GE Healthcare

Lunar DPX Pro

Office-based Bone Densitometry

GE imagination at work

High Performance - Clinical Densitometry

Bone densitometry has reached a new landmark in clinical performance with the DPX Pro densitometer. The unique combination of high-performance scanning, advanced clinical utility, and the revolutionary enCORE™ software bring unprecedented ease of use and throughput to densitometry in an affordable package.

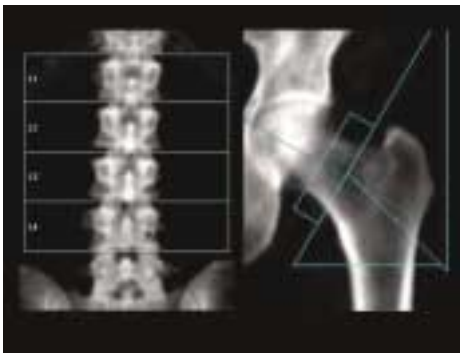
The DPX-Pro's comprehensive features assist physicians in diagnosing osteoporosis, assessing fracture risk, and monitoring response to therapy. The hip is the critical fracture site and Lunar's unique DualFemur™ feature automatically assesses the density of both femurs with one acquisition to identify the weakest side. DualFemur calculates the average density of both femurs for unmatched precision to follow changes over time. The spine is also a key measurement site due to its rapid response to therapy.

DXA (dual-energy x-ray absorptiometry) technology coupled with innovative software and hardware engineering for reliable performance - a necessity in today's medical environment.

Precise, easy and fast exams

Revolutionary enCORE software optimizes productivity
enCORE's intuitive graphical interface provides ease of use, fast throughput and automation that frees the operator for other tasks. The enCORE 2004 feature automatically adjusts the scan path real-time during acquisition for the optimal scan of the specified region reducing at the same time the radiation dose.

AutoAnalysis™ delivers fast, precise, consistent results
Excellent precision, or reproducibility, is key to detecting small changes in bone density. enCORE's AutoAnalysis calculates results in just one keystroke, for fast, precise analysis. Only GE Lunar offers true one-button analysis, eliminating operator variability, subjective decisions and inconsistent analysis in over 90% of scans.

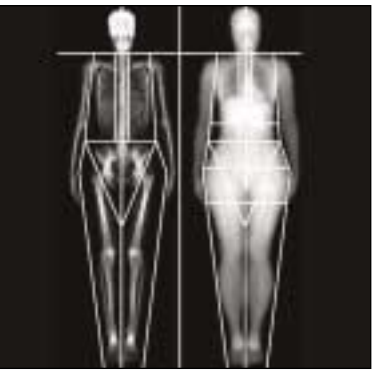


Seamless reporting saves time and costs
OneVision automatically combines scans of the spine and both hips into one comprehensive exam, acquired in one process and evaluated in one analysis. Rather than receiving multiple assessment reports, the referring physician receives a single, consolidated report that combines all risk assessment analyses for greater convenience and time savings. The Composer option allows you to customize the patient report including consolidation of all BMD results, follow up and treatment recommendations.

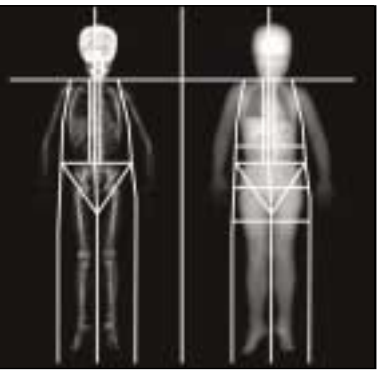
OneScan for faster testing
OneScan simplifies BMD testing by acquiring spine and bilateral femur scans in one, automatic process from a single patient position. The process requires less operator training and patient positioning. The typical amount of throughput savings is 10 to 15 percent.

CAD - Computer Assisted Densitometry adds quality and diagnostic power
Optional Computer Assisted Densitometry (CAD) automatically studies acquisition inputs and the acquired image, looking for errors and patient irregularities. When it detects anomalies, it displays explanations and instructions. CAD helps speed throughput and reduces errors. It also helps technologists provide information to the interpreting physician.

Advances Beyond BMD



Total Body



Pediatric

Hip Axis Length (HAL)

Cross-Sectional Moment of Inertia (CSMI)

Total Body, Body Composition

The Total Body exam, the ultimate in skeletal assessment, provides precise bone density and body composition (total fat, lean and bone tissue) results in one scan. Body composition measurements are used increasingly to manage a variety of clinical and research applications including: secondary osteoporosis, hyperparthyroidism, anabolic steroid therapy, anorexia nervosa and malabsorptive syndromes.

