

# ARIETTA V60

**ARIETTA V60**

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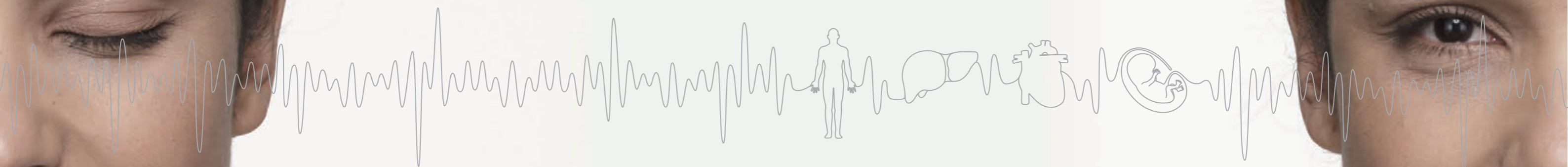
We operate with regard for the environment.

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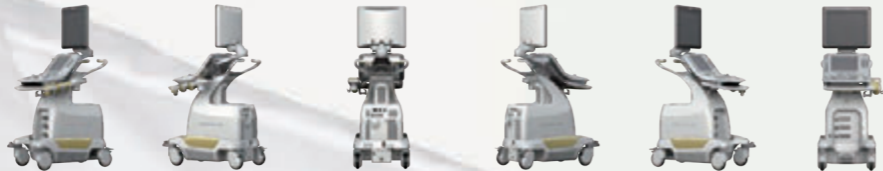
**ALOKA**  
*illuminate the change*

Sense and Visualize Ultrasound



Hitachi Aloka Medical manufactured one of the world's first diagnostic ultrasound platforms, and today this imaging modality has become the first choice examination for many disorders. If the subtlest of changes not previously captured could now be seen, it would bring greater reassurance to both patients and doctors. The new brand "ARIETTA" is born out of the experience cultivated from the past and channelled into one force to create the new generation ultrasound platform to meet that challenge.

