

UltraFocus^{DXA}

In Vivo Imaging and DXA Analysis System

UltraFocus^{DXA} by Faxitron®

UltraFocus^{DXA} is a fully shielded x-ray cabinet designed for ultra high-resolution imaging and dual-energy x-ray absorptiometry (DXA) analysis.



UltraFocus^{DXA} FEATURES

Ultra High-Resolution Imaging

The 10 x 15cm 48µm CMOS detector is mounted in a moveable shelf for both DXA analysis and ultra high-resolution imaging. UltraFocus^{DXA} replaces obsolete DXA units and older imaging cabinets with a single, modern, high performance, high throughput system.

Automatic DXA Analysis

In DXA mode, the system automatically calculates bone mineral density (BMD), bone mineral content (BMC), and body composition in under 3 minutes. Both whole body and region of interest (ROI) data can be selected, and separate bone, lean and fat tissue maps are presented to simplify ROI analysis.

Automatic Calibration

UltraFocus^{DXA} quickly and automatically calibrates on a daily basis, utilizing our proprietary dynamic calibration routine to ensure reproducibility of results. The pre-programmed DXA scan is initiated with a single click or push of a button.

Self-Contained and Safe

UltraFocus^{DXA} is fully shielded and exceeds FDA radiation safety standards. It is self-contained with no additional x-ray shielding required; simply plug into any standard A/C outlet. The unit is also NRTL Certified by Intertek for Electrical Safety.

Accurate Positioning and Measurement

A laser centering guide and viewing window ensure simple and proper sample positioning. The magnification shelf with field of view guides and automatic position detection provide accurate measurements at any level.

Compact and Convenient

UltraFocus^{DXA} was designed with a manageable footprint for the lab or the barrier facility. Its stainless steel inner chamber allows for easy cleaning and the access port provides a safe method for inserting anesthesia hoses into the chamber for longitudinal studies.

Easy to Use

No additional training or specialized x-ray requirements are needed to operate UltraFocus^{DXA}.

UltraFocus^{DXA}
Detector



Imaging area	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)
Focal spot size, nominal	8µm
Window filtration	0.25mm Be, tungsten source
Power requirements	100-240VAC ±10%, 50/60Hz, 150VA
External dimensions	23" W x 21" D x 36" H (59cm x 54cm x 90cm)
Chamber dimensions	15.4" W x 15.4" D x 22" H (39cm x 39cm x 56cm)
Weight	415lbs (188kg)
Shipping weight	510lbs (230kg)