

## *Excellent-m 2D*

Image-based Spectrum Conversion (ISC)  
Fine Structure Control (FSC)

## *Excellent-m 3D*

Iterative Super-Resolution (ISR) reconstruction

- Super-resolution technology
- Iterative reconstruction  
(artifact suppression / noise reduction)



# *AMULET Innovativity*

FUJIFILM DIGITAL MAMMOGRAPHY SYSTEM



FUJIFILM supports the Pink Ribbon Campaign  
for early detection of breast cancer

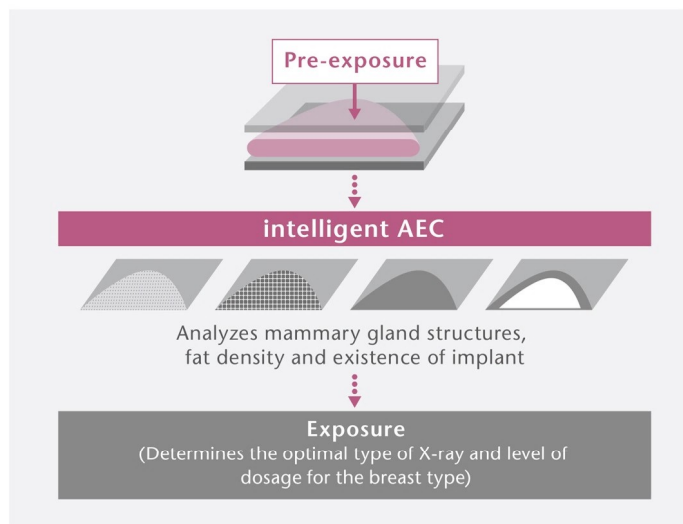
# Easy operation and patient comfort

## Intelligent AEC optimizes the X-ray dose for each breast type

Intelligent AEC has advantages in defining the optimal dose for an examination compared to conventional AEC systems where the sensor position is fixed.

Through the analysis of information obtained from low-dose pre-shot images, Intelligent AEC makes it possible to consider the mammary gland density (breast type) when defining the x-ray energy and level of dose required.

Able to be used even in the presence of implants; intelligent AEC enables more accurate calculation of exposure parameters than is possible with conventional AEC systems. By allowing the use of automatic exposure for the implanted breast, Intelligent AEC can further enhance examination workflow.



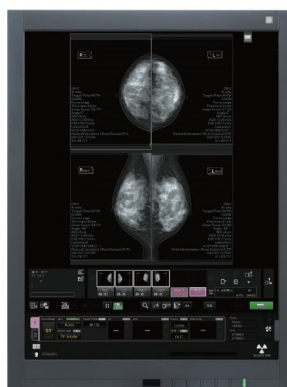
## Patient information display

The information shown on the display **A** at the base of the exposure unit can be switched between patient information (ID, name, date of birth, etc.) and positioning information (angle of swivel arm, compression force and breast thickness). Positioning information can also be confirmed on the display **B** on the compression arm.

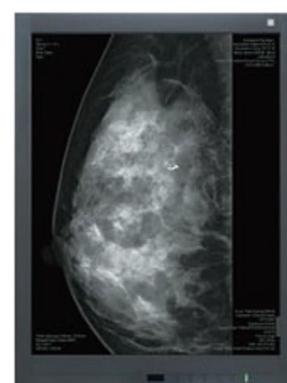


## AMULET Bellus II (Diagnostic Workstation)

The multi-modality workstation optimized for mammography imaging can display images of MG, CT, PT, MR, CR, DX and US. Selection of a reading protocol and an image pattern is possible, providing efficient diagnosis workflow. Images can be printed at preferred positions and sizes with measurement information.



AWS



High definition second monitor

## Dedicated mammography AWS (Acquisition Workstation)

### Optimal examination workflow

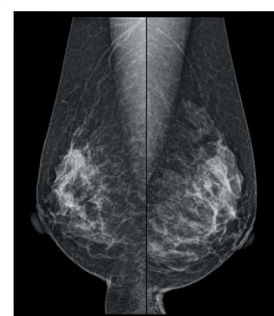
- Integrated X-ray controller allows setting and confirmation of exposure conditions on a single screen
- Examination screen can be split and switched between 1, 2, or 4 image display.
- Individual images can be immediately output to a PACS, viewer or printer during an examination.
- Density and contrast can be easily adjusted while viewing images.
- Alignment of left and right images can be adjusted both automatically and manually.

### High definition second monitor (3M/5M: Optional)

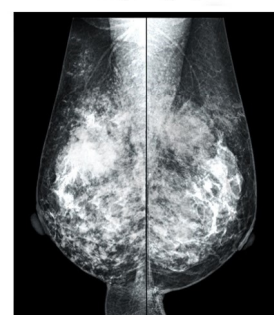
- A second, high resolution monitor can be added to the AWS making it possible to display previous images recalled from a PACS to ensure the mammographer has access to previous images at all time
- For Tomosynthesis, reconstructed images can be displayed.

