

QDR[®] 4500

Clinical Bone Densitometer

Specifications

*Modularity to Meet
Your Evolving Needs*



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Whether you're conducting major research or just beginning to incorporate bone densitometry into your clinical practice, Hologic has a high-performance system to suit your needs. The QDR 4500 family of clinical fan-beam bone densitometers lets you take advantage of advanced technology in a simple-to-use modular system. The QDR 4500 family offers high-quality imaging, high speed, unmatched precision and modularity to meet your evolving clinical requirements today and in the future.

QDR 4500 Series Upgrade Path

	Body Composition Analysis [†]		Supine Lateral Spine
	WholeBody	Supine Lateral Spine	Body Composition Analysis [†]
Prosthetic Hip ^{**}	Prosthetic Hip ^{**}	Prosthetic Hip ^{**}	Prosthetic Hip ^{**}
Forearm	Forearm	Forearm	Forearm
Hip	Hip	Hip	Hip
Lumbar Spine	Lumbar Spine	Lumbar Spine	Lumbar Spine
QDR 4500 C	QDR 4500 W	QDR 4500 SL	QDR 4500 A

[†]Optional ^{**} For investigational use only in the U.S.A.

QDR 4500 Product Specifications

Scanning method:

X-ray fan beam, utilizing motorized table and C-arm

X-ray System:

Switched-pulse dual-energy (140 kVpeak)

Detector System:

Multi-element detector array

Scatter Dose:

Less than 1.0 mR/hr (0.01mSv/hr) nominal measured at 2.0m from the examination table for most scan modes

External Shielding:

None required*

BMD Precision:

<1.0%

Calibration:

Self-calibrating using patented HOLOGIC Automatic Internal Reference System
 ■ Automated Quality Control program ■ Operator calibration *not* required

Operating Requirements:

TEMPERATURE: 60°-90°F (15°-32°C)
 POWER: 100VAC (16A)/120VAC (14A)/230VAC (8A)
 HUMIDITY: 20%-80% relative humidity, noncondensing
 AVERAGE HEAT LOAD: 3,400 BTU/hr

Table Height:

71cm (28in)

Standard Hardware Configuration:

Computer worktable with: Pentium II CPU (min) ■ 6GB (min) hard disk drive ■ 3.5in 1.44MB floppy drive ■ 104 key enhanced keyboard ■ Mouse, pad and shelf ■ 4MB (min) video board ■ 56K modem ■ 17in monitor with 1,280 x 1,024 screen resolution and 0.28 dot pitch ■ HP Professional Color DeskJet[®] printer ■ 3.5in LS120 Superdisk Drive ■ CD ROM

Standard Software Configuration:

QDR for Windows 98 ■ NHANES Standardized Hip Reference Database ■ QDR OnePage Report ■ Context Sensitive Help ■ Fracture Risk Indication

Optional Hardware:

Magneto Optical Disk Storage ■ HP LaserJet[®] B&W printer (standard on QDR4500 A in U.S.) ■ Modem ■ Network

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

QDR 4500 Typical Performance (60 Hz)*

Exam	QDR 4500 C		QDR 4500 W		QDR 4500 SL		QDR 4500 A	
	ScanTime	Exposure	Scan Time	Exposure	Scan Time	Exposure	Scan Time	Exposure
Lumbar Spine	30s	10mR	30s	10mR	30s	10mR	30s	10mR
Hip	30s	10mR	30s	10mR	30s	10mR	30s	10mR
Lateral Spine					120s	35mR	120s	35mR
Forearm	30s	10mR	30s	10mR	30s	5mR	30s	5mR
Whole Body			6.8min	1.5mR			180s	1mR

†Optional *50Hz and other scan modes available.

