Digital Radiography System

For ultra-high resolution imaging and dual-energy x-ray absorptiometry (DXA).

The compact and fully shielded x-ray cabinet can be placed directly on the bench top in your lab or wherever you need easy access to imaging and DXA analysis.
The entire system, consisting of the self-contained x-ray unit and workstation, can be located on a lab bench or directly in the vivarium to protect the integrity of the colony.

The 10 x 15cm CMOS detector coupled with the energy range from 10 - 100kV makes the UltraFocus ideal for imaging a broad range of samples as well as true DXA analysis. The microfocus tube and up to 6X geometric magnification provide up to 8µm resolution images.

In DXA mode the system automatically calculates BMD, BMC, and lean and fat mass percentages. Both whole body and region of interest (ROI) data is presented.

**Features & Benefits**

- No additional x-ray shielding required
- No specialized x-ray knowledge needed to operate
- Plugs into any standard A/C outlet
- Stainless steel inner chamber designed for easy cleaning
- Transparent window for monitoring animal during in vivo imaging and DXA analysis
- Magnification shelf with field of view guides and automatic position detection provides for up to 6X geometric magnification with accurate measurements at any level
- Single click calibration with auto object detect allows for simple, error-free calibration
- One button operation with Automatic Exposure Control (AEC) optimized for a variety of samples (manual exposure settings also available)
- Easily switch between high resolution imaging and DXA mode
- Select from bone, lean, and fat tissue maps for detailed ROI DXA analysis
- Images instantaneously displayed on 24" high resolution 3.7MPx monitor (included)
- Remote diagnostic and support over the web

**Detector**

- Sample imaging size: 10cm x 15cm (4” x 6”)
- Pixel pitch: 48µm
- Spatial resolution: 8µm at 6X geometric magnification

**Specifications**

- Energy range: 10 - 100kV
- Tube current: 0.3mA max (isowatt limited to 12W from 41-60kV)
- Focal spot size, nominal: 8µm
- Window filtration: 0.25mm Be, tungsten source
- Power: 100-240VAC ±10%, 50/60Hz, 150VA
- Dimensions external: 23” W x 21” D x 36” H (59cm x 54cm x 90cm)
- Dimensions internal: 15.4” W x 15.4” D x 22” H (39cm x 39cm x 56cm)
- Weight: 415lbs (188kg)
- Shipping Weight: 510lbs (230kg)