Mammo Tomosynthesis 5MP
Display system for digital breast imaging
The standard of care

For thousands of women every day, details make all the difference. This understanding has led to a groundbreaking technology – digital breast tomosynthesis – which significantly improves early breast cancer detection.

To get the best out of this revolutionary technology, Barco has developed an innovative display system for multi-frame mammography. Its unique methods for tomosynthesis visualization increase detection of the smallest details, providing radiologists with a new degree of diagnostic confidence.

With a proven track record in breast imaging, Barco’s advanced mammography displays have become the preferred choice for screening and training centers worldwide. Because radiologists know that, when it comes to women’s health, Barco is the standard of care.
The first choice for digital breast tomosynthesis

Barco’s reputation for accuracy and dependability is the result of extensive clinical and technological research, along with a strong emphasis on quality control. Barco’s Mammo Tomosynthesis SMP is the first display cleared by the US Food and Drug Administration (FDA) for breast tomosynthesis, meeting the highest standards for patient safety and efficacy in digital breast imaging today.
Barco’s Mammo Tomosynthesis SMP proves that technology can make a real difference. Its benchmark technologies set the tone in digital breast screening and provide best-of-class mammography imaging, setting a new standard of care for women’s health.

**Quick readings, exceptional results**

Scrolling through a stack of images usually results in loss of detail due to the slow response time of the LCD screen. When reviewing multi-frame image sequences such as tomosynthesis, breast ultrasound and breast MRI, RapidFrame™ technology counteracts motion blur by providing a high pixel refresh rate. Instant delivery of sharp images is ensured, increasing correct diagnosis and swift workflow.

**Bright images, more details**

Unrivalled image precision and visibility of the most subtle details are a given thanks to the powerful DuraLight Nova™ backlight. DuraLight Nova delivers twice the brightness of conventional lamps, while doubling their life span. Adding the I-Luminate™ ‘hot light’ button for extra brightness, the smallest detail, even in dark areas, will be revealed.

**Less noise, improved accuracy**

Enhanced contrast contributes significantly to lesion visibility. However, screen noise often hinders contrast, disguising subtle image details. Barco’s patented Per Pixel Uniformity (PPU) technology ensures pixel-perfect images without disturbing screen noise, offering clearer visibility of differences in tissue density.
Guaranteed compliance, diagnostic confidence

The display’s intrinsic brightness reduces eye fatigue and allows for reading in a more pleasant ambient room light, without decreasing detection of low-contrast details. Automated checks of contrast and luminance, thanks to I-Guard™ and the hemispherical ambient light sensor, result in an optimal working environment and worry-free readings.

Online calibration, absolute quality

The display is bundled with MediCal QAWeb, an innovative online service for automated and high-grade Quality Assurance bringing a new degree of transparency to your QA routine. The system is your guarantee for consistent image quality and uptime of all displays throughout the facility.

Protecting the environment

The Mammo Tomosynthesis 5MP has been designed with respect for the environment. The system complies with RoHS and WEEE regulations, and combines energy efficiency with smart LCD technology.
Accurate diagnosis

In critical applications such as digital breast imaging, radiologists need a workstation that delivers the highest level of accuracy. That’s why the Mammo Tomosynthesis 5MP display features a top-of-the-line LCD panel with Barco’s patented optics to reduce reflections and ensure high-bright, high-contrast images. With its WideView 5 MegaPixel resolution, display images look good from any angle.

Superb long-term luminance
Long-life DuraLight Nova™ backlights deliver twice the brightness of conventional Cold Cathode Fluorescent Lamps, guaranteeing a diagnostic luminance of 1,000 cd/m² for the lifetime of the display. In addition, they last twice as long without increasing power consumption.

High-speed cine imaging
Equipped with groundbreaking RapidFrame™ technology, the display system provides an exceptionally high pixel refresh rate to eliminate slow LCD response time when scrolling through a stack of images. This allows you to study multi-frame images at any speed and without blurry artifacts or ghosting, resulting in efficient and accurate diagnostic performance.

Pixel-perfect image quality
Screen noise can significantly affect the accuracy of mammography diagnoses. Barco’s patented Per Pixel Uniformity technology™ (PPU) overcomes this problem. PPU measures and adjusts the luminance of each pixel, making every pixel permanently DICOM compliant. PPU works together with SmoothGray technology to eliminate the overall screen noise.