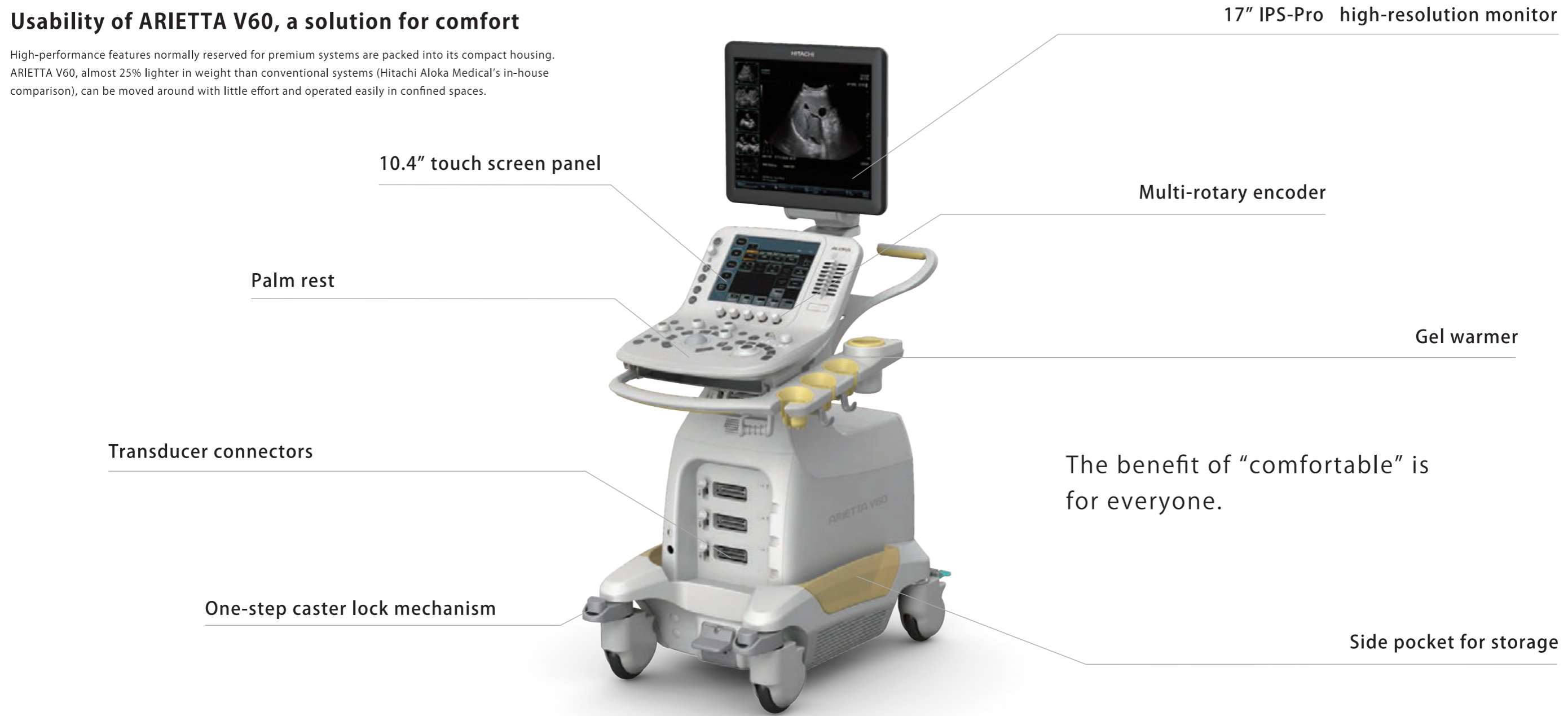
# ARIETTA V60





**Usability of ARIETTA V60, a solution for comfort**

High-performance features normally reserved for premium systems are packed into its compact housing. ARIETTA V60, almost 25% lighter in weight than conventional systems (Hitachi Aloka Medical's in-house comparison), can be moved around with little effort and operated easily in confined spaces.



17" IPS-Pro high-resolution monitor

10.4" touch screen panel

Multi-rotary encoder

Palm rest

Gel warmer

Transducer connectors

The benefit of "comfortable" is for everyone.

One-step caster lock mechanism

Side pocket for storage

**Ergonomic Design**

ARIETTA V60 is ergonomically designed to allow the examiner to scan in comfort irrespective of the type of patient or clinical examination. The adjustment of the panel height between 70 and 100 cm is one of the key contributory elements.



**IPS-Pro (In-Plane Switching) LCD panel technology**

ARIETTA V60 is fitted with an IPS-Pro monitor, giving a high quality display of the images from a wide viewing angle.



**Console design**

The console layout is arranged to provide intuitively smooth operation, with a large palm rest provided centrally to give optimum wrist support.



**Multiple auto-adjust functions**

Optimization in real-time: In B-mode, the image brightness is continuously monitored, so that the adjusted value is tuned to the user's preference and the speed of sound is corrected for different tissues automatically bringing all areas of the image into sharper focus. In Doppler mode, the velocity range and baseline position are instantly optimized with just a single key stroke.



## Dependable results provided by high-definition image quality

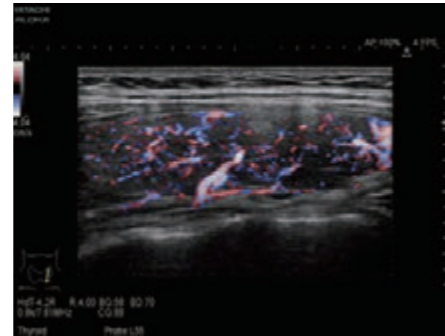
ARIETTA V60 offers imaging solutions from diagnosis through to treatment, in a wide variety of clinical fields.

To complement the high-definition image quality, a broad range of transducers and advanced functionality offer increased diagnostic confidence.



### High Resolution B-mode

ARIETTA V60 provides an image quality that excels in both lateral and axial resolution.

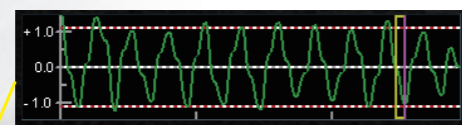
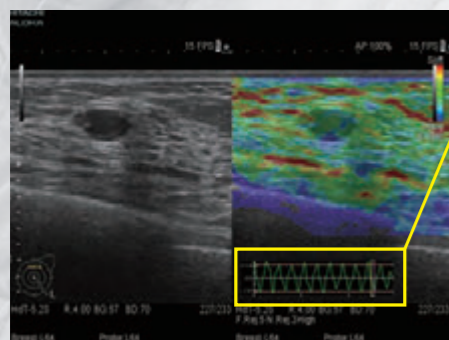
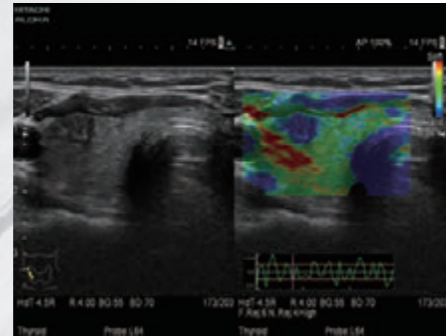
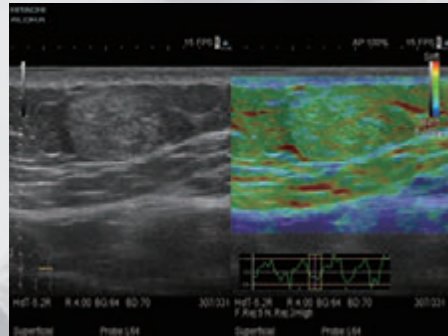