Specifications According to Model

	QDR 4500 C	QDR 4500 W	QDR 4500 SL	QDR 4500 A
Scan Sites	<ul style="list-style-type: none"> ▪ PA lumbar spine ▪ Proximal femur (hip) ▪ Forearm 	<ul style="list-style-type: none"> ▪ PA lumbar spine ▪ Proximal femur (hip) ▪ Forearm ▪ Whole body 	<ul style="list-style-type: none"> ▪ PA lumbar spine ▪ Proximal femur (hip) ▪ Forearm ▪ Supine lateral lumbar spine 	<ul style="list-style-type: none"> ▪ PA lumbar spine ▪ Proximal femur (hip) ▪ Forearm ▪ Supine lateral lumbar spine ▪ Whole body
Scan Region	<ul style="list-style-type: none"> ▪ 38" x 20" (96cm x 51cm) 	<ul style="list-style-type: none"> ▪ 77" x 26" (195cm x 65cm) 	<ul style="list-style-type: none"> ▪ 38" x 26" (96cm x 65cm) 	<ul style="list-style-type: none"> ▪ 77" x 26" (195cm x 65cm)
Footprint	<ul style="list-style-type: none"> ▪ 79.5" x 55" (2.02m x 1.40m) 	<ul style="list-style-type: none"> ▪ 79.5" x 48" (2.02m x 1.22m) ▪ 119" x 59" (3.02m x 1.50m) (table extended) 	<ul style="list-style-type: none"> ▪ 79.5" x 55" (2.02m x 1.40m) ▪ 79.5" x 59" (2.02m x 1.50m) (c-arm rotated, table extended) 	<ul style="list-style-type: none"> ▪ 79.5" x 55" (2.02m x 1.40m) ▪ 119" x 59" (3.02m x 1.50m) (c-arm rotated, table extended)
System Weight	<ul style="list-style-type: none"> ▪ Table/C-arm 650lb (295kg) ▪ Control console 150lb (68kg) 	<ul style="list-style-type: none"> ▪ Table/c-arm 680lb (310kg) ▪ Control console 150lb (68kg) 	<ul style="list-style-type: none"> ▪ Table/C-arm 800lb (365kg) ▪ Control console 150lb (68kg) 	<ul style="list-style-type: none"> ▪ Table/C-arm 800lb (365kg) ▪ Control console 150lb (68kg)
Optional Software	<ul style="list-style-type: none"> ▪ General Region of Interest ▪ DICOM ▪ Metal Removal* 	<ul style="list-style-type: none"> ▪ General Region of Interest ▪ DICOM ▪ Metal Removal* ▪ Body Composition Analysis 	<ul style="list-style-type: none"> ▪ General Region of Interest ▪ DICOM ▪ Metal Removal* ▪ Quantitative Morphometry 	<ul style="list-style-type: none"> ▪ General Region of Interest ▪ DICOM ▪ Metal Removal* ▪ Body Composition Analysis ▪ Quantitative Morphometry ▪ Small Animal

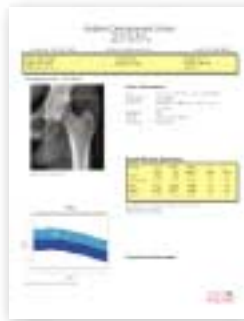
*For investigational use only in the United States

Elite Value-Added Package

Now standard on all QDR4500 systems

QDR OnePage

Combines image, scan analysis and reference curves into a concise, easy-to-read, visually impressive, single-page reports. Customize with your clinic's name, address and phone numbers. Saves time and materials.



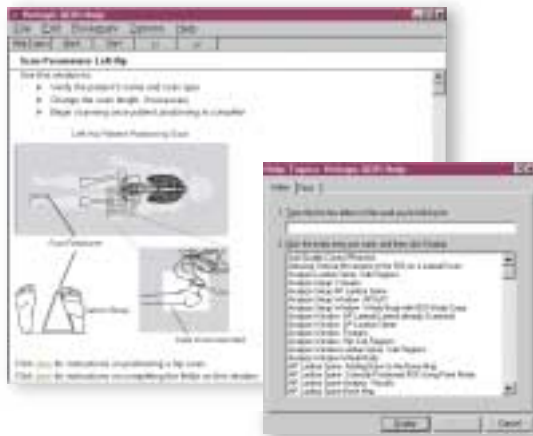
Standard Patient Report with Reference values



Rate of Change Report

Context Sensitive Help

The text and graphics in *QDR for Windows* Help Menu provide an overview and virtual "walk through" of the QDR's operation and capabilities. A single click on a topic button produces instructions on scanning, analysis, and data management.



Practice Development Guide

Helps you promote your bone densitometry services to patients and referring clinicians. Includes ready-to-print brochures, ads, mailers and other promotional/educational aids.



Other Exclusive Hologic Features

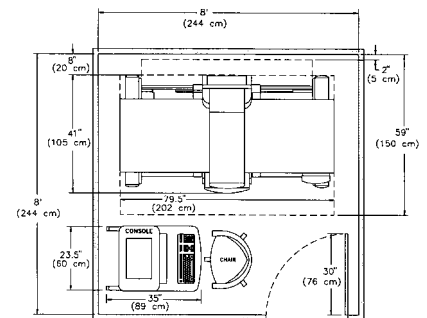
- **NHANES Reference Database**—selected by the International Committee for Standards in Bone Densitometry as the standardized hip reference data for the United States.
- **Patient Rescan** eliminates need to reposition patients. Saves time and assures patient comfort.
- **Reanalysis**—reanalyze data, even a year or more later, without rescanning
- **Scoliotic Spine Analysis** tailors vertebral BMD assessment to the unique curvature of patients with scoliosis
- **Automatic Bone Mapping** calculates the soft tissue and bone map of any scan without operator involvement
- **Automatic Locate** records and monitors the location of patient data saved to a storage media, eliminating the need to log patient data.

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Specifications



The QDR 4500 Series packs a lot of performance in a small footprint. Operating from existing power sources, the QDR 4500C (shown above) and QDR 4500SL fit comfortably in an 8ft x 8ft exam room (8ft x 10ft for the QDR 4500A and QDR 4500W) and require no protective shielding or special room preparations.

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