

GE Healthcare

Essential for life

Senographe Essential
Full-Field Digital Mammography System





Excellence in FFDM is a process. An ongoing quest, fueled by our continuing breakthroughs in breast cancer detection technology. GE Healthcare is committed to this quest – and inspired by the process of both refining and redefining what's essential.

As part of this process, global leaders in digital mammography were asked what is essential to them in a Full-Field Digital Mammography system – for today and tomorrow.

Essential platform. Give us the best possible platform for current and future applications. In essence, provide an excellent long-term investment.

Essential image quality. The quest for the perfect image is within our grasp. Let's get even closer to the goal.

Essential efficiencies. Streamline the workflow for faster throughput and increased first-time accuracy – yet maintain essential patient comfort.

Essential workstation and connectivity. The Seno Advantage is world-class. Continue to improve the ease and PACS-connectivity of this essential system.

Essential service and support. We need a reliable partner – and GE is there at all phases, from initial room design to ultimate online equipment monitoring and support.

When it comes to Full-Field Digital Mammography Systems,

What's truly Essential?



Introducing Senographe Essential.

Come even closer to the essence of what's possible in the early detection and fight against breast cancer. The Senographe Essential is ready. It's the platform for now and for the future. Let's go.

Platform of Possibilities.

The fullest field. Senographe® Essential's groundbreaking 24x31 cm active field of view is the largest field currently available in the marketplace. In just a single exposure, it can accommodate a great diversity of shapes and sizes – all with the same level of dose reduction as the Senographe DS. The result? Larger breasts that previously took two exposures per view, can now be imaged in one. What's more, the optimized image matrix, 14 MB for a large image, provides users with unparalleled speed, efficiency, and productivity. It all leads to better patient accommodation and expanded possibilities.

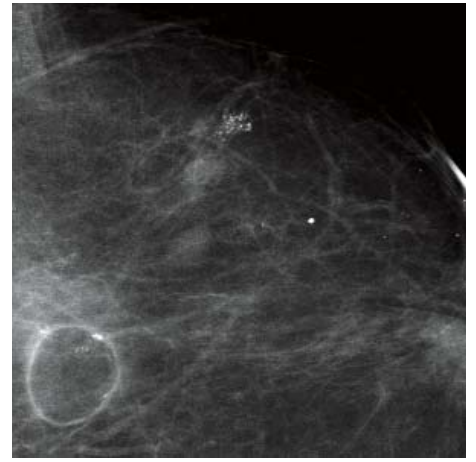
Platform to power. Intuitive and equipped with fully automatic functions, the Senographe Essential's design is targeted for digital mammography. It furthers GE Healthcare's track record of uniting strong design with cutting-edge technology. Silent, smooth, and ergonomically rounded, Senographe Essential's flexibility and complete ease of use instill confidence in patient and technologist alike. And it's all backed by the reliability and stability of GE's enduring commitment to healthcare. Now that's powerful.



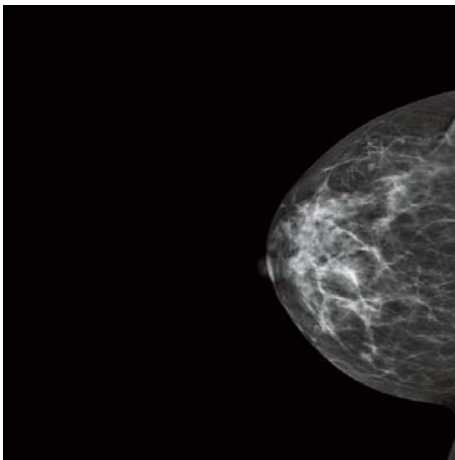
Large breast acquired on 24 x 31 cm field of view. Display in full screen. Premium View™ applied. Right MLO



Large breast acquired on 24 x 31 cm field of view. Display in full screen. Premium View™ applied. Left MLO



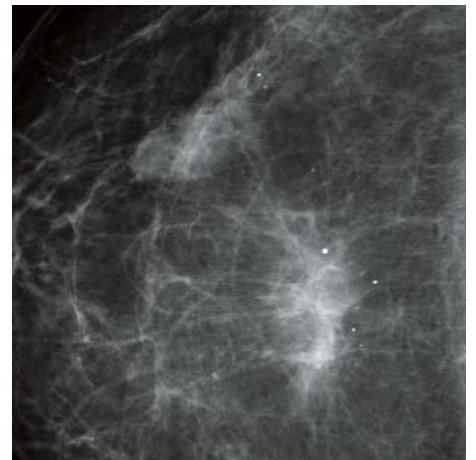
Zoomed image of post-surgical breast tissue alteration. Premium View™ applied