### High Resolution eFlow

The high spatial resolution of eFLOW produces an accurate display of blood flow confined within the vessel walls even in fine vessels.

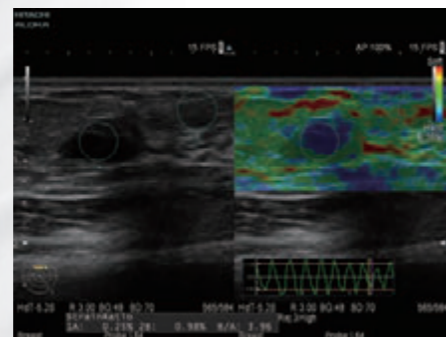
## Real-time Tissue Elastography (RTE)

Hitachi's Real-time Tissue Elastography 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, urinary structures, and many more.



### Strain Graph

The strain graph analyses the main strain in the chosen area of interest and provides feedback to the user for selection of the optimum frame that will provide robust information on tissue stiffness.

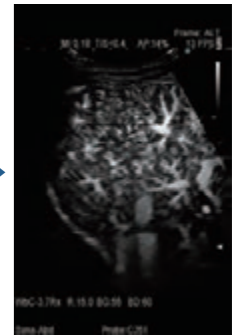
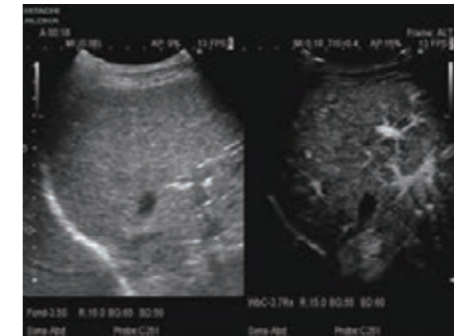


### Assist Strain Ratio

Assist Strain Ratio provides automatic identification of both the border of a designated breast lesion and a reference area in the fat tissue. The two ROIs are automatically positioned and the strain ratio of the lesion to the fat tissue is calculated.

## Contrast enhanced ultrasound – from detection to differential diagnosis

Contrast enhanced ultrasound, a technique widely used in clinical diagnosis, is also realized in this compact system. It delivers homogeneous enhancement throughout the field of view.



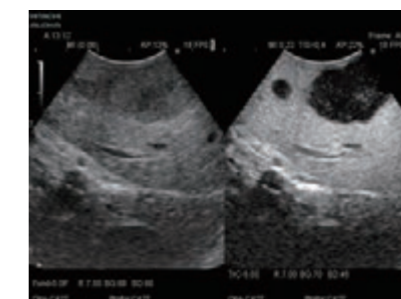
Accumulation Imaging

## Variety of transducers that support intraoperative examinations.

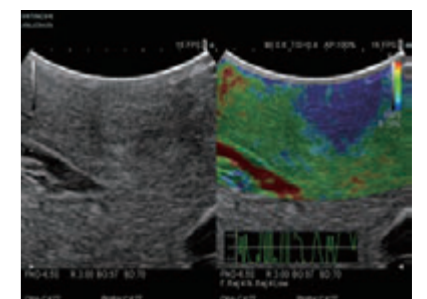
The importance of intraoperative ultrasound is increasing in the quest to improve the safety of surgery. Choosing the best transducer to suit the procedure can lead to a more definitive diagnosis.

### T-shaped convex intraoperative transducer

Held between fingers, this transducer provides stability for scanning. Contrast enhanced ultrasound and Hitachi's Real-time Tissue Elastography modes complement the high-definition B-mode and high-sensitivity Color Flow Doppler.



