

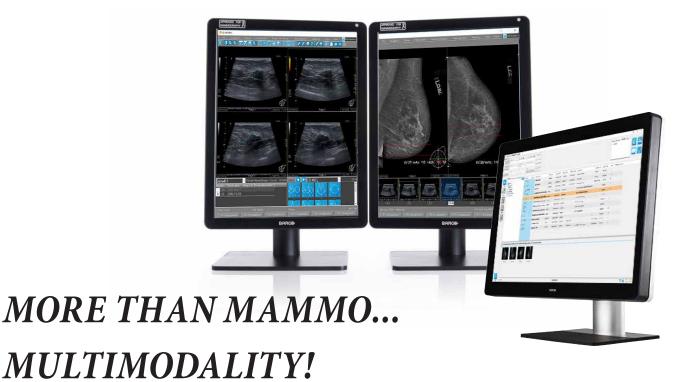
MAMMO ENHANCED MAMMOGRAPHY VIEWING CAPABILITIES

# **SPECTACULAR MAMMO** ... AND MORE!



**/ERSION 1.6** 

## iQ-MAMMO



Imagine designing your own mammography workstation... Wouldn't it be nice to view studies from any modality on one single workstation?

Once the professional radiology workstation iQ-VIEW PRO is connected to the iQ-MAMMO software, it turns into a unique mammography solution that incorporates the complete imaging and staging process. There is no need to switch between workstations anymore to assess mammography, ultrasound, CT, MRI and tomosynthesis images.

#### What makes iQ-MAMMO special?

Exceptional interpretation of DICOM information enables iQ-MAMMO to automatically choose the optimum on-screen hanging position of all current and prior studies - regardless of the manufacturer or device model that created the images. The hanging protocol manager can further hang US, MR or CT images next to the MG study for a better overview. Reference lines between CC and MLO images make it easier for the physician to correlate a suspect finding with the other view position. Reference regions between MG images and the integrated US matrix correlate a finding to the probable region of an US study. This includes the calculation of the distance from the nipple.

With the solution of combining the two products iQ-MAMMO and iQ-VIEW PRO, studies are received from the archive or modalities. Additional images or documents coming from scanners, file folders or any TWAIN sources can be easily imported or be attached to existing studies, such as reports or laboratory data.

In the opposite direction, DICOM images, series or studies can be

exported in multiple still formats or as a movie file and by burning disks, creating projects on memory sticks or even sending encrypted DICOM emails to any colleague.

With the assistance of iQ-VIEW PRO also iQ-MAMMO can easily be integrated into virtually any HIS, RIS, EMR or screening system.

#### Tomosynthesis support

If additional breast tomosynthesis support is required, the iQ-MAMMO TOMO module is a perfect fit. This advanced tool offers the fastest breast tomosynthesis (BTO) in the market with up to 20 frames per second on 2x5 Megapixel displays and includes maximum intensity projections of variable thickness for the selected BTO study.

## iQ-MAMMO FEATURES

#### GENERAL

- Support of any mammography image modality and vendor
  - Support of virtually any ultrasound device (incl. B-mode, Power Doppler, duplex ultrasound etc.), CT and MRI
  - Multi-monitor support (2 high-resolution displays for mammographies in iQ-MAMMO, while iQ-VIEW PRO adds 1 low-resolution display for a study browser and up to 2 optional mid to high-resolution displays to display US, CT, MR etc.)
  - Support of Independent Sub-pixel Drive technology to triple the resolution on compatible displays
  - Creation of shortcuts and customized configuration of various external keyboards
  - Supported character sets: ISO 2022 IR 13, ISO 2022 IR 87, ISO 2022 IR 100 and/ or ISO 2022 IR 159
  - Ergonomic mouse support (Logitech G600 suggested)

#### BASIC VIEWING FEATURES

- Simultaneous opening and easy comparison of current and prior studies
- Display of breast density information out of DICOM tags
- Synchronized Zoom/Pan function with automatic detection of contralateral images
- Basic annotation of images
- Distance, ratio and ROI measurements (whole breast ROI or polygonal ROI)
- Histogram feature (whole breast ROI, polygonal ROI, over a line drawn or magnifier window)
- Comprehensive shutters/masking (horizontal, band, oblique, circular, rectangular and free)
- Blocker features (semiautomatic implant blocker, rectangular, circular and free hand)
- Dynamic and static zoom feature

#### HANGING PROTOCOL MANAGER

- Easy-to-use hanging protocol manager: Six sequences with an unlimited number of steps, e.g. normal breast without prior, normal breast with prior and large breast with prior
- 87 predefined hanging steps shortcuts to allow for easy one-touch arrangement of images (NEW!)
- Free selection of default start-up hanging protocol (NEW!)
- Automatic vertical positioning available during one-touch initialization (NEW!)
- Display of synthetic or regular MG using Hanging Protocols (NEW!)
- Configurable automatic selection of prior study, e.g. previous, 2nd previous, oldest etc. for fast comparison
- Vendor-independent comparison using semantic interoperability, e.g. studies from CR readers and flat panel detectors will be hung automatically with the same quality (FUJI images can be hardened and HOLOGIC images can be smoothened)
- Automatic loading of still US images either into different viewports depending on the image order number or into one viewport to browse through them (NEW!)

