

Small Animal Imaging System

- Control of nanoparticles bio-distribution
- Tumor tracking
- Luminescent imaging of inflammation
- Pharmacodynamic studies



Photonics 4 Work

sais-a

Optical imaging system for small animal in-vivo examination

Beneath its contemporary design, **SAIS-A** provides the ultimate combination of sensitivity, speed and flexibility to meet the most demanding challenges and broadest range of applications for optical luminescent imaging.

Designed for researchers with demanding requirements for high sensitivity luminescence the In-Vivo **SAIS-A** enables users to precisely detect up conversion nanoparticles in live mouse.

Innovative design using laser scanning system allows to detect emerging class of new luminescent nanomaterials - Up conversion nanoparticles (UCNPs), exhibiting many advantages over conventional fluorophores, such as high signal-to-noise ratio and superior photo stability.

The near-infrared excitation wavelengths of these particles realized in **SAIS-A** offer additional advantages such as deep tissue penetration and low photo damage to biological samples.

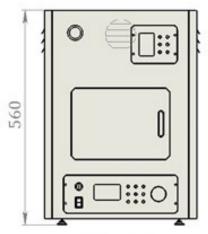
SAIS-A unique modular architecture also allows users to upgrade their camera and excitation source as new technology evolves and research requirements change.

Optionally, high quantum efficiency fiber spectrometer can be integrated into measurement chamber to realize direct spectral measurements of fluorescence.

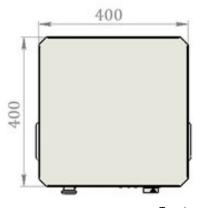
- sample type: live mice
- imaging detector: emCCD camera (300-1100 nm)
- spectrometer: high QE fiber spectrometer (350-1100 nm)
- excitation source: CW IR diode laser



sais-a



Front view



Top view