Liver Metastasis (Used with Contrast Harmonic Imaging)



Liver Metastasis (Used with RTE)



## Support for early detection and diagnosis – from the heart to systemic blood vessels

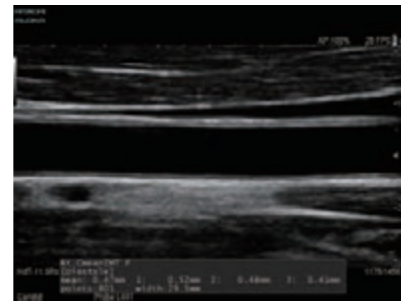
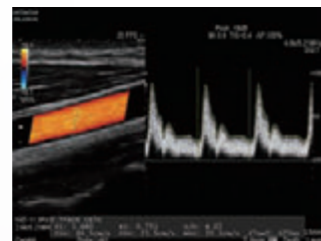
Even with its compact size, ARIETTA V60 features advanced tools that contribute to early detection and diagnosis of lesions in the heart and systemic blood vessels.

### Vascular system evaluation



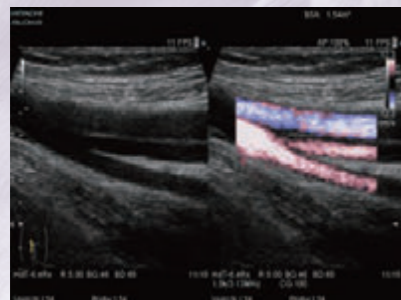
#### Early assessment of atherosclerosis (eTracking)

eTracking analyses changes in blood vessel diameter in real time by tracking the RF signals. It determines parameters that measure the degree of atherosclerosis.



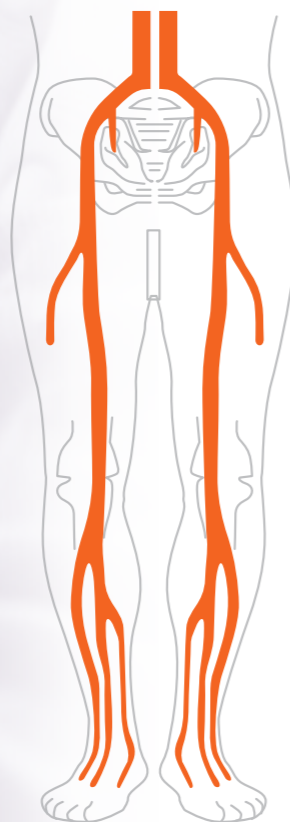
#### Automatic measurement of Intima-media Thickness (IMT)

The maximum and mean IMT is automatically calculated following the placement of the ROI on a long-axis section of the blood vessel.



#### Dual CF

Dual CF is a simultaneous side by side display of the color Doppler and B-mode images, enabling the observation of both the intravascular lumen and the blood flow together in real time.



#### eFlow

eFlow is a blood flow mapping display with high spatial resolution that reduces color overlapping of small vessel walls.

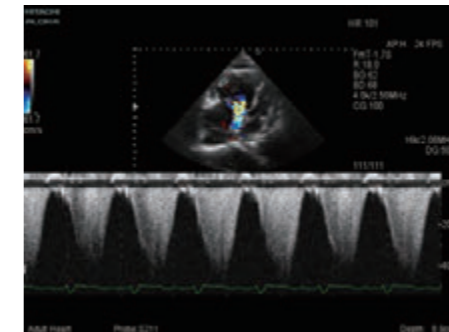
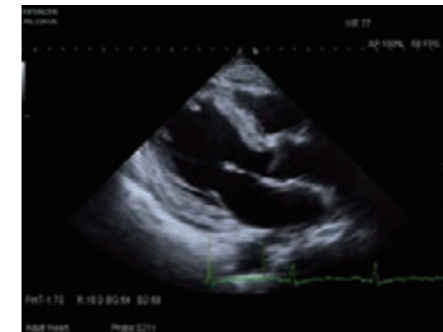


#### Trapezoidal scan

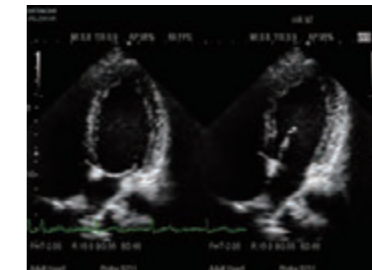
Trapezoidal scan offers a wider field of view with the linear transducers, enhancing the visualization of vessels and organs and the tissues around them.

### Cardiac function evaluation

B- and CW-modes can be realized with less patient-dependent variability. Clarity of imaging contributes to reduced examination time and improved workflow.