Pediatric

BMD and soft-tissue assessment provide valuable clinical information in children with growth disorders, metabolic diseases, and cachexic disorders, among other conditions. Gender-specific pediatric reference data is implemented.

Advanced Hip Assessment (AHA): Hip Axis Length (HAL), Cross-Sectional Moment of Inertia (CSMI)

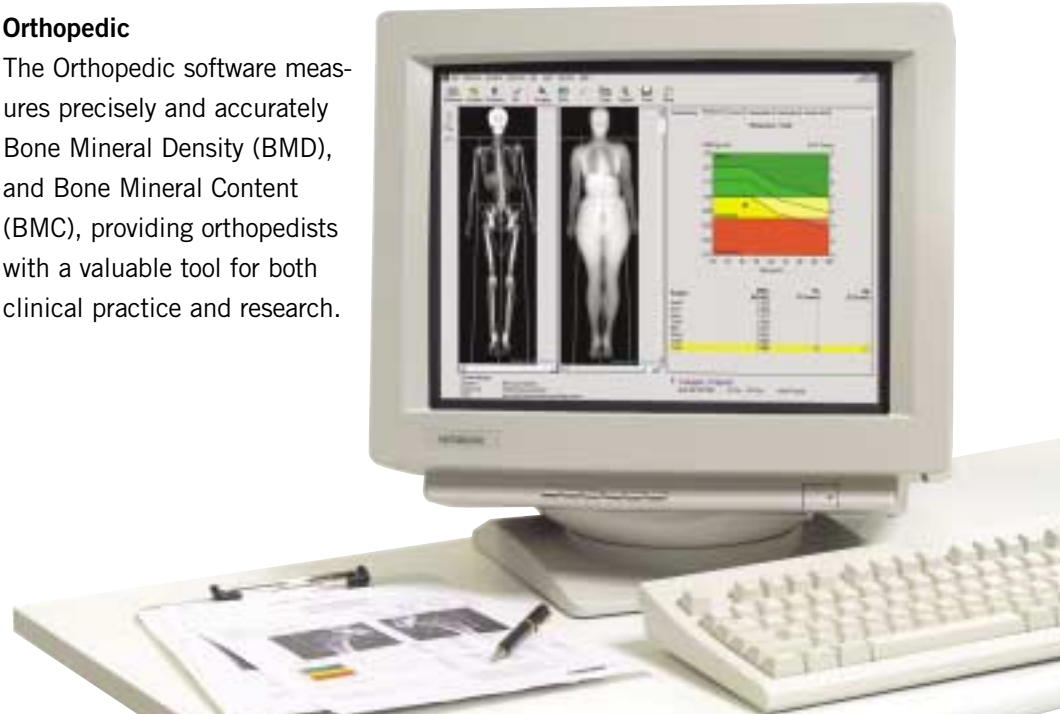
The Lunar DPX Pro provides the first major breakthroughs in femoral densitometry assessment since the introduction of DXA system software in 1987. These features are included in the new Advanced Hip Assessment software.

AHA includes all the standard femoral regions of interest that were previously available, plus additional key measurements and assessments:

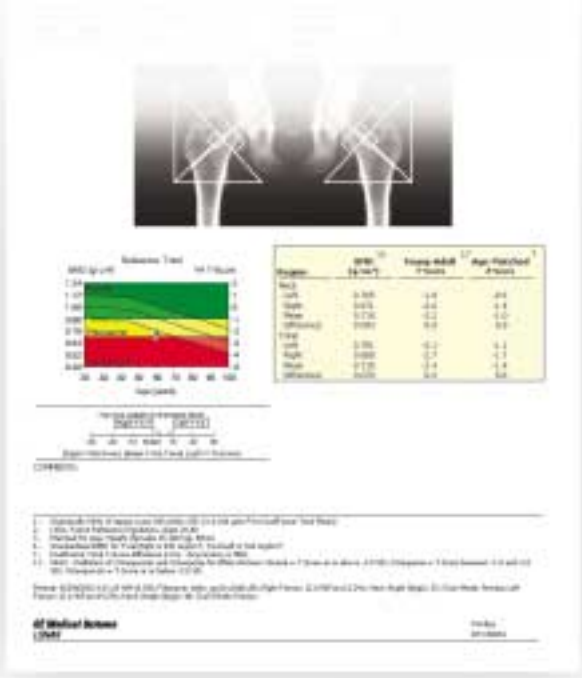
- **HAL** has been demonstrated in prospective studies as an effective adjunct to femur bone density in predicting fracture risk.
- **CSMI** is automatically calculated and can be used for research into load bearing capacity of the hip.

Orthopedic

The Orthopedic software measures precisely and accurately Bone Mineral Density (BMD), and Bone Mineral Content (BMC), providing orthopedists with a valuable tool for both clinical practice and research.



