



### **Description**

The accudxa2 Model 7200 is a peripheral Dual-Energy X-ray (p-DXA) bone densitometer for use by healthcare professionals as a screening tool for bone density disorders in women and men between the ages of 22 and 89 years. It provides results within 60 seconds and allows the operator to distinguish between osteoporotic, pre-osteoporotic and normal bone density states.

The accudxa2 Region of Interest (ROI) is the intermediate phalanx of the middle finger of the non-dominant hand. As the finger is easily accessible as a measurement site, the test takes very little time to complete (< 2 minutes) and the patient receives an extremely low absorbed x-ray dose ( $3.76 \times 10^{-4}$  microsieverts per BMD exam). The extremely low radiation levels eliminate the need for protective garments for the patient and the operator.

### **Operation**

The accudxa2 features a color glass-on-glass touchscreen for entering patient information. A precise and repeatable finger positioning protocol, controlled by the accudxa2's software, uses a laser guide to ensure that the finger is positioned correctly. Once the finger is properly positioned, the x-ray source is activated at two different energy levels and two separate x-ray images acquired and analyzed. The bone mineral density reading is then displayed (expressed in  $\text{g}/\text{cm}^2$ ).

In addition to the BMD measurement, the accudxa2 contains a proprietary normative

database that is used to calculate a t-score and a z-score for the patient based upon their age, gender, ethnicity and BMD measurement. A screening table is provided on the printed test report to assist operators in interpreting the test results.

### **Accessories**

Each unit ships with a QC test finger phantom, AC line cord, replacement sensor covers and a CD containing the user guide. Spare finger phantoms are available as replacements for lost items.

Hygienic disposable sensor covers are available and may be replaced in the field by the customer.

The test results may be printed on an optional external printer. The accudxa2 supports a range of Hewlett Packard inkjet printers including mobile units.

The accudxa2 provides two USB ports for connecting the optional printer and for transferring patient test records to an optional removable USB thumb drive.

A durable plastic case is available for storing and transporting the accudxa2, the optional printer and other accessories.

### **Planned Markets**

The accudxa2 will be launched into the US market in 2012, with planned release into Canada, Latin America and Europe over the following 12-18 months.

## Specifications

### GENERAL

Model Number and Part Number	Model 7200 Lone Oak P/N 10000
Normative Databases	Female: Caucasian, Hispanic, Asian and African American Male: Caucasian
Receptor Size	2 x 1.75 in / 5.08 x 4.445 cm
Reference Axis to Receptor Angle	90°
Source To Finger Distance	4.5 in / 11.43 cm
Focal Spot to Target Distance	6.6 in / 16.76 cm
Focal Spot to Skin Distance	5.8 ± 0.2 in / 14.73 ± 0.5 cm
BMD Precision	Within 1%
X-ray Leakage	0.8 mR per hour at 1 meter distance
Effective X-ray Dose	3.76x10 <sup>-3</sup> uSv per scan
Scatter Radiation	6.1 mR per hour at 1 meter distance
Calibration	Automatic, no user intervention required
Scan Time	Less than 1 minute
Image Storage Capacity	8GB, sufficient for 1000 patient tests
Field Quality Control Test Method	Phantom Test, required after every 300 tests

### MECHANICAL

Weight	26 lbs / 11.8 kg
Size	14 x 15 x 14 in / 35.56 x 38.1 x 35.56 cm

### ELECTRICAL

Safety and EMC Standards Compliance	IEC 60601-1 3 <sup>rd</sup> Edition. ETL marked.
Maximum Line Current and Voltage	127 VAC at 1A (115 VAC units) 253 VAC at 0.5A (230VAC units)
Scan Current	6A

### ENVIRONMENTAL

Operating Temperature	40° to 110° F / 4° to 43° C
Storage Temperature	-30° F to +150° F / -34° C to +66° C
Humidity	20% to 80%
Highest Permissible Temperature Limit	150° F / 66° C

### X - RAY SYSTEM

Maximum Heat Dissipation into Oil	65W
Nominal Anode Input Power	350W
Maximum Anode Input Power	480W
X-ray Source	Lone Oak Medical Technologies P/N 00010 Low Energy 50kVp, 0.5mAs High Energy 70kVp, 0.9mAs, zinc filtered
Collimator	Lone Oak Medical Technologies P/N 21008-01
Image Receptor Accessories Attenuation	Negligible
X-ray Source Assembly Compliance	See Safety and EMC Standards above
X-ray Tube Voltage Measured By	Radcal Rapidose
Serial Number of X-ray Tube	Make and Serial Number on X-ray Source Assembly and rear panel of Unit
Single Load Rating	63 Joules
Serial Load Rating	88 Joules
Maximum X-ray Tube Assembly Heat Content	4900 Joules
Target Material	Tungsten
Target Angle	14°
Nominal Focal Spot Value	0.2mm (IEC)
Filtration (High Energy Only)	+0.5mm Zn (equivalent to +4mm Al)
Total Filtration	6.5mm Al (filter in), 2.5mm Al (filter out)
High Voltage Generator Model	Lone Oak Medical Technologies P/N 12050
High Voltage Generator Input Power	115 VAC, 6A 230 VAC, 3A

### About Lone Oak Medical Technologies

Based in Doylestown, PA, Lone Oak Medical Technologies was established in 2007 to manufacture, service and repair the Accudexa line of bone densitometers. We are certified to ISO 13485:2003 and ISO 9001:2008.

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For further information please visit our website at <http://loneoakmedical.com>