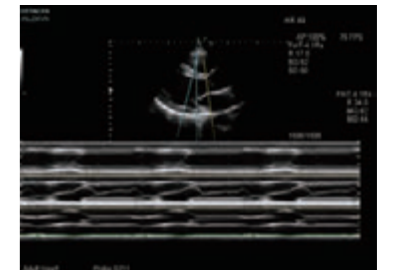


### Functions that reduce exam time



#### Dynamic Slow-motion Display (DSD)

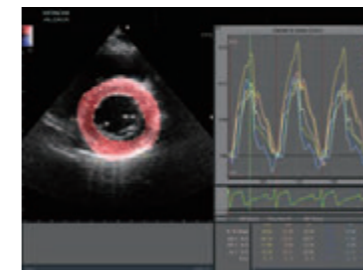
Display of the real-time image and its slow-motion counterpart side by side on one screen. Rapid valve movements can be observed in detail.



#### Free Angular M-Mode (FAM)

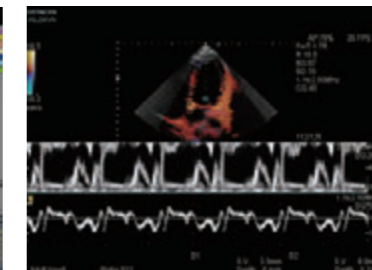
The M-mode can be displayed using any cursor orientation in real time or reconstructed from the data in the cine memory after freeze. In this way, the wall motion or valve excursion can be compared from multiple angles in the same heartbeat.

### Advanced functions for cardiac examinations



#### Two-dimensional Tissue Tracking

Two-dimensional Tissue Tracking (2DTT) can be used to quantify the movement of the entire left ventricle or a local movement of the cardiac muscle. This speckle tracking technique provides precise and accurate analysis of the movement of the cardiac muscle.



#### Dual Gate Doppler

Dual Gate Doppler can display Doppler waveforms from two sampling points simultaneously, shortening exam time. A combination of Tissue Doppler Imaging and Pulsed Wave Doppler (TDI/PW) allow simultaneous evaluation of wall motion and hemodynamics and enables measurement of E/e'.

### Variety of Transesophageal Transducers

The form of the TE probes is designed to reduce patient discomfort while providing high imaging performance.

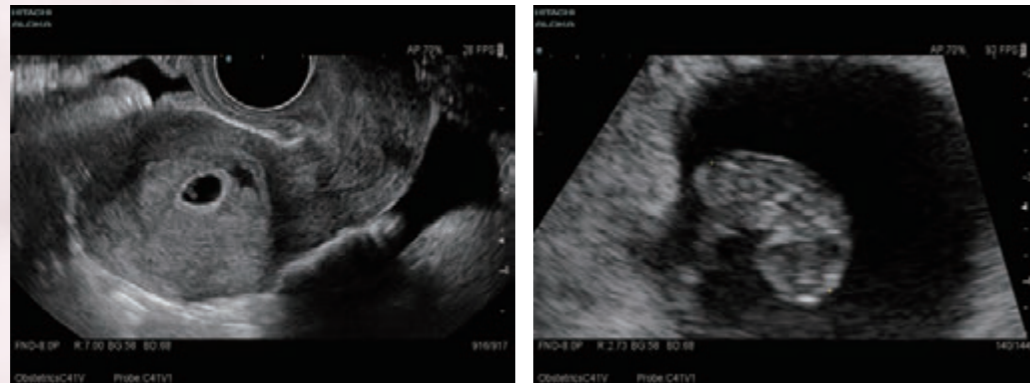
- Rotary plane transducer
- Electronic transesophageal transducer





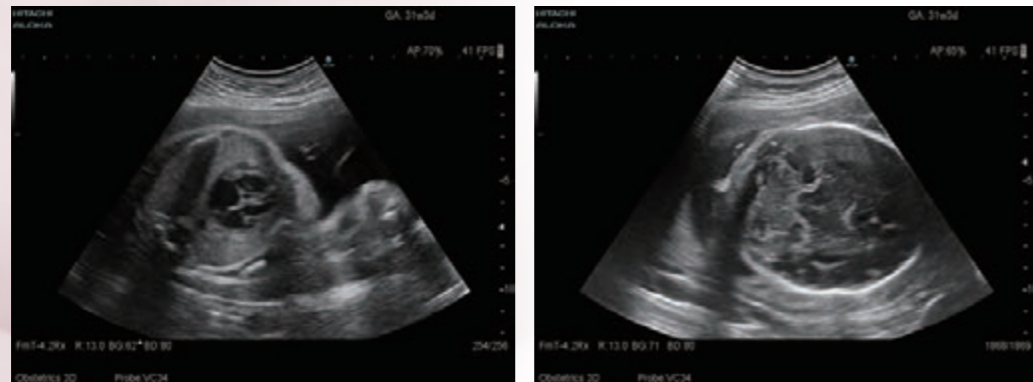
## An earlier, more accurate diagnosis of maternal and fetal well-being provides reassurance

