

Pearl Trilogy Small Animal Imager

Near-Infrared Fluorescence and Bioluminescence Imaging

The Pearl Trilogy Small Animal Imager is a sensitive, NIR imager that captures fluorescence and bioluminescence in live animals and excised tissue. This imager's multi-channel detection allows for easy characterization and monitoring of specificity, biodistribution, clearance, delivery, and efficacy.

At the heart of the Pearl Trilogy is a revolutionary FieldBrite™ Xi² system, which uniformly illuminates the sample. This innovative approach detects smaller and deeper targets accurately and in a single acquisition—without saturation or the need for image adjustments.



Accessory Products

- SmartFlow Anesthesia Suite: Inhalation isoflurane anesthesia system
- Pearl Clean Box: HEPA-filtered imaging bed with isoflurane administration
- Pearl Docking Station: HEPA-filtered anesthesia provider for Pearl Imaging Bed and Pearl Clean Box
- Compound Injection Clip: Drawer attachment during imaging for real-time injection imaging
- Organ Tray Base and Trays: Unheated surface for organ imaging and transport
- Pearl Imaging Bed: Removable imaging bed with isoflurane administration
- Pearl Imaging Cart: Mobile cart for imaging instruments and systems

Pearl Trilogy Small Animal Imager Key Specifications

Optical System

Image Area:

11.2 cm W × 8.4 cm D (4.4" W × 3.3" D)
at the surface of the imaging bed

Resolution: 85, 170, or 255 μm**Dynamic Range*:**

>6 logs

Detectors: CCD, thermoelectrically cooled**Acquisition Times:**

500 ms to 60 s, depending on camera settings

Laser Lifetime:

20,000 hours of operation
Class 1 Laser Product

White Channel Laser Source:

Excitation: N/A
Emission: 450-650 nm

Bioluminescence Channel Laser Source:

Excitation: N/A
Emission: 450-650 nm

Light Sources:**700 Channel Laser Source**

Excitation: 685 nm
Emission: 720 nm

800 Channel Laser Source

Excitation: 785 nm
Emission: 820 nm

Capacity:

One animal with linked look-up tables for image normalization

Gas Anesthesia:

Inlet and outlet ports flow anesthesia gas through a nose cone in the imaging drawer. A rotameter is included for flow rate control.

Size and Weight

Dimensions (Instrument Only):

41 cm W × 41 cm D × 66 cm H
(16" W × 16" D × 26" H)

Depth with imaging drawer open:

63.5 cm (25")

Imaging Drawer:

16.8 cm W × 12 cm D (6.6" W × 4.75" D)
Vertical clearance to top of drawer: 7.5 cm (3")

Field of View:

11.2 cm W × 8.4 cm D (4.4" W × 3.3" D)
at surface of imaging bed

Weight: 25 kg (55 lbs)

Software Specifications

Please contact LI-COR for compatibility with software packages.

**This dynamic range is obtained in a single acquisition.
Specifications subject to change without notice.*