

UNIGAMMA COMPACT



DEXA system for bone mineral density measurement. Compact version composed by:
Bed for the patient
Movement mechanics controlled by personal computer that is connected on-line to the measurement device. The system is able to scan a surface equal to 37x52 cm² of area
Selection of trace point of the start scan by means of a laser diode
Scan field defined by the personal computer keyboard with a precision of half centimeter
Scan spacing selectable by half millimeter steps
Ultra stable X-Ray Tube with dual photon emission and "Samarium" filter able to produce a thin x-ray beam (pencil-beam) with double energy of 35keV and 75keV end with a current of 0.4mA. Focal spot: 0.6 x 0.6
NaI (TI) detector with 1.5" of diameter
Electronics of measure with two channel to the analysis of two x-ray energy peak
Personal computer Interface and connection by RS232
Database organized by date, patient and type of survey
Survey scan: *Spine* (front-back and lateral), *Forearm*, *Femur*

Show of the map with the possibility to select horizontal and oblique interest areas

Software to acquire and elaborate bone density data. WMOC is projected for Microsoft Windows® 9x is 2000 year bug free

Quality control on-line with automatic registration of the internal standard measurement for each survey made. Possibility to store the results obtained by the equipment standard and control of them by the C.V.%

Auto-calibration with verification of the internal reference standard before any survey and auto-centering of the x-ray energetic peak

Database: possibility to compare data inserted into database with reference population, possibility to increase of normality curves by means of insertion of own production, auto-representation of the data expressed in term average value, T-Score and Z-Score, per cent variation respect to the reference population, graph to compare the results with the reference population

Accessories for patient positioning during the survey

Calibration Phantoms (1 for Spine end 1 for forearm)

Technical Specification:

Storage and elaboration of survey per day: more than 30

Patient exposure: less than 5 µS by using standard scan time:

6 min. Spine and Femur precision better than 1% pixel dim. 1.5 x 3 mm

4 min. Forearm precision better than 1% pixel dim. 0.8 x 1.6 mm

12 min. for vertebral morphometry analysis. valuation of the trend to become cuneiform of each lumbar or dorsal vertebra

Operator exposure: none for a distance more than 1 meter from the patient

Dimension (W,H,D) cm. 190 (78 in storage condition) x 136 x 125, weight about 150 Kg

Electric characteristic: single phase, supply voltage: 220V, frequency 50 Hz, power absorption: 400W

NOTE: The instrument needs a PC compatible with Windows® 9x installed