to 10 mice from a single image.



ROBUST & RELIABLE WORKHORSE



Spectral Instruments' novel Solid State Air-Cooled Cameras

Provide ultra cold -90°C absolute cooling without the use of liquids or gas for support which guarantees *No Leaks!*



Less pieces & parts to break

Built without limit switches or other dated parts prone to failure. Innovative light tight cabinet with interlocking greek keyed steel avoids gaskets that crack & degrade over time. Vertical door to save space & minimize isoflurane exposure.



Factory Calibrated

All instruments are factory calibrated prior to shipment, allowing easy and quick installation. Factory calibrations last over the life of the instrument, maintaining high data quality.



Absolute Calibration

Ensures data accuracy regardless of changes in animal position or camera settings. Traceable to NIST standard.

SELECTION GUIDE



	Lago X	Lago	Ami HTX	Ami HT	Kino
Ideal For:	High Capacity Imaging Cores, BioPharma		Animal Care Specialists, CROs		Small Startups
Bioluminescent Imaging (BLI)	✓	✓	✓	✓	✓
Fluorescent Imaging (FLI)	✓	✓	✓	✓	✓
X-ray	✓	Field Upgradable	✓	Field Upgradable	N/A
Mouse Capacity	10 Mice	10 Mice	5 Mice	5 Mice	3 Mice
Maximum Optical Field of View (cm)	25 x 25	25 x 25	25 x 17	25 x 17	13 x 13
Patented LED Excitation	✓	✓	✓	✓	✓
# of LED (Fluorescent) Excitation Wavelengths	14	14	10	10	10
Included LED Excitation Wavelengths	360, 405, 430, 465, 500, 535, 570, 605, 640, 675, 710, 745, 770, & 805nm		430, 465, 500, 535, 570, 605, 640, 675, 710, & 745nm		430, 465, 500, 535, 570, 605, 640, 675, 710, & 745nm
Fluorescent Emission Filters	20	20	10	10	5
Standard Emission Filter Choices:	490, 510, 530, 550, 570, 590, 610, 630, 650, 670, 690, 710, 730, 750, 770, 790, 810, 830, 850, & 870nm				
CCD -90°C Absolute Solid State Cooling	✓	✓	✓	✓	✓
Minimum Detectable Radiance	45 photons/sec/cm2/sr	45 photons/sec/cm2/sr	50 photons/sec/cm2/sr	50 photons/sec/cm2/sr	59 photons/sec/cm2/sr
Camera Sensor	1" back-illuminated Grade 1 plus CCD	1" back-illuminated Grade 1 plus CCD	1" back-illuminated Grade 1 plus CCD	1" back-illuminated Grade 1 plus CCD	.5" back-illuminated Grade 1 plus CCD
Pixel Dimensions	2048 x 2048	2048 x 2048	1152 x 770	1152 x 770	1024 x 1024
High Performance CCD Size	27.6 x 27.6mm	27.6 x 27.6mm	25.9 x 17.3mm	25.9 x 17.3mm	13mm x 13mm
Quantum Efficiency: >85% efficiency 500-700nm; >35% efficiency 700-900nm	✓	✓	✓	✓	✓
Dark Current	<49 e-/sec/cm²	<49 e-/sec/cm²	<49 e-/sec/cm²	<49 e-/sec/cm²	<100 e-/sec/cm²
Binning	1x1,2x2,4x4,8x8,16x16	1x1,2x2,4x4,8x8,16x16	1x1,2x2,4x4,8x8	1x1,2x2,4x4,8x8	1x1,2x2,4x4,8x8
Lens	50mm, Aperture: f/1.2 - f/16	50mm, Aperture: f/1.2 - f/16	50mm, Aperture: f/1.2 - f/16	50mm, Aperture: f/1.2 - f/16	50mm, Aperture: f/1.2 - f/16
Absolute Calibration, NIST Traceable	✓	✓	✓	✓	✓
X-ray Source	10-50keV	Field Upgradable	10-40 keV	Field Upgradable	N/A
X-ray Camera	Line scanning imager	Field Upgradable	Line scanning imager	Field Upgradable	N/A
X-ray Field of View	25x22cm	Field Upgradable	25 x 15cm	Field Upgradable	N/A
Heated Imaging Platform, 20-40c	✓	✓	✓	✓	✓
Inlet & Outlet Ports for Gas Anesthesia	✓	✓	✓	✓	✓
Light Tight Access Port (Field Upgradeable)	N/A	Optional	N/A	Optional	Optional
Space Requirements	56cm(w) x 66cm (d) x 211cm (h)	56cm(w) x 66cm (d) x 211cm (h)	56cm (w), 66cm (d), 122cm (h)	56cm (w), 66cm (d), 122cm (h)	56cm (w), 66cm (d), 122cm (h)
System Internal Dimension	Imaging platform: 50x34cm	Imaging platform: 50x34cm	Imaging platform: 50x34cm	Imaging platform: 50x34cm	Imaging platform: 50x34cm
PC, Monitor & Software Included	✓	✓	✓	✓	✓
Aura Analysis Software: License Free (MAC & PC)	✓	✓	✓	✓	✓