



syngo MammoReport

The breast care reporting station for optimized workflow
in digital mammography

Technical Data

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The breast care reporting station for optimized workflow in digital mammography

syngo MammoReport – The advanced solution for the highest demands in screening and diagnostics

A dedicated reporting station with high image quality is essential for digital mammography.

syngo MammoReport, your advanced system for high-volume mammogram reading and optimized workflow, is suitable for both screening and diagnostics.

In addition, breast examinations from other imaging modalities, such as ultrasound and MRI, can be evaluated and comparatively viewed.

syngo MammoReport offers:

Streamlined workflow for high-volume reading

syngo MammoReport has been specially optimized based on your requirements and your personal workflow. A new case (comprising 8 mammograms) can be loaded in less than 1 second.

The automated arrangement of individual X-rays on the screen, easy access to full image resolution quality, and high-resolution image display on the monitors support optimized reporting.

Individual reporting workflow

syngo MammoReport enables the clinician user to customize his/her own personal workflow and image arrangement. An individual workflow can be programmed easily and controlled with a single key.

Image manipulation tasks are thus accelerated, leaving you more time for your “real work” – evaluation and reporting.

Workflow-oriented special keypad

syngo MammoReport features a special keypad that is customized to the user’s individual workflow. Frequently used functions are available at the push of a button. This not only optimizes the workflow, but also enables the user to familiarize him/herself with the system faster.

Easy access to full spatial and grayscale resolution

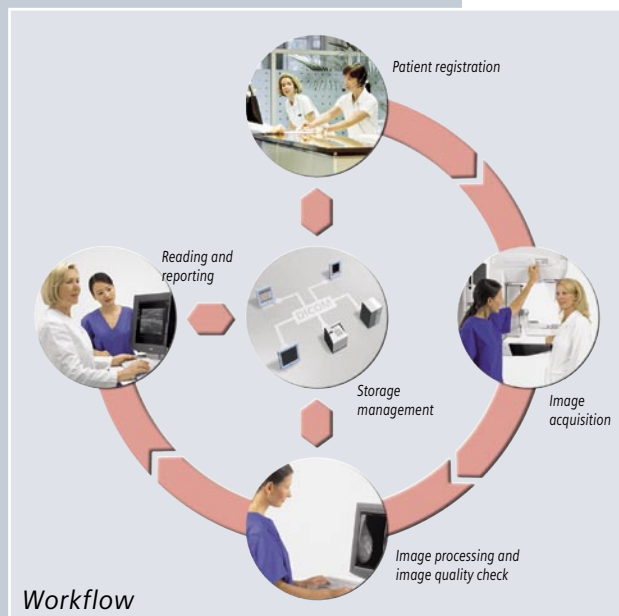
High-end digital systems offer a spatial resolution which cannot be displayed “one-to-one” on state-of-the-art 5 MP monitors.

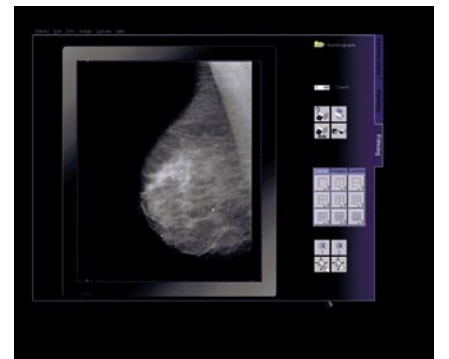
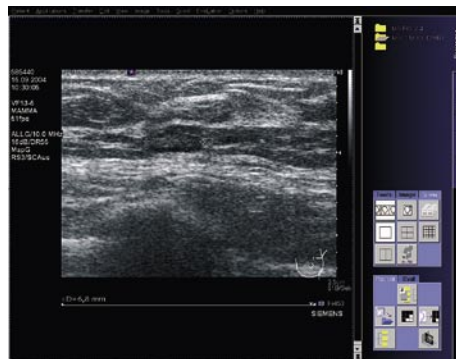
syngo MammoReport offers a variety of functions such as the magnifying glass and Structured Roaming to ease the access to full spatial resolution.

CAD – Computer Aided Detection

syngo MammoReport supports CAD and a CAD-driven workflow.