Diagnostic ultrasound plays a role in connecting a mother with her fetus. Early observation and accurate diagnosis provide support that can guide the optimum course of the pregnancy.



### High-resolution B-mode Imaging

High-resolution B-mode imaging is recognized as the key requirement for observation of potential morphological abnormalities in fetal organs, such as the heart and brain. ARIETTA V60's high contrast resolution allows detailed observation.



### Accurate diagnosis in the 2nd & 3rd Trimesters

Various functions support the observation of the fetal heart. They can streamline the examination as well as improve the accuracy of diagnosis.



**eFlow**  
eFlow is a blood flow mapping display with high spatial resolution that reduces color overlapping of the wall of small vessels.

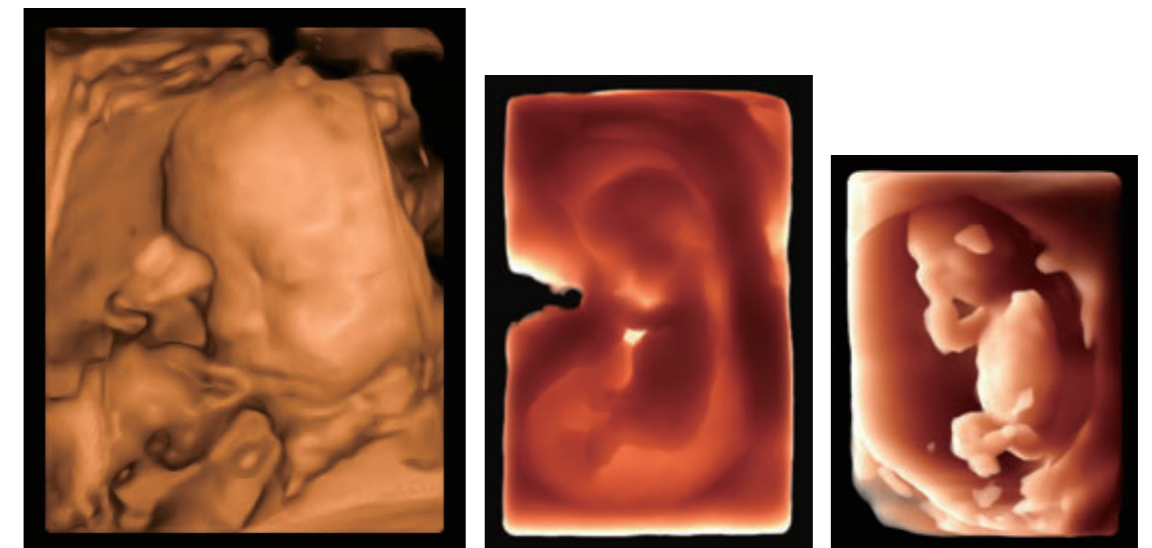
**STIC**  
STIC displays 3D images using volume data constructed by collecting image frames at the same time phase from multiple heartbeats. It is possible to observe the motion of the fetal heart in any arbitrary cross section.

**Dual Gate Doppler**  
Dual Gate Doppler allows observation of Doppler waveforms from two different locations during the same heart cycle. Simple measurements from the two different waveforms can be useful in the diagnosis of fetal arrhythmia.

### Reassurance for patients

#### Real-time 3D

Three- and four-dimensional imaging can play a role in connecting a mother with her fetus. 4Dshading is a rendering technology that simulates different positions of a virtual light source giving a more realistic appearance to the 3D reconstructed image



3D (Fetus)

4Dshading

### Supporting Women's Health

The compact size of ARIETTA V60 allows positioning in confined spaces and close to the examination table. Our focus is to improve women's quality of life by making full use of technology to contribute to the early detection and prevention of diseases.

#### Transvaginal transducer

The transvaginal transducer is designed for patient comfort with a small insertion tip and thin shaft. At the same time, the handle is easy to grip and the transducer light in weight ensuring operator well-being when scanning for long periods.

