



## Digital Mammography

The SERENYS dR is a full field digital mammography solution that was designed to provide excellent image quality, optimal work-flow and outstanding patient comfort.

#### **EXCELLENT IMAGE QUALITY**

The Serenys DR is equipped with a **direct conversion Amorphous Selenium detector** available in two formats :18x24 cm or 24x30 cm. This technology is recognized as being the most advanced for the best image quality possible.

The Acquisition Workstation was developed to improve the examination procedure, and is without a doubt one of the major advantages of the Serenys dR. It provides a complete set of tools including: possibility to set the exposure parameters, the ACR view, various graphic tools to manipulate images, DICOM tools, HIS-PACS-RIS Interface. It is inaccordance with DICOM 3.0 MG, IHE (PIR, SWF, MI) and CONNECTATHON 2007.



For **improved ergonomics**, an auxiliary display gives information about the exam parameters associated with the "C" Arm such as rotation angle, applied compression force and compressed breast thickness.

A geometric magnification device adjustable in two factors (x1.5 and x2) for a more precise diagnosis.

#### **OPTIMAL PATIENT AND USER COMFORT**

The Serenys dR was designed to make the exam environment as comfortable as possible for both the patient and the operator.

The compression system "µPress" features a smooth and adapted paddle design that compresses the breast progressively once in contact, making compression as comfortable as possible for the patient.

The AEC device (Automatic Exposure Control) for an optimized monitoring of the x-ray dose delivered to the patient.



# Serenys dR

### Optimized workflow and exam versatility...

#### **OPTIMIZED WORKFLOW**

The SERENYS dR is equipped with a fully motorized **isocentric C-Arm** (rotation and vertical movement). The isocentric C-Arm permits all breast projections without moving the patient and without adjusting the height of the C-Arm, **making exams faster and more comfortable for the patient**.

Perhaps the most important advantage of the isocentric C-Arm is that it is upgradable with a stereotactic biopsy device.



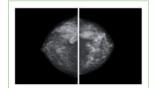
#### STEREOTACTIC BIOPSY DEVICE:



The state-of-the-art biopsy device included (optionally) on the SERENYS dR uses **microprocessor control combining simplicity and precision** to locate the three-dimensional position of lesions and position the biopsy needle to reach the lesions, even those in difficult positions.

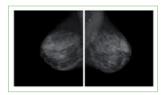
Key elements of the system include:

- <u>Automatic Positioning</u> at LEFT, SCOUT and RIGHT projections with high resolution digital inclinometers
- The Needle Placement Unit (NPU), comprised of:
  - the needle placement support (different sizes of needles can be fitted)
  - » the compression paddle with window for biopsy



#### • The Processing Unit (PU), which:

- » introduces the horizontal coordinates measured with a precisior joystick on the two radiographs taken at +/- 15 degrees
- » calculates and displays the final x, y, z space co-ordinates for automatic positioning of the needle placement support
- » indicates compression thickness and selection range for needle length



#### DIAGNOSTIC WORKSTATION (OPTIONAL)

A post-treatment Workstation is available as an option.



#### It includes:

- Workstation with DVD recorder
- Treatment and image processing software
- 2 high-resolution 5 MP monitors
- 1 LCD colour monitor
- DICOM 3.0 MG compatibility
- HIS-RIS-PACS interface