The DICOM CAD SR (Structured Report) objects from different vendors are supported.





syngo MammoReport

Technical Data

Software functions

Patient examination management

- The patient list is based on the *syngo* Patient Browser with standard filter and sort functionality
- A special MammoBrowser supports the required mammography data management tools; e.g., for managing single or double reading or changing the read status
- Reporting according to BI-RADS classification (optional) or separate reporting categories for each breast can be configured

Standard image display and documentation

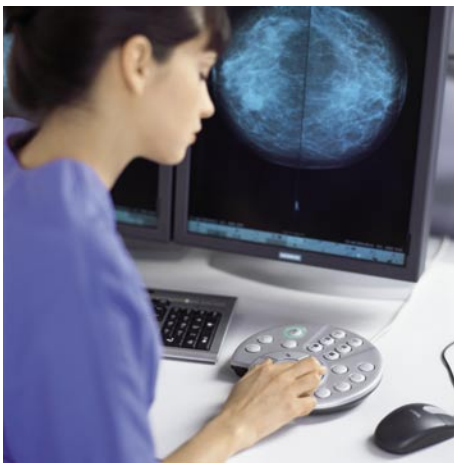
- Standard viewing and filming functions based on the standard *syngo* applications
- Intuitive graphical user interface, operation via *syngo*

High-resolution viewer for image processing/display

- Grayscale windowing of the original image by using the middle mouse button or by clicking Window/Level on the keypad
- Multiple magnification functions; e.g.:
 - Magnifying glass for displaying details in multiple images
 - Zoom & pan
 - Structured Roaming
 - Activation of full resolution on both monitors by pushing a single button
- Grayscale inversion: only the area in the magnifying glass or the entire image
- Image annotation with graphics; via free text and/or according to BI-RADS
- Distance measurement
- Image rotation and mirroring
- "Undo" function for image manipulations
- Direct scroll function: \pm Study, \pm Page, \pm Image
- Hanging protocols for different demands:
 - Automatic screen layout depending on the different image projections; e.g., MLO, CC, LM/ML
 - Advanced hanging for other modalities; e.g., US
 - Two examinations (the current one and a previous one) can be simultaneously displayed on the monitors with four images each
- Loading of the next examination from the patient list by pressing a single key on the special keypad
- Extended overlay of image and patient information:
 - Examination date and viewing direction
 - Detailed examination data such as exposure factors, dose, etc.

Administrative functions

- Login with user name and password
- Particular user-specific rights to use special functions
- Customizable workflow and interface
- User administration and profiles
- Customer-specific reporting tools and configurable image display (dorsal and ventral hanging)
- Automatic synchronization (report status)



Documentation

- Filming of images using *syngo* Filming function and interactive Film Sheet
- Documentation of images on CD using *syngo* function in DICOM format optionally with multi-session and DICOM viewer
- Printing of images on paper using *syngo* standard function:
 - Interface for paper printer
 - Prerequisites (local or network connection): PostScript Level 2
Formats: DIN A4, US Letter, or US Tabloid
 - Note: Paper printer is not suitable for diagnostic purposes (Only in connection with an additional documentation device)

DICOM 3.0 functions

DICOM interface for image data communication in a clinical network (PACS) based on the DICOM 3.0 standard:

- DICOM Storage (Send/Receive)
- DICOM Query/Retrieve (Retrieval of studies from a digital archive, a workstation or other imaging systems)
- DICOM Storage Commitment (Archiving confirmation from the image archive)
- DICOM Basic Print (For connection to a DICOM capable camera or printer)