### Breast Density Measurement Software with Density Category display (Optional)

Immediately after a mammography, the mammary glandular dose information is automatically calculated and displayed on the AWS console for reference. The data can be exported to the DICOM Tag. The threshold of the Density Category can be adjusted.



Breast Density: 23%  
Density category: 1



Breast Density: 85%  
Density category: 4



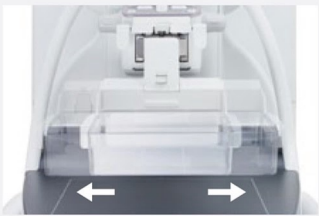


# Other Unique Functions

## Shift Compression Paddle

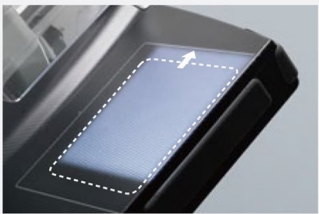
18×24 cm

This small compression paddle can be positioned in the middle, right or left side of the detector at any time of examination according to the positioning of the patient.



24×30 cm

When this compression paddle is used with 18×24 cm radiation field, the radiation field remains in the center for the CC position, while shifting to the upper portion of the detector when the gantry is rotated to a MLO or ML position.



## Mammography QC Program

Fujifilm’s Mammography QC Program is a dedicated quality control program that can be used on all Fujifilm digital mammography systems. This program monitors system performance to ensure stable image quality is maintained for both screening and diagnosis.



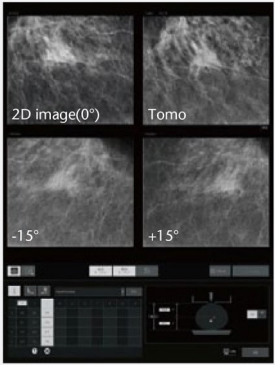
## Stereotactic Biopsy Unit

The stereotactic biopsy unit allows accurate and reliable biopsy procedures to be performed using high resolution images. By attaching the optional lateral adapter the needle can be inserted not only vertically but also parallel to the exposure table.



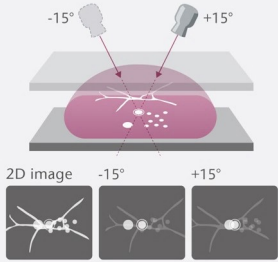
## Tomosynthesis Biopsy

Targeting is supported using both tomosynthesis and stereoscopic images: the choice depends on operator confidence and lesion positioning. Tomosynthesis acquisition can be performed in both ST (Standard) and HR(High Resolution) modes, according to desired accuracy and lesion size.



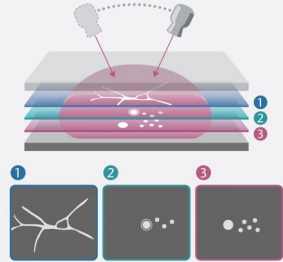
- Using a tomosynthesis image, it makes it possible to target the lesion which cannot be found on 2D image.
- Thanks to easier lesion position identification, tomosynthesis targeting results in a more efficient workflow and more simple operation.

### Stereo imaging

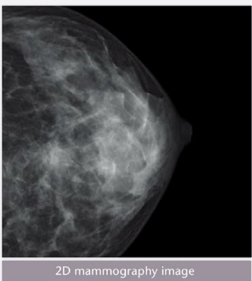


- Overlapping breast structures make lesions less visible
- Difficult to identify a particular region

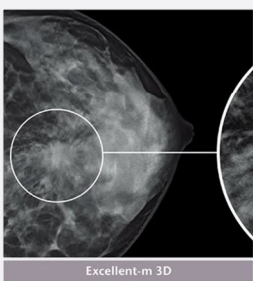
### Tomosynthesis



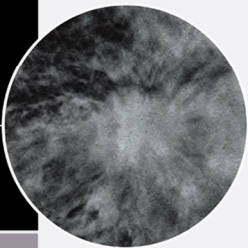
- Reconstructed images show overlapping structures separately
- Easier to locate a target than with the conventional method