CLINICAL BENEFITS

- Excellent visibility of subtle details especially in dense breast tissue
- Increased image clarity of near skin-line details
- Less color variation between displays
- Reduced eye fatigue thanks to BlueBase color light (ClearBase also available)

- High-speed cine imaging without blur for fast interpretation
- Increased screening rates due to highly efficient diagnostic workflow
- Cost-effective mammography screening

- Easier to distinguish subtle lesions from screen noise
- Improved contrast in dense breast tissue
- Improved Contrast to Noise Ratio, even at lower patient doses
- Easy conformance to DIN 6868-57
Faster reading

The Mammo Tomosynthesis 5MP demonstrates that precision and productivity can go hand in hand. The display’s ultra-fast 10-bit display controller and innovative design features improve the representation of your mammograms, enabling quicker workflow and increased diagnostic performance.

An extra touch of brightness

The Mammo Tomosynthesis offers extra brightness right at your fingertips. Simply push the I-Luminate™ ‘hot light’ button to temporarily boost your display brightness. Imagine how convenient this will prove when inspecting subtle details or comparing current digital exams with film-based priors. For your convenience, the display also comes with a handy clip to hold 18x24 or 24x30 films which can be brightly lit from behind.

Ultra-fast display controller

The high-performance Barco MXRT display controller loads current and prior exams in less than a second. This powerful display controller provides specific support for medical software applications relying on OpenGL or Microsoft DirectX.

Adjustable display positioning

The adjustable dual-head stand aligns a pair of displays for optimum viewing angle and allows the user to tilt, swivel and adjust the height of the displays to fit their preferred position.

Flexible conferencing

The Mammo Tomosynthesis 5MP is available with Barco’s Conference CloneView™ software to facilitate effortless and accurate projection of high-quality breast images onto a large-screen display.

Clinical benefits

- Enhanced perception of small and low contrast details
- Simplified comparison with film-based mammograms
- Uninterrupted DICOM compliance

- Fast study loading, even for complex diagnostic exams
- Efficient workflow and smooth image manipulations
- Ability to view current and prior digital mammograms together with Breast MRI, Tomosynthesis, and Ultrasound

- Easy to adjust the height to match the preference of individual radiologists
- Possible to angle displays for optimum viewing

- Flexible projection configurations to facilitate training and conferencing
- Effortless cloning, scaling, zooming and panning for ease of viewing
Guaranteed compliance

Barco’s Mammo Tomosynthesis 5MP ensures DICOM compliant images over time and under all lighting conditions through automated calibration and high-level quality assurance. A model of long-lasting efficiency and dependability, the display is your guarantee for complete diagnostic confidence.

A smart reading room

The integrated I-Guard sensor continually guards and adjusts the luminance output of the diagnostic viewing area at the front of the display. Combined with the hemispherical ambient light sensor which monitors the light in the room, this intelligent system performs automated DICOM calibrations, and records whole room quality assurance for an optimal reading environment without interrupting your daily workflow.

User-friendly Quality Assurance

Barco’s Mammo Tomosynthesis 5MP is bundled with an innovative softcopy Quality Assurance solution that brings a new degree of transparency to your QA routine. In combination with the intelligent I-Guard and ambient light sensors, the MediCal QAWeb system provides an easy-to-use, web-based tool for automated calibration and QA. Integrated into MediCal QAWeb is a compliance test for MQSA, simplifying the conformance process and documentation for this standard.

5-year warranty, zero worries

The display is covered by a standard 5-year warranty. In addition, the product is backed by Barco’s global service and support organization, which helps you to reduce unscheduled downtime and keeps your expenses under control. It is your guarantee for professional support, wherever you are, whenever you need it.

CLINICAL BENEFITS

- Ability to control the ambient light level
- Worry-free compliance with the DICOM & mammography QC standards
- Transparent calibration without interrupting the diagnostic workflow
- Optimum luminance over time and between displays

Effortless conformance with DICOM, MQSA, EUREF, FDA, JESRA, ACR-NEMA, DIN, IEC, AAPM, CMDCAS, and the French Protocol

- User-friendly remote Quality Assurance and asset management
- Reduced operating costs

- Complete peace of mind
- Optimal protection of your investment
- Maximum uptime of your display system
Supporting healthcare professionals a billion times per year

More than a billion times each year, Barco display solutions help physicians make critical decisions. Every day, Barco provides them with peerless diagnostic performance.

Barco presents a full range of advanced display solutions for mammography, radiology, surgery, and pathology, along with DICOM compliant clinical displays and mobile point of care devices.

Barco’s commitment to quality has earned the trust of customers from all over the world, who partner with Barco to meet their most demanding imaging challenges. This partnership approach is also reflected in Barco’s worldwide customer service network, ensuring professional support, wherever you are, whenever you need it.