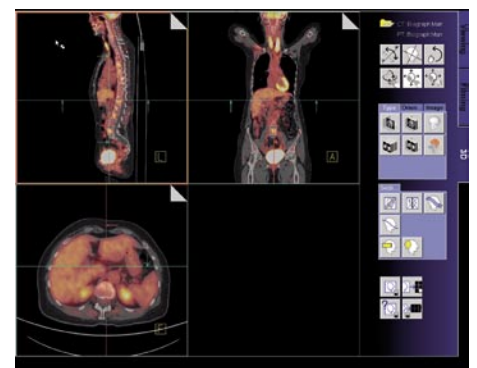
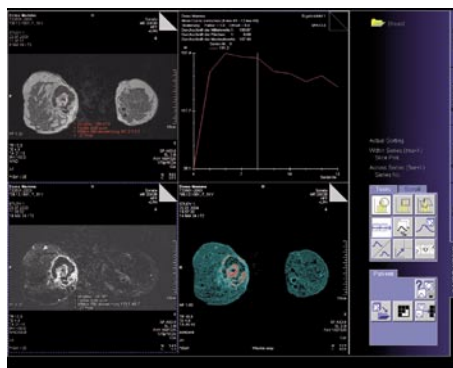
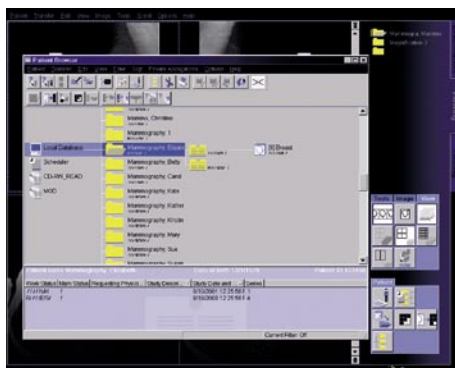
Optional

- Display of CAD:
 - By mouse click via DICOM CAD SR objects
 - R2, iCAD and Kodak are supported
- *syngo* 3D applications:
 - 3D Basic
 - Image Fusion
- *syngo* MR applications:
 - Basic Evaluation
 - Soft Tissue Evaluation
- RIS interface:
 - e.g. for the following IT systems: Penrad, Norwegian Screening IT System, i Soft RadCentre, TRIS 2000, Kodak RIS, Sectra RIS and Power Scribe

DICOM compatible modalities

- MG (Digital Mammography X-Ray) Image Storage for Presentation
- MR (Magnetic Resonance) Image Storage
- CR (Computed Radiography) Image Storage
- CT (Computed Tomography) Image Storage
- DR (Digital X-Ray) Image Storage for Presentation
- AX (X-Ray Angiographic) Image Storage
- AX (X-Ray Radio Fluoroscopic) Image Storage
- IO (Digital Intra-oral X-Ray) Image Storage for Presentation
- NM (Nuclear Medicine) Image Storage
- US (Ultrasound) Multi-frame Image Storage
- US (Ultrasound) Image Storage
- SC (Secondary Capture) Image Storage
- PET Image Storage

For further information and details please refer to the DICOM Conformance Statement



syngo MammoReport

Technical Data / Hardware Requirements

Monitors/Displays for mammography reporting

Two high-contrast 5 MP monitors, 2.5 x 2 K

Monitors in portrait format for images and text

5 MP grayscale flat panel display

Screen size 21" (54 cm)

Image matrix 2560 x 2048 pixels

Maximum brightness, typical 600 cd/m²

Horizontal / vertical viewing angle 170° / 170°

Plus one high-contrast 1.3 MP display

19" TFT color display

Screen size 19" (48 cm)

Image matrix 1280 x 1024 pixels

Maximum brightness, typical 270 cd/m²

Horizontal / vertical viewing angle 170° / 170°

Special keypad for mammography

Computer configurations

CPU	2 x Dual-Core Xeon 5130 2.00 GHz or faster
Memory	3 GB RAM
Network adapter	100/1000 Mbits
Disk drive	1 x 1.44 MB floppy drive
Slots	4 x 3½" (internal) 3 x 5¼" (external)
Hard disk	1 x 160 GB SATA II and larger 1 x 500 GB SATA II and larger 1 x 500 GB SATA II and larger (optional) 1 x 500 GB SATA II and larger (optional)
Hard disk controller	Serial ATA controller
CD	1 DVD/RW
Graphic interface	DVI/VGA interface

Operating data

Power requirements	100 V to 240 V ± 10%, 50/60 Hz ± 1 Hz
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Environmental conditions (operation)

Temperature range	+ 10°C to + 35°C
Relative humidity	15% to 75%, non-condensing
Barometric pressure	700 hPa to 1060 hPa

The information in this document contains general descriptions of the technical options available and may not always apply in individual cases.

The required features should therefore be specified in each individual case at completion of contract.

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In the interest of complying with legal requirements concerning the environmental compatibility of our products (protection of natural resources, waste conservation), we recycle certain components.

Using the same extensive quality assurance measures as for new components, we guarantee the quality of these recycled components.

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