

# Powerful images Clear answers

## Horizon<sup>®</sup> DXA System: An Innovative Solution for Accurate Diagnosis

Hologic, the pioneer in X-ray based bone densitometry, takes advanced health assessment to a new level with the Horizon DXA System. This multi-faceted system can help clinicians assess bone health, body composition and cardiovascular risk — critical elements that will help patients keep life in motion.

The Horizon DXA System features the latest innovations in bone densitometry technology; including a new digital high resolution ceramic detector array, as well as a new high frequency X-ray Generator. When paired with our exclusive OnePass™ true fan-beam acquisition geometry, Horizon delivers rapid, dual-energy bone density measurements in a single-sweep, eliminating beam overlap errors and image distortion found in rectilinear acquisition techniques. We've also improved our Dynamic Calibration System, which delivers pixel-by-pixel calibration through bone and tissue equivalents — for greater long-term precision. The adjustable aperture is now completely lead-free. This, combined with the elimination of cadmium from the detectors, currently makes the Horizon DXA system the greenest on the market.



Model shown: Horizon A

## Horizon® DXA system product specifications

**Patient Weight Limit**  
227kg (500lbs)

**Typical Exposure Time and Entrance Dose**

|                         |                                     |
|-------------------------|-------------------------------------|
| Lumbar spine .....      | 10 sec / 0.04 mGy (C, W, A models)  |
| Proximal Femur .....    | 10 sec / 0.04 mGy (C, W, A models)  |
| SE femur .....          | 15 sec / 0.025mGy (C, W, A models)  |
| IVA™ option in HD ..... | 15 sec / 0.025 mGy (C, W, A models) |
| Whole body .....        | 113 sec / 0.007 mGy (A models)      |
|                         | 290 sec / 0.015 mGy (Wi, W models)  |

**Advanced Fan-Beam DXA Technology**

OnePass™ Acquisition Technique; Multi-Detector Array Scanning Method

High-resolution multi-element detector array with gadolinium sulfoxylate GADOX scintillator technology used in modern CT devices (64 to 216 detectors, model dependent)

High Frequency X-ray Generator

X-ray System Switched-pulse dual-energy (100 kVp/140 kVp)

**Superior Precision and Accuracy<sup>3</sup>**

Dynamic Calibration™ System for Continuous Calibration

QDR™ Anthropomorphic Spine Phantom

**Mechanical and Positioning System Features**

Indexing Scan Table with Positioning Accessories

Motorised Table and Rotating C-arm (A models)

Motorised Table and C-arm (Ci, Wi, C, W models)

**Standard Computer Hardware (Minimum Configuration)**

Computer Workstation with Dual Core 3 GHz

Windows® 10

250 GB hard drive

4 GB RAM

18.5" Widescreen LCD Monitor

HP Professional Series Color DeskJet® printer

DVD RAM drive

**Standard Configuration:**

**Hologic APEX™ Operating System**

Automatic PASS/FAIL Quality Control

Express BMD 10 Second Acquisition (C, W, A models)

Single Energy Scan Display Capability

Window/Level Control for Image Optimisation

**Apex Productivity Tools**

Express Exam™ Workflow Management

OneTime™ Auto Analysis with Histogram

ProTech with DXApro

Auto Hip Positioning

Reposition/Rescan Feature

Automatic Scan Comparison for Serial Exams

Least Significant Change Configuration

**Horizon Advance Reporting Solutions**

QDR OnePage™ Report with Rate of Change Assessment

FRAX™ 10 Year Fracture Assessment

Dual Hip™ Report

Integrated Physicians Report Writer™ DX Feature

**Horizon Scan and Analysis Protocols**

AP Lumbar Spine with Automatic Low Density Analysis and Scoliosis Analysis

Supine Lateral Spine

Proximal Femur, Automatic Low Density Analysis and Hip Structure Analysis™ (HSA) Feature

Dual Hip™ Feature

Forearm

Horizon® Wi, W and A models:

- Whole Body BMD
- Advanced Body Composition™ Analysis with InnerCore™
- Visceral Fat Assessment

IVA HD with Image Pro High Resolution Imaging capability for C, W and A models

IVA with Image Pro Imaging Capability optional for Ci and Wi models

- Quantitative Morphometry
- Integrated Physicians Viewer™ with MXApro™ Feature

Atypical Femur Fracture Assessment (AFF) High Resolution Imaging Capability (C, W, A models)

Pediatric Analysis for Spine, Femur and Forearm

Pediatric Whole Body with Body Composition Assessment (Wi, W, A models)

**External Shielding**

None required<sup>1</sup>

**BMD Precision**

<1.0%

**Scan Region**

195.5 x 65 cm for Wi and W models

195.5 x 66 cm for A models

**Table Height**

71cm

**C-arm Clearance**

61cm

**Calibration**

Automatic, continuous calibration using Hologic's automatic internal reference system

Operator calibration not required

Automatic quality control program with multiple system checks

**Operating Requirements**

Temperature: 15-32°C ( 60-90°F)

Power: 100 VAC (16 A); 120 VAC (14 A); 230 VAC (8 A)

Humidity: 20% - 80% relative humidity, noncondensing

Average heat load: 3,400 BTU/hr.

## Scan site specifications according to model

| Horizon® Ci                            | Horizon Wi  | Horizon A   | Horizon W   | Horizon C   |
|--|---|---|---|---|
| 64 Detectors                           | 64 Detectors  | 216 Detectors   | 128 Detectors   | 128 Detectors   |
| Regional Scans 30 s                    | Regional Scans 30 s<br>Body Comp 6 min  | Regional Scans 10 s<br>Body Comp 3 min  | Regional Scans 10 s<br>Body Comp 6 min  | Regional Scans 10 s   |
| Optional Vertebral Fracture Assessment | Optional Vertebral Fracture Assessment  | Hi-Definition Vertebral Fracture Assessment with Abdominal Aortic Calcification detection | Hi-Definition Vertebral Fracture Assessment with Abdominal Aortic Calcification detection | Hi-Definition Vertebral Fracture Assessment with Abdominal Aortic Calcification detection |
|  |   | Atypical Fracture Assessment  | Atypical Fracture Assessment  | Atypical Fracture Assessment  |
|  | Advanced Body Composition™ Assessment with InnerCore™ Visceral Fat Assessment | Advanced Body Composition Assessment with InnerCore Visceral Fat Assessment               | Advanced Body Composition Assessment with InnerCore Visceral Fat Assessment               |   |
| Lumbar Spine                           | Lumbar Spine  | Lumbar Spine  | Lumbar Spine  | Lumbar Spine  |
| Decubitus Lateral BMD                  | Decubitus Lateral BMD   | Supine Lateral BMD  | Decubitus Lateral BMD   | Decubitus Lateral BMD   |
| Dual Hip                               | Dual Hip  | Dual Hip  | Dual Hip  | Dual Hip  |
| Proximal Femur                         | Proximal Femur  | Proximal Femur  | Proximal Femur  | Proximal Femur  |
| Forearm                                | Forearm   | Forearm   | Forearm   | Forearm   |
| Hip Structure Analysis                 | Hip Structure Analysis  | Hip Structure Analysis  | Hip Structure Analysis  | Hip Structure Analysis  |
| General Region of Interest             | General Region of Interest  | General Region of Interest  | General Region of Interest  | General Region of Interest  |

### Research package option

- Prosthetic hip
- Small Animal
- Infant Whole Body with Body Composition Assessment and subregional analysis (Wi, W and A models)

