



**FUJIFILM**  
Value from Innovation

## ARIETTA 850 DeepInsight

PREMIUM ULTRASOUND SCANNER

**FUJIFILM**

**FUJIFILM Healthcare Corporation**

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FBU-E227

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Printed in Japan 2022-6-(E)

## ARIETTA 850 DeepInsight

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Redefining  
the way  
we see

## DeepInsight

Fujifilm Healthcare has been at the forefront of technology and product developments, responding to the challenges of users, throughout their history, since the birth of diagnostic ultrasound imaging.

An ultrasound system is an indispensable diagnostic tool in numerous medical fields, and can even provide advanced imaging support in surgical environments.

Fujifilm Healthcare's ultrasound systems are designed to meet the ever-increasing expectations for precision in image quality, efficiency of examination and accuracy in diagnosis.

Fujifilm Healthcare will continue to pursue increased depth of image enhancement by implementing all the technologies it has developed to continually meet the challenges ahead.

Fujifilm Healthcare's vision for the future of ultrasound imaging is "DeepInsight".

It represents Fujifilm Healthcare's confidence in delivering the highest quality images and their determination to continue to innovate in order to reach ever higher standards of diagnostic imaging confidence.



# Redefining the way we see

Fujifilm Healthcare believes that innovation within 5 essential elements is required to achieve optimal ultrasound imaging. These are encompassed by "DeepInsight".

## Reproducibility

Maintain image quality without inter-examiner and inter-patient variation.

## Accuracy

Improve signal to noise ratio (S/N) without compromising resolution.

## Visibility

Deliver images that enable examiners to recognize abnormalities even in the most challenging cases.

# Deep- Insight

## Utilization of AI

Provide an enhanced level of diagnostic image quality with DeepInsight Technology, utilizing AI technology\*.

## Efficiency

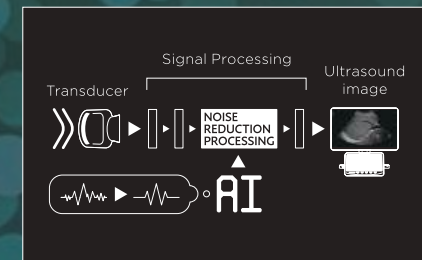
Reduce the process of image optimization providing high quality diagnostic images.

DeepInsight, which is a new noise reduction technology, eFocusing PLUS and Carving Imaging. The combination of these technologies enhances the signal from the tissues and delivers higher image quality with far less examiner dependency.



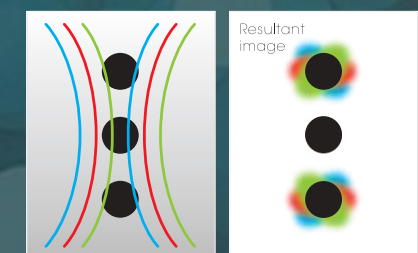
## DeepInsight Technology Powered by REILI

DeepInsight technology, which utilizes AI technology for image enhancement, extracts only the necessary information from a vast amount of data, delivering clearer representations of fine and complex tissue structures that could, until now, have been masked by noise. A more natural representation of the tissue structure is achieved.



## eFocusing PLUS

The eFocusing technology acquires multiple received beams from a single transmission and combines them to display a single image in real-time. The ARIETTA 850 DeepInsight has evolved the eFocusing technology further by incorporating multiple frequencies to achieve high sensitivity, high contrast, and high spatial resolution.



Focused at all depths

## Carving Imaging

Images with "Clearer Demarcation" are produced by our advanced image processing technology that enhances tissue structure. Delivering stable imaging with less patient dependency.





ARIETTA 850  
DEEPIINSIGHT  
PREMIUM  
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## Sense and Visualize Ultrasound

The new reality of  
ultrasound imaging  
deepening diagnosis.



### Designed for high expectations

Greater examination precision, greater comfort, and a wider range of applications are now possible with ultrasound imaging. In response to the ever-increasing expectations of the medical profession, diagnostic equipment continuously needs to evolve. "Image quality", "Workflow", and "Applications" are three key functional areas where we have made a determined effort to refine fundamental performance, with the goal of creating the ultimate ultrasound platform.