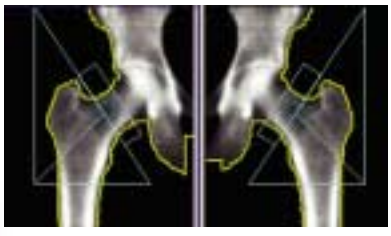
Advanced Connectivity & Communication



Exclusive DICOM, MUDBA, HL7 and Teledensitometry Communication

Optional DICOM connectivity seamlessly integrates densitometry results with Radiology Information Systems (RIS) and Picture Archival and Communication Systems (PACS). With Worklist, your system can receive patient information directly from scheduling applications via HL7 or DICOM for faster throughput and reduced data entry errors. Multi-user Database Access (MUDBA) provides remote access to raw scan data improving productivity and flexibility.

The ultimate in convenience, optional Tele-Densitometry lets you send digital, paperless reports as faxes, or as simple e-mail attachments that recipients can view on any personal computer, without special software.



The Dexter:
BMD anywhere, anytime

The optional Dexter software lets you read BMD analysis on the go. BMD reports are synchronized to the Dexter from your DXA workstation to display BMD images, patient demographics, analysis, trending, and the physician report. You can conveniently qualify analysis by entering or dictating a response anytime, anywhere.

Composer™

Composer automatically generates patient reports, including assessments and follow up recommendations. Scan results are based on pre-defined criteria established by the World Health Organization (WHO), and International Society of Clinical Densitometry (ISCD) and the National, and International Osteoporosis Foundations (NOF, and IOF). It determines the lowest T-score, based on user-defined regions, and automatically inserts the corresponding assessment and recommendations.

Technical Specifications

Available Applications and Options
AP Spine
Femur
DualFemur
Advance Hip Assessment with Hip Axis Length, Cross Sectional Moment of Inertia and Femur Strength Index
Total Body*
Body Composition* (with fat/lean assessment)
Forearm
Lateral Spine BMD
Orthopedic Hip Analysis
Pediatric*
OneVision
OneScan
Composer with 10-year Fracture Risk Assessment
Practice Management Report
Dexter PDA interface software**
TeleDensitometry**
DICOM (Worklist -Color Print and Store)**
Multi User Data Base Access (3/10)**
HL7 Bidirectional interface **

enCORE™ Software Platform
Advanced intuitive graphical interface
Multiple Patient directories with Microsoft Access® database
SmartScan for scan window optimization and dose reduction
Automated Scan mode selection
AutoAnalysis™ for a better precision
Customized Analysis for clinical flexibility
Exam Comparison process
BMD or sBMD results (BMC and Area)
Extensive Reference Data
> 12,000 subjects – NHANES and several Regional Lunar Reference Data
User defined Reference Population
T-score, Z-score, % Young-Adults and % Age-Match
Automated WHO Background evaluation
Patient trending with previous exam importation
Multiple languages available
Multimedia Online Help

Typical Scan Time and Radiation Dose at the best Precision
AP Spine : 90 sec ; 20 µGy (< 1%CV)
Femur : 90 sec ; 20 µGy (< 1%CV)
Total Body/ Body Comp. : 8 min ; 0.02 µGy (< 1%CV)

Calibration and Quality Assurance
Automated test program with complete mechanicals and electronics tests and global measurement calibration
Automated QA Trending with complete storage

Scanning Method
DXA Pencil Beam technology with SmartScan algorithm.
No scout scan required, no moving table.

X-ray characteristics
Constant potential source at 76kV
Dose efficient K-edge filter

Detector technology
Nal PM tube detector
High pulse rate

Magnification
None

Dimensions (L x H x W) and weight
242 x 103 x 128 cm - 272 kg (Full)
181 x 103 x 128 cm - 254 kg (Compact)

External shielding
Not required : X-ray safety requirements may vary upon destination. Please inquire with local regulatory authorities.
GE Healthcare recommends consulting your local regulatory agency to comply with local ordinances.

Environnemental requirements
Ambient temperature: 18-27°C
Power: 230/240 VAC ±10%, 10A, 50/60 Hz
Humidity: 20% - 80%, non-condensing

Computer workstation
Windows XP® Professional
Intel processor computer, printer and monitor
Contact GE Healthcare or our local distributor for the detailed current configuration and optional hardware.

* on full size table only
** networking is under the user's responsibility

For more than 100 years, healthcare providers worldwide have relied on GE Healthcare for medical technology, services and productivity solutions.

So no matter what challenges your healthcare system faces – you can always count on GE to help you deliver the highest quality healthcare.

For details, please contact your GE representative today.

GE imagination at work

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