In Vivo Micro-CT Scanner for Small Lab Animals

LaTheta LCT-200

LCT-200 is an X-ray CT scanner for experimental animals. The non-invasive measurement is economical in the way that it enables you to observe the same mouse or rat in long-term. By using the standard analysis software, quantitative analysis of RAW data for fat, bone, body mass etc.

- Ideal for morphological observation
- Respiratory and cardiac synchronized scanning
- Portable design with shielding box

Specifications

Holder size	24, 48, 80 and 120 mm diameter (isolated bones, mice, rats and obese rats) ・ Scan area to be reduced by thickness of a specimen holder is typically 3 to 12 mm (10%)
X-ray generator	Tube voltage : 50 and 80 kV Tube current : Maximum 0.5mA
Scan mode	Tomography (standard, precision, high-precision and integrating modes) General/digital radiography (standard, precision and high-precision modes)
Axis of the body (Transition)	Maximum 300 mm (general/scout scan length)
Number of slices	Maximum 2,000
Image matrix	512 x 512 to 2,048 x 2,048
Scan function	Respiratory and cardiac synchronization
Analysis/processing function	**Form measurement** ・ Distance, area, volume, body fat percentage, separation of visceral and subcutaneous fats **Bone mineral density measurement** ・ Total, cortical and cancellous BMDs ・ Morphology (cortical bone thickness, cortical bone and trabecular area ratios) ・ Mechanical property (second moment of minimum and polar areas)
Power requirement	100 to 240 VAC ±10%, 50 to 60 Hz, Maximum 400 VA (main unit only)
Dimensions/weight	Approx. 74 (W) x 116 (H) x 116 (D) cm / Approx. 220kg
Environmental requirements in operation	Temperature : +18 to +28 degrees C Relative humidity : 30 to 80% (non-condensing)