Flexibly responding to users' individual needs across the range of clinical disciplines, the ARIETTA 850 DeepInsight brings diagnostic imaging without compromise.

## ARIETTA 850 DeepInsight

## PURE IMAGE

Further refinement of technologies harnessing high quality "sound" gives rise to our highest premium class performance yet.

### Pure Symphonic Architecture



## SEAMLESS WORKFLOW

Designed with sophisticated ergonomics and multiple new tools that streamline your workflow.

## YOUR APPLICATION

An extensive variety of unique applications that deliver new clinical value are accessible across all specialties.



## SEAMLESS WORKFLOW

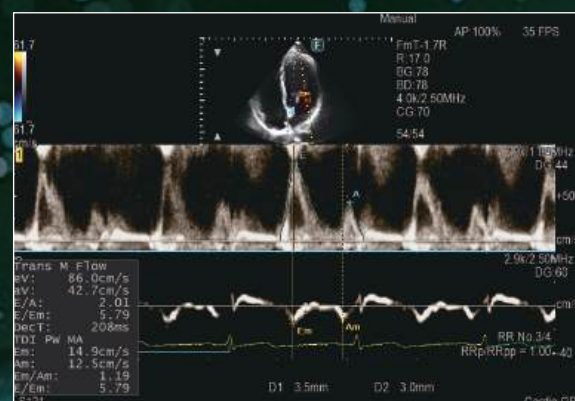
### Protocol Assistant



Pre-existing examination protocols and imaging conditions can be programmed. Button operations can be reduced significantly to support efficient examinations. Additionally, a reference image can be displayed via the Guide View function.

### Intelligent Series

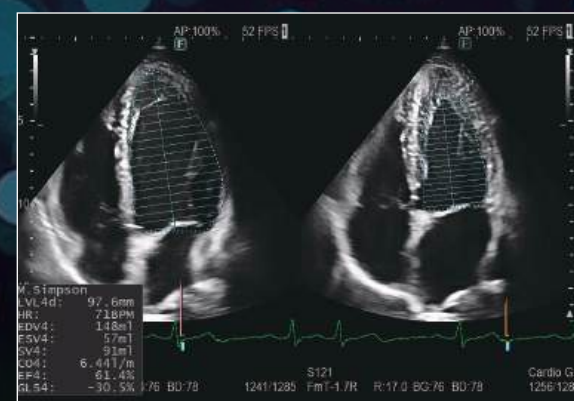
The Intelligent Series improves cardiovascular measurement workflows by combining automated functions and measurements.



#### [ iDGD ]

E/e', one of the key LV diastolic performance indices, is measured automatically in Dual Gate Doppler. Using this feature in combination with R-R Navigation, iDGD detects an optimum heartbeat automatically, making it effective for arrhythmia case assessment.

### Cardiac Function



Simpson measurement, which utilizes AI technology\*, automatically recognizes LV, LA and RA intima and measures the volume. Additionally, a wide range of functions are supported to improve the workflow of cardiovascular measurement, such as Doppler Cursor Assist.



#### [ i2DTT ]

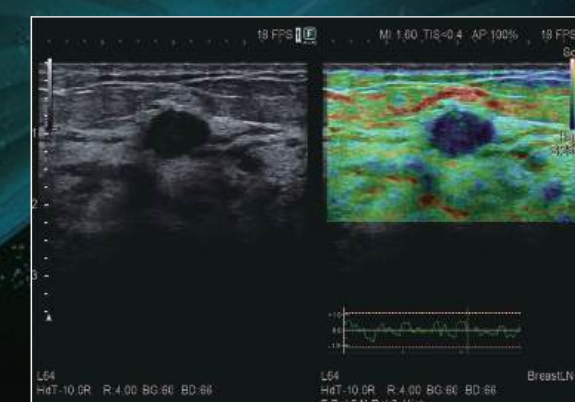
Automatically conducts various measurements via the 2D tracking method. The steps for ROI setting and analysis can be saved to shorten examination time significantly. Global Longitudinal Strain (GLS), which is attracting attention in heart failure examinations, can be measured easily.