2D mammography image

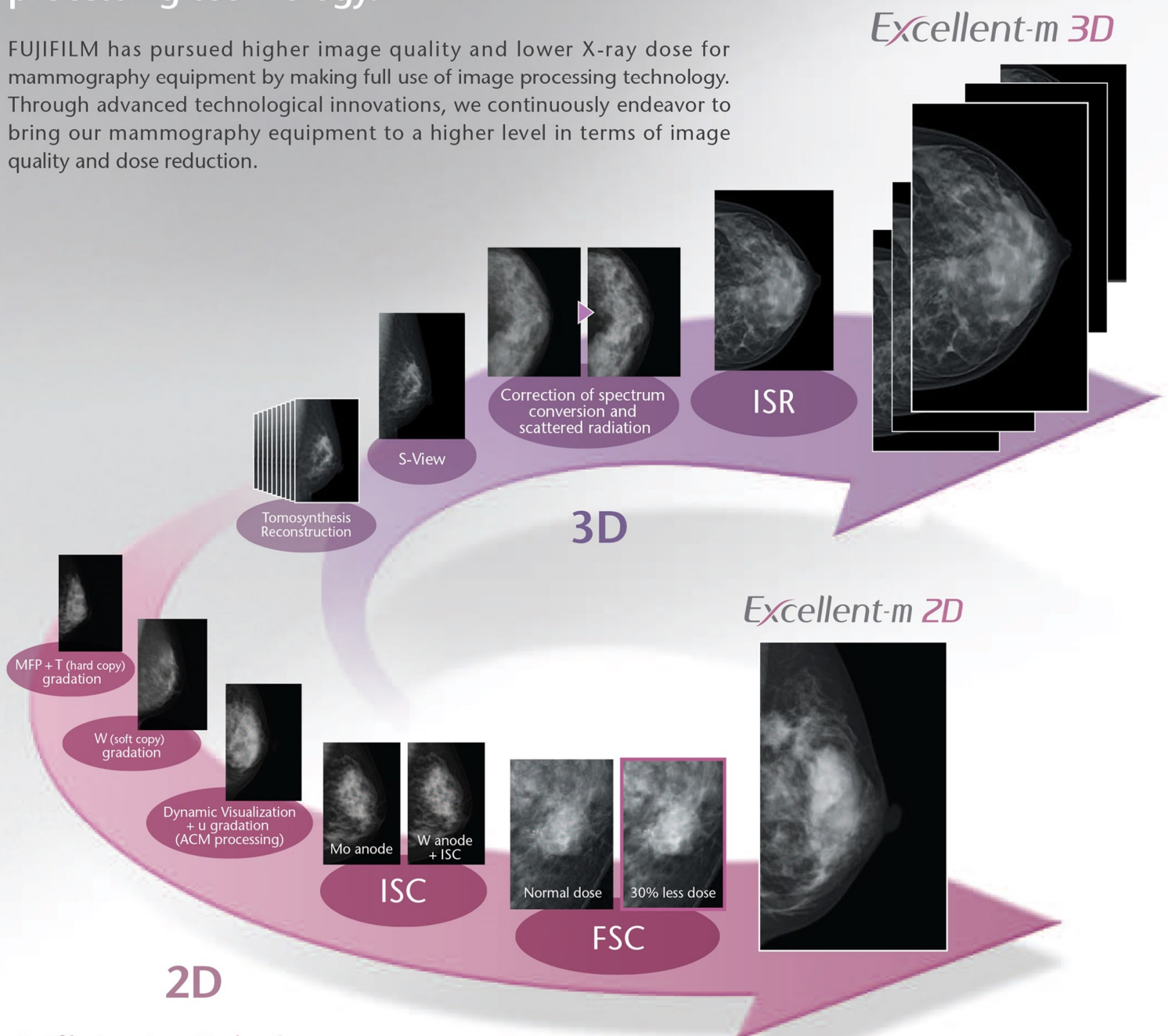


Excellent-m 3D



# Continuous challenges to higher image quality and lower X-ray dose through image processing technology.

FUJIFILM has pursued higher image quality and lower X-ray dose for mammography equipment by making full use of image processing technology. Through advanced technological innovations, we continuously endeavor to bring our mammography equipment to a higher level in terms of image quality and dose reduction.



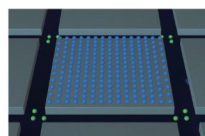
## Fujifilm's unique Technology

Solution to support diagnosis

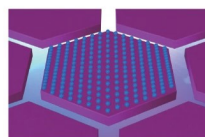
### Unique detector for fast, low dose examinations

AMULET Innovality employs a direct-conversion flat panel detector made of Amorphous Selenium (a-Se) which exhibits excellent conversion efficiency in the mammographic X-ray spectrum. The HCP (Hexagonal Close Pattern) detector efficiently collects electrical signals converted from X-rays to realize both high resolution and low noise. This unique design makes it possible to realize a higher DQE (Detective Quantum Efficiency) than with the square pixel array of conventional TFT panels. With the information collected by the HCP detector, AMULET Innovality creates high definition images with a pixel size of 50  $\mu\text{m}$ ; the finest available with a direct-conversion detector.

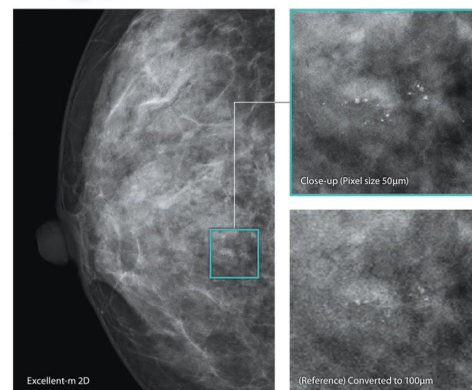
This low-noise and high-speed switching technology allows tomosynthesis exposures with a low X-ray dosage and short acquisition time to be performed. Fast image display is also possible, realizing a smooth mammography workflow from exposure to image display.



Conventional square pixel



AMULET Innovality hexagonal pixel



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