

# BMA™ High Resolution Digital X-Ray

## TECHNICAL SPECIFICATION

**Mobile unit (Patent n° 06 00129) including :**

### GANTRY

- horizontal axis rotating C arm ( $\pm 90^\circ$ ) supporting image detector and X-Ray tube
- vertical axis rotating column ( $180^\circ$ ) allowing C arm up & down movement

### GENERATOR

- high frequency generator : 40 kHz
- power: 3 kW
- high voltage: 40 to 120 kVp\*
- current: 25 mA (at 120 kVp) to 75 mA (at 40 kVp)
- output : 0,5 to 125 mAs (safety timer set at 2 s)\*
- power supply: 230 V / 16 A
- all generator parameters are monitored by software
- X-ray parameters are automatically settled by an Anatomical Program

\* Possibility to limit kV and mAs by software

### X-RAY TUBE

- size: 0,3 mm and 0,6 mm
- rotating anode (3000 RPM, heat capacity 150 kJ)
- target: tungsten (W)
- light centering device and adjustable collimator
- FDD : 800 mm

### IMAGE DETECTOR

- high resolution digital detector
- field of view: 12 x 12 cm or 17 x 24 cm
- spatial resolution :  $\geq 8$  lp/mm
- output level : 12 bits for detector 12 x 12 or 13 bits for detector 17 x 24

### WORKSTATION

- central unit (Windows operating system)
- backup on DVD ROM or external drive
- frame grabber board
- high resolution flat screen color monitor
- keyboard and mouse

### SOFTWARES (D3A proprietary)

- digital image acquisition, visualization and archiving software

### ACCESSORIES

- ankle positioner
- knee positioner
- deskjet printer
- film printer SONY UP990 AD
- patient chair
- X Ray transparent examination table

### DICOM

- send an exam to a remote DICOM application
- print with a DICOM printer



### Dedicated Softwares :

#### TRABECULAR BONE MICRO-ARCHITECTURE QUANTIFICATION

- Bone Micro-Architecture Quantification (MAQ)\* by Fractal Texture Analysis (FTA)\* with Acquisition Control Technique (ACT)\*
- Precision phantom

\* D3A proprietary

#### MEASURE OF JOINT SPACE WIDTH OF THE KNEE

#### EFFECTIVE DOSE

- 2  $\mu$ SV for a calcaneum exam

#### REGULATORY APPROVAL

- CE marking in conformity with the 93/42/EEC directive
- Class IIb

#### Maximum space requirement

#### DIMENSIONS

- Length = 1915 mm
- width = 630 mm
- height = 1890 mm
- weight = 254 Kg