Large breast acquired on 24 x 31 cm field of view. Display in full screen. Premium View™ applied. Right CC

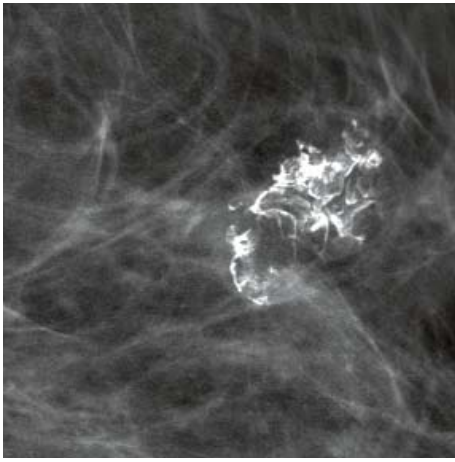


Large breast acquired on 24 x 31 cm field of view. Display in full screen. Premium View™ applied. Left CC

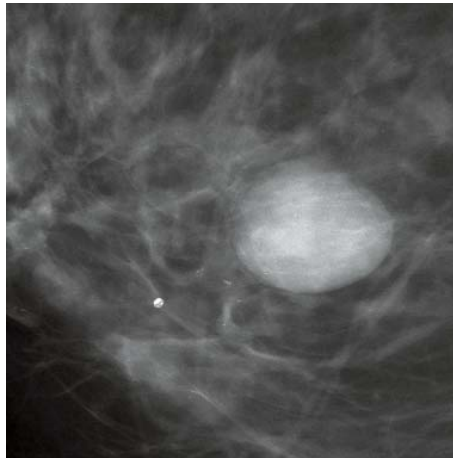


Magnified view of Stellate lesion. Premium View™ applied

Diagnostic image quality.
It's Essential.



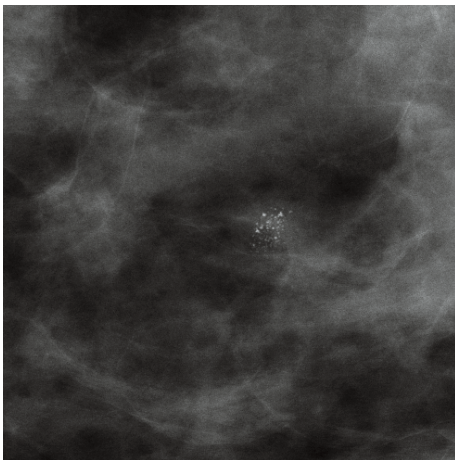
Zoomed image of post-surgical breast tissue alteration. Premium View™ applied



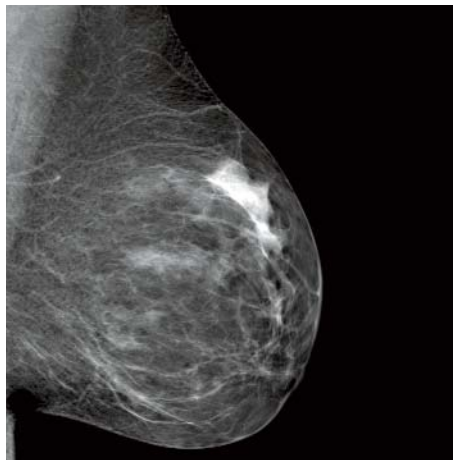
Zoomed image of mass with associated microcalcifications



Small breast acquired on 24 x 31 cm field of view. Display in full screen. Tissue Equalization™ applied. Right MLO



Zoomed image of microcalcifications. Premium View™ applied. Right MLO



Large breast acquired on 24 x 31 cm field of view. Display in full screen. Premium View™ applied. Left MLO



Small breast acquired on 24 x 31 cm field of view. Display in full screen. Premium View™ applied. Right MLO

It compels us all: The ongoing quest for the most perfect image possible. The Senographe Essential furthers this quest with stunning attention to detail, delivering top-of-the-line image quality at an impressively low dose, together with great flexibility.

Smaller tube with improved performance and the GE-exclusive Rhodium track. Offering a significant beam hardening when needed, the use of Rhodium increases contrast and visibility of lesions in dense or difficult breasts with optimized level of dose.

Automatic Exposure Control, combined with the bimetal anode tube. It's the only system available today that measures and selects exposure parameters based on radiological breast density measurements. Automatic Optimization of Parameters (AOP) maximizes image quality, independent of the breast size or density, over the entire surface of the detector. So it's capable of generating high-precision images for a diverse array of patients and conditions, with excellent repeatability of exposures.

GE's proven Revolution digital flat-panel detector delivers precision image quality with high Detective Quantum Efficiency (DQE). Built on an optimized pixel pitch that delivers sharp image resolution while decreasing noise level, it's designed to deliver optimum performance, particularly at lower doses.

