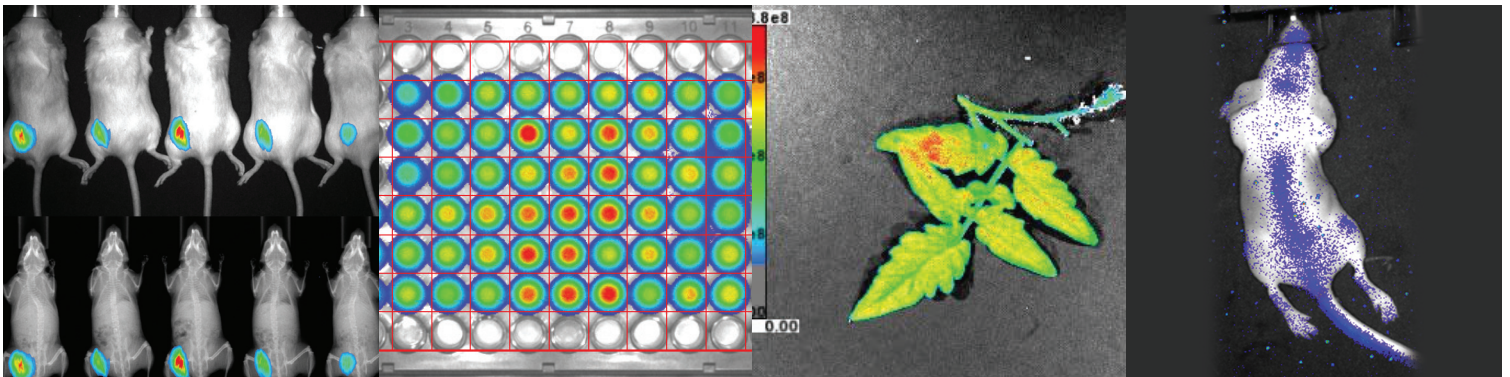




spectral
instruments
Imaging

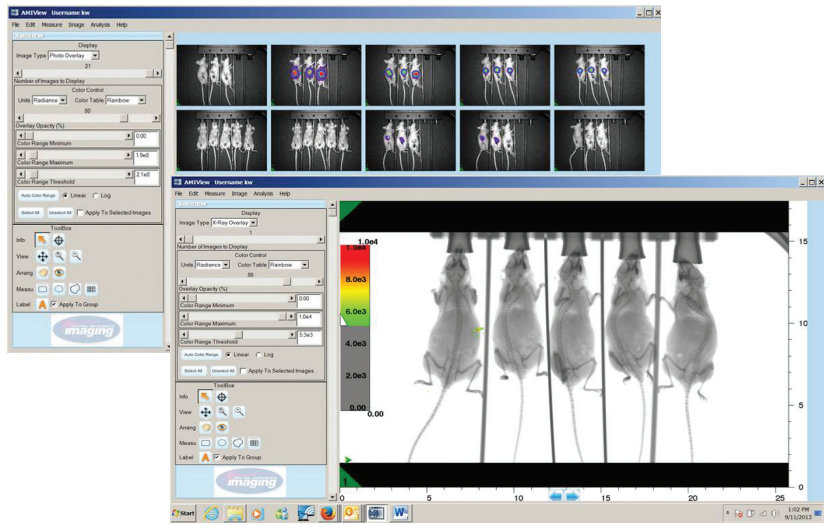
Advanced Molecular Imaging

The SPECTRAL Ami HT and Ami HTX acquire quantitative images from a diverse set of applications including well plates, plants and small animals. The imaging system contains a high performance cooled CCD camera to record the image collected by a large aperture lens with automation for filter and field of view selection. Luminescence, fluorescence, and x-ray modalities are combined into the system utilizing the latest technologies.



Advanced Software

Spectral Instruments Imaging software fully integrates the high performance camera and lighting system in the SPECTRAL line of products to give you the shortest path from experiment to conclusion. The software automates the multiple steps necessary to attain calibrated quantitative images so the experiment at hand receives the highest priority of the users attention, not the instrument. Intuitive controls and an integrated file browser allow rapid analysis and presentation of the optical and x-ray data collected.



Features/Specifications

- **Industry Leading Field of View**
High Throughput
- **Lowest Background Signal**
High Performance -90° C Absolute Camera
- **No External Coolers**
Completely Air Cooled
- **Simplified Imaging**
Intuitive User Interface allowing focus on the experiment not the instrument
- **Unrivalled Support**
Limited downtime
- **Broad Imaging Capability**
Fluorescence, Bioluminescence and X-ray

- **Ten LED's for Fluorescence Excitation**
Wavelengths of 430, 465, 500, 535, 570, 605, 640, 675, 710, and 745nm are standard for excitation of fluorescence species
- **Choice of 10 Emission Filters for your Fluorescence and Luminescence Imaging Needs**
490, 510, 530, 550, 570, 590, 610, 630, 650, 670, 690, 710, 730, 750, 770, 790, 810, 830, 850, and 870nm
Custom filters available upon request.

Camera Sensor	Back-illuminated, cooled CCD sensor
Pixel dimensions	1152 x 770
CCD Size	25.9 x 17.3mm
Quantum Efficiency	>85% from 500-700nm, >30% from 400-850nm
CCD Operating Temperature	-90°C Absolute, air cooled
Dark Current	<100 e ⁻ /sec/cm ²
Binning	1x1, 2x2, 4x4, 8x8
Lens	50mm, max aperture f/1.2, min f/16
Read Noise	3.0e
Fluorescence Measurement	Standard feature
Imaging Field of View	25 x 17 cm to 10 x 7 cm
Fluorescence Excitation LEDs	10
Fluorescence Emission Filter Slots	10
Fluorescence Emission Filters Available	20
X-ray Source (Ami X)	10-40 keV
X-ray Camera (Ami X)	Line scanning imager
X-ray Field of View (Ami X)	25 x 15cm
Space Requirements (no outward opening door)	56cm wide, 66cm deep, 122 cm high
System Internal Dimension	Imaging platform is 50x34cm
Heated Imaging Platform	Standard feature