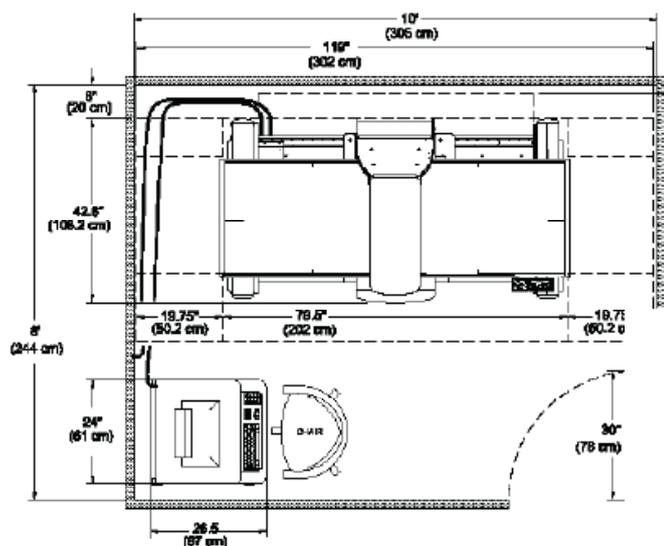
NOTE: Features and specifications subject to change without notice.

<sup>1</sup> Some components of the IRIS™ package can be purchased separately.

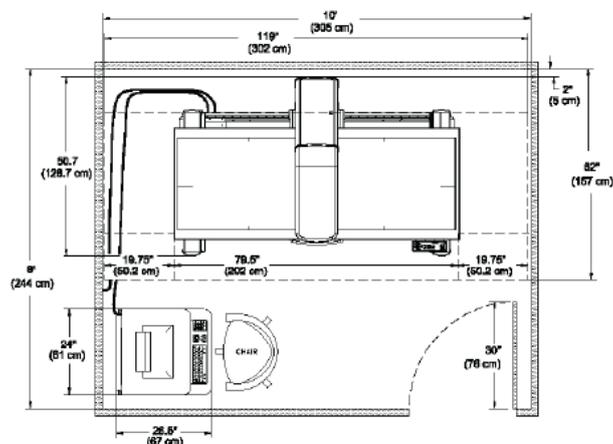
<sup>2</sup> Installation requirements for X-ray equipment vary. Check with local regulatory authorities.

\* Times are dependent on area scanned and represent total irradiation time at 60Hz.

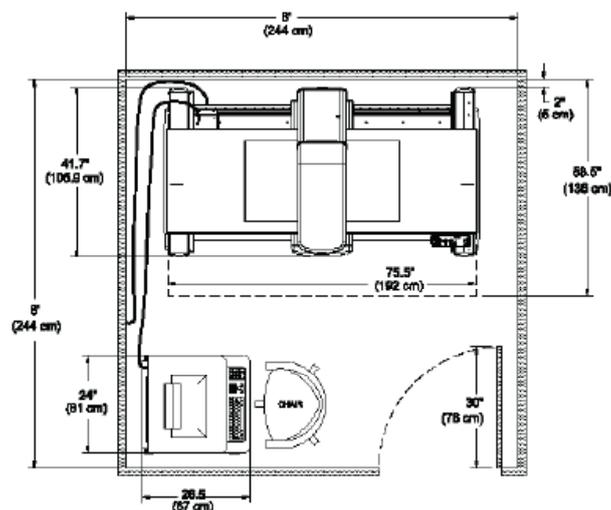
## Horizon® DXA system footprint



**Figure 1-1. Horizon A**



**Figure 1-2. Horizon W, Horizon Wi**



**Figure 1-3. Horizon C, Horizon Ci**

The Horizon® DXA system packs a lot of performance into a small footprint. Operating from existing dedicated power sources, the system fits comfortably in an 8' X 8' exam room (8' X 10' for whole body models) and requires no protective shielding or special room preparations.\*

\*Installation requirements for X-ray equipment vary. Check with local regulatory authorities.

### References

1. K023398, K041226, K042480, K130277 (AFF), K113356(VAT), K103265(Whole Body), K072847 (AAC), K060111 (AAC) 2. K023398 3. Hangartner, TN. A study of long-term precision of dual energy X-ray absorptiometry bone densitometers and implications for the validity of the least-significant-change calculation. Osteoporosis Int. 2007

**Contact your Hologic representative to learn more or visit [hologic.com](http://hologic.com)**

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