Sharp image acquisition and processing. GE's exclusive image-processing algorithms, Tissue Equalization and Premium View, are designed to improve both diagnostic image quality as well as reading speed on the Seno Advantage 2. What's more, the Essential's standard Fine View feature further enhances image acquisition by sharpening visibility of lesions while Premium View optimizes local contrast in breast structure. These algorithms work together to reduce windowing manipulation, improve visualization of dense breast tissue, and maintain peripheral contrast at the skin line and pectoral muscle. And by reducing the needed number of image manipulations (WW/WL), these essential imaging capabilities will increase reader productivity. A gift of time and efficiency for radiologists.

Essential efficiencies.

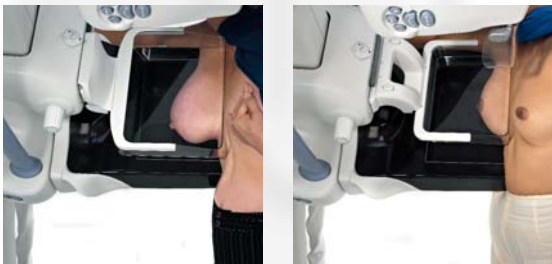
Intuitive Operation. Increased first-time accuracy.
Fast throughput. Essential patient comfort.

The Senographe Essential's unparalleled precision and intuitive operation means faster, more efficient exams with fewer retakes. How fast is fast? Reduced time between exposures allows several exposures per minute. Productivity redefined.

Flexibility is key. With the largest field-of-view detector in the industry, the Essential can precision-image virtually any woman, from the smallest to largest, in a single exposure per view. Flexible, off-centered, ergonomic paddles and refined chest compression capabilities add to both patient comfort and image accuracy, especially important for women with smaller breasts. A state-of-the-art bucky and a smooth, rounded, ergonomic design create a positive experience for patient and technologist alike.

Essential ease of use. Automatic collimation. Paddle auto-detection. Quick, easy set-up with pre-set gantry positioning. Shape-coded buttons so simple to use, you may not have to look. A small, narrow tube. In-room control, with almost instantaneous image review. These gains in efficiency, accuracy, and productivity optimize not only your return on investment, but the entire clinical experience for everyone involved. That's Essential.





Personalize your workflow.

Enhanced diagnostic confidence plus optimal productivity – the Seno Advantage 2 Review Workstation delivers the best of both. It builds on the swiftness, power, and functionality of GE's industry-leading Advantage Workstation® (AW) platform, for fast interactive access and streamlined workflow.

The Seno Advantage 2 Review Workstation features two high-resolution monitors dedicated to mammography and a third monitor built on a true AW for multi-modality images and patient data management.

The flexible, user-customizable hanging protocols allow total image-display versatility on high-resolution screens. GE's advanced image-processing capability allows images to be displayed with Tissue Equalization or with Premium View processing, either automatically with protocols or manually with the push of a button, to maximize review speed and diagnostic confidence. Coupled with Senographe Essential's standard Fine View image acquisition feature, the result is even cleaner, sharper imaging. Customizable toolbars and user preferences let each user optimize the workspace for personal comfort and ease of use.

Image review pace is streamlined by a dedicated keypad that places commonly used functions and additional tools – such as invert, zoom, dark mode and optional Computer-Aided Detection (CAD) – at your fingertips.

Communication to referring physicians or surgeons is made easy. All patient images can be printed or saved in DICOM format on CD, with a DICOM image viewer to permit viewing from a PC. Non-DICOM image export allows for image use in Microsoft® PowerPoint® or other presentations.

Access to optional multi-modality advanced applications, such as FuncTool or Volume Viewer, combined with the ability to display and print multi-modality DICOM images – from our system or from any system – allows for great flexibility and productivity.



Only GE...

GE Healthcare helps you address complex clinical and financial challenges of today's healthcare environment by providing:

- 7 years of experience in digital mammography.
- A complete range of digital systems to answer all clinical needs.
- Clinical confidence with very high image quality at low dose.
- An ergonomic design with patient and technologist in mind.
- High patient throughput.
- A flexible and customizable review station based on Advantage Workstation platform for a streamlined workflow.

The totality of GE brings you:



- A unique Women's Healthcare Portfolio from an experienced, stable partner ... an inventor, leader and innovator committed to the advancement of mammography for over 35 years.
- Service leadership for optimal uptime.

- iLinq™ provides one-touch access to a GE engineer for a remote diagnostic response.
- Training on-site or at the GE Healthcare Institute to improve staff effectiveness.
- Financing, performance and marketing solutions to optimize the return on your investment.