## iQ-MAMMO FEATURES

#### HANGING PROTOCOL MANAGER

- Image inversion
- Automatic symmetry detection
- Sector view
- Automatic scaling (1:1 view, fit in or custom percentage)
- Specific center, window and gamma settings

#### ADVANCED

#### IMAGE PROCESSING FEATURES

- Conditional initial image adjustments for vendor-independent comparison
- Adjustment of View Position and Laterality
  - Conditional inversion, sigmoid curve, flip, rotate, left-right and up-down adjustment
  - Center, width and gamma settings
  - Contrast improvement filter, e.g. harden FUJI images and smoothen HOLOGIC images
- Automatic nipple height alignment to adjust inaccurate positioning on the detector
- Automatic skin detection for sole breast tissue inversion (without the surrounding background)
- Subtraction of mirrored contralateral images of the same view position for easy detection of small contralateral differences in tissue density
- Mammography CAD overlay reduces the risk of incorrect interpretation by marking possible lesions and calcifications, virtually any CAD system available on the market is supported
- Automatic reference lines for easy cross correlation between CC and MLO images
- Automatic reference regions for easy cross correlation between MG images and US matrix
- Cine loop to be started from the beginning or the end or played in "round" (start-to-end, start-to-end) or "yo-yo" (start-to-end, end-to-start) mode (NEW!)
- LICENSING Single (PC-based) licenses
- LANGUAGES 

  English

### iQ-VIEW PRO Features supporting iQ-MAMMO

COMMUNICATION	DICOM STORE/FIND	
IMPORT	Study selection and loading using the study browser of iQ-VIEW PRO	
EXPORT	DICOM Secondary CAPTURE export of result images from iQ-MAMMO to the iQ-VIEW PRO imagebox or the PACS 1:1 or scaled DICOM or paper print using the iQ-VIEW PRO print manager Creation of IHE PDI or DICOM-CD compliant media with patient data	

## *iQ-MAMMO TOMO FEATURES*

#### GENERAL

- Fastest breast tomosynthesis with up to 20 frames per second on 2x5 megapixel displays
- Specialized tomosynthesis toolbar including instance slider for easy scrolling
- Automatic display of reference in US matrix for easy cross correlation between tomosynthesis and US
- Fast communciation of results by exporting tomosynthesis key images
- Specialized hanging protocol options enable automatic comparison of MG and tomosynthesis images
- Automatic start of BTO cine to enhance the viewing speed
- Maximum intensity projections of variable thickness for advanced image assessment
- Creation and export of tomosynthesis key images



## iQ-MAMMO SCREENSHOTS

Imagine viewing all your breast images without changing the viewer! iQ-MAMMO TOMO not only displays MG, CR and Tomo studies, but also US, CT and MR.



With the advanced hanging protocol manager it is possible to compare your mammography with your ultrasound study in one viewer using fully customizable hanging protocols.



You have a CAD engine? iQ-MAMMO can display computer assisted diagnoses from virtually any CAD system available on the market.



Not sure whether an asymmetric opacity is a mass?

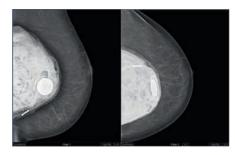
The integrated reference regions help you to correlate your images.

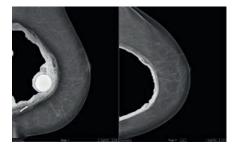


With iQ-MAMMO TOMO you have the fastest tomosynthesis viewer in your hands.

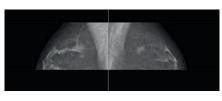
## *iQ-MAMMO SCREENSHOTS*

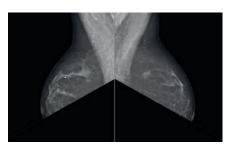
Automatic implant blockers enable the eye to adapt faster to the luminance of the breast tissue.





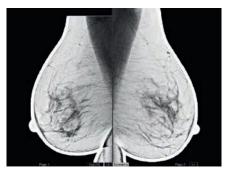
Band masking according to Tabar and oblique shutters allow the comparative study of small areas of both breasts. They enhance the perception of any subtle, asymmetrical change of breast tissue.





Automatic skin detection, nipple height adjustment and inversion improve the detection of small but crucial signs of breast cancer such as microcalcification.





Semantic Interoperability allows for optimum on-screen hanging, e.g. automatic flipping of Hologic Tomo studies or automatic contrast changes to FUJI CR images.

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# OUR COMPANY AT A GLANCE

IMAGE Information Systems is an international company group with offices in Germany, USA and India, which offers complete, user friendly and cost-effective medical imaging solutions.

Thousands of satisfied clients all over the world benefit from our state-ofthe-art products for PACS, RIS, X-ray solutions, 3D processing and teleradiology. We have pioneered several innovations in the market:

- We have introduced MED-TAB, the first DICOM-calibrated portable display for medical image analysis
- Our iQ-ROUTER supports virtually all DICOM image formats and transfer syntaxes in data transmission
- DICOMReader has the highest available read-in rate of patient media, ensuring compatibility with almost all available imaging modalities and vendors

IMAGE Information Systems provides the second largest digital imaging user forum on earth, enabling users to share knowledge and best practice.

To learn more about us and our products, please visit our website.

www.image-systems.biz

## OUR PRODUCTS FOR YOUR IMAGING NEEDS

Full featured, reliable and affordable PACS Smooth radiology information system Superior portable image analysis Your PACS on demand

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**iQ-SYSTEM PACS** 

**iQ-RIS** 

**MED-TAB** 

iQ-4CLOUD

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