## YOUR APPLICATION

### Diagnostic Support

The ARIETTA 850 DeepInsight has unique and advanced applications that quickly provides diagnostic information keeping it one step ahead of the market.

### Elastography



#### [ Real-time Tissue Elastography (RTE) ]

RTE assesses tissue strain in real time and displays the measured differences in tissue stiffness as a color map. Its application has been validated in a wide variety of clinical fields: for the breast, thyroid gland, and urinary structures.

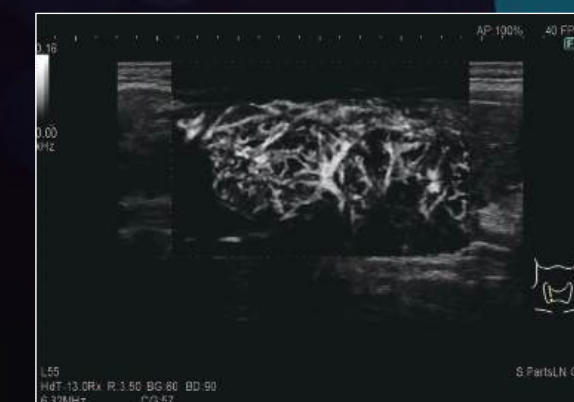


#### [ Shear Wave Measurement / iATT ]

It is possible to evaluate tissue stiffness by generating shear waves and measuring Vs, its propagation velocity in the tissue. An index to estimate the degree of hepatic adipogenesis (ATT) can also be measured at the same time.

### Technology to Improve Visibility of Blood Flow Imaging

An algorithm that discriminates and suppresses the features of noise generated by transducer scanning and body motion has been incorporated within the color mode. This improves the visibility of blood flow even in areas where body motion and blood flow are mixed. This enables stress-free observation of blood flow even during screenings.





## YOUR APPLICATION

### Treatment Support

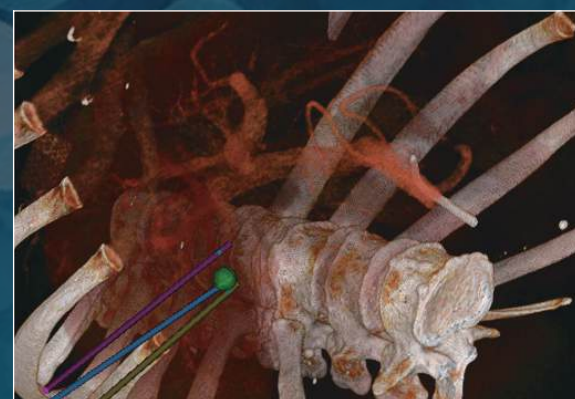
A wide variety of transducers and advanced functions improve accuracy and confidence to deliver therapeutic treatments increasing the curability of lesions.

### Real-time Virtual Sonography



#### [ Real-time Virtual Sonography (RVS) ]

RVS is a function which fuses real-time ultrasound imaging with an MPR image created from the previously acquired CT, MRI or ultrasound volume data. It is a complementary technology which allows safer and more accurate treatments such as the detection of tiny lesions which may be difficult to find in an ultrasound examination alone, and the improvement of treatment targeting.



#### [ 3D Sim-Navigator ]

Provides simulation of single or multiple needle paths during navigation to a target with RVS. The positional relationship between the marked target and needle paths can be assessed in real time using the 3D body mark, reconstructed from the virtual CT volume data, with additional C-plane display orthogonal to the needle path.



#### [ E-field Simulator ]

A color map superimposed on the CT image simulates the distribution of the electric field (E-field) from the given location of multiple electrodes during RFA treatment. The simulation can be made with different positions of the multiple electrodes or additional ablation to determine the optimal arrangement. This flexibility in planning the needle path can bring significant improvement to the treatment technique.

## YOUR APPLICATION

### Intraoperative Transducers

