

# Secure your care

## Samsung Healthcare Cybersecurity

### Bringing peace of mind to your hospital and patients

To address this emerging need for cybersecurity, Samsung provides a solution to support our customers by offering the tools to protect against cyberthreats that may compromise invaluable patient data and ultimately degrade the quality of care. Samsung's Cybersecurity Solution strives to abide by the CIA triad (Confidentiality, Integrity, and Availability) and takes a comprehensive approach to providing impeccable protection with the following pillars: Intrusion prevention, Access control, and Data protection.



#### Intrusion prevention

Tools for protecting against cyber threats from external attacks

- Security tools include Anti-virus & Firewall
- Secured operating system



#### Access control

Strengthened surveillance for tracking the access of patient information

- Account management
- Enhanced audit trail



#### Data protection

Encryption functions for safeguarding data whether at-rest or in-transit

- Data protection
- Transmission security

#### About Samsung Medison CO., LTD.

Samsung Medison, an affiliate of Samsung Electronics, is a global medical company founded in 1985. With a mission to bring health and well-being to people's lives, the company manufactures diagnostic ultrasound systems around the world across various medical fields. Samsung Medison has commercialized the Live 3D technology in 2001 and since being part of Samsung Electronics in 2011, it is integrating IT, image processing, semiconductor and communication technologies into ultrasound devices for efficient and confident diagnosis.

- This product, features, options and transducers are not commercially available in all countries.
- Due to regulatory reasons their future availability cannot be guaranteed. Please contact your local sales network for further details.
- S-Vue Transducer™ is not the name of a function, but is the name of Samsung's advanced transducer technology.
- This product is a medical device, please read the user manual carefully before use.

1. This is an optional feature which may require additional purchase.
2. Clinical image acquired by the HS70A V1.00 ultrasound system.
3. Clinical image acquired by the HS70A V2.01 ultrasound system.
4. S-Detect™ for Breast and S-Detect™ for Thyroid are not available in Canada.  
In the United States, the Margin, Posterior Features, and Echo Pattern, the classification items of S-Detect for Breast are manual, thus these classification items are not automatically provided.  
Also the recommendations about whether results are benign or malignant in S-Detect™ are not applicable in the United States.
5. Strain value for ElastoScan+™ is not applicable in Canada and the United States.
6. Clinical image acquired by the HS70A V2.02 ultrasound system.

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# Daily inspiration

## Ultrasound system

## HS70A Powered by CrystalLive™



CT-HS70A V2.03-0B-IMC-211224-EN

Scan code or visit  
[www.samsunghealthcare.com](http://www.samsunghealthcare.com)  
to learn more



**EXPERIENCE**  
A New Healthcare  
Solution

# SAMSUNG

# Powered by CrystalLive™

CrystalLive™ is Samsung's up-to-date ultrasound imaging engine with enhanced 2D image processing, 3D rendering and color signal processing, to offer outstanding image performance and efficient workflow during complex cases.

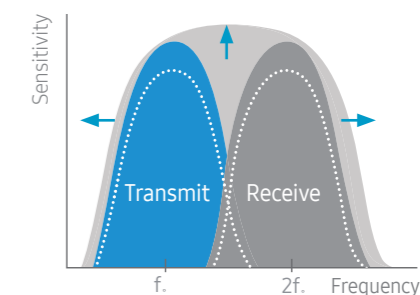


Boost diagnostic accuracy to new heights with the Samsung ultrasound HS70A with Prime. Its superior imaging performance, specialized features, and accurate quantification tools enable you to conduct a wide range of general imaging exams, from the routine to the complex.



## S-Vue Transducers™ (CA2-9A, CV1-8A, CA1-7A, CA3-10A, PA1-5A)

S-Vue transducers™ provide more efficient piezoelectric properties, resulting in wider bandwidths that enable better penetration and higher quality resolution.



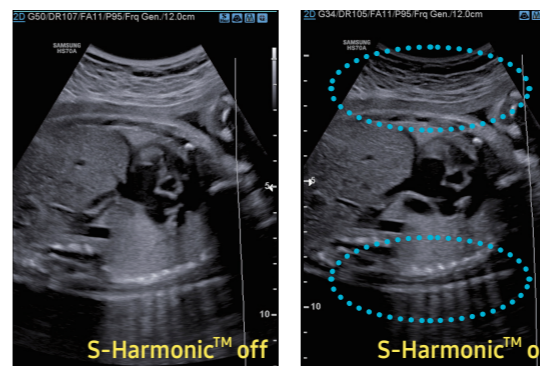
Fetal face<sup>3</sup>



Fetal heart<sup>3</sup>

## S-Harmonic™

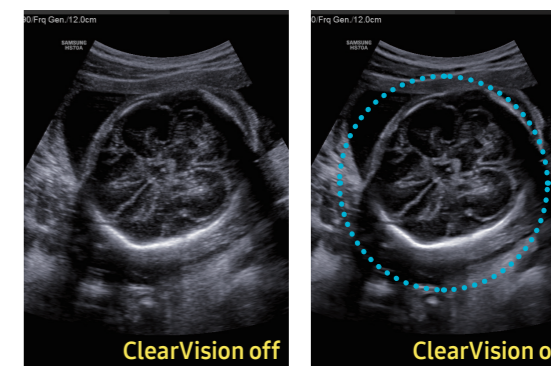
S-Harmonic™ mitigates the signal noise, enhances contrast, and provides uniform image performance of overall image area from near-to-far.



Fetal thorax<sup>2</sup>

## ClearVision

The noise reduction filter improves edge enhancement and creates sharp 2D images for optimal diagnostic performance. In addition, ClearVision provides application-specific optimization and advanced temporal resolution in live scan mode.



Fetal brain<sup>3</sup>

# 5D advanced solutions

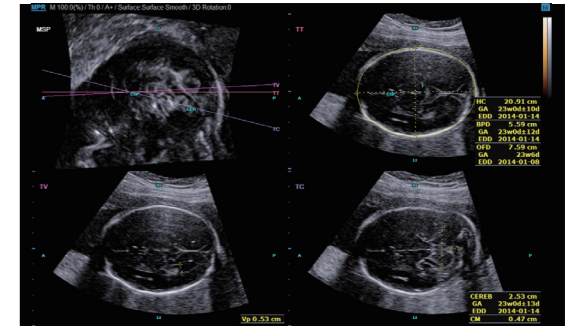
The semi-automated functions included in 5D advanced solutions mean less operator dependency and more efficient work, which allows higher patient throughput. In addition, these solutions provide reliable, high-quality exams which enable you to make quick, accurate decisions.



## 5D CNS™<sup>1</sup>

(Fetal brain measurement)

5D CNS™ uses intelligent navigation to provide 6 measurements from 3 transverse views of the fetal brain to enhance measurement reproducibility and streamlined workflow.

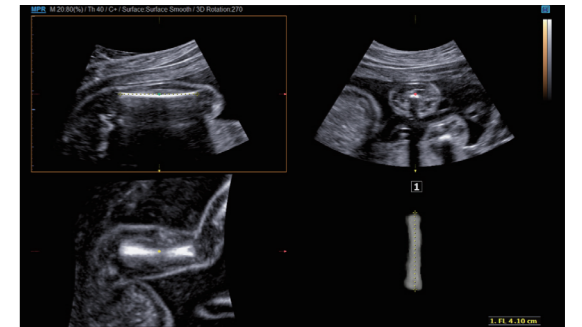


5D CNS™<sup>3</sup>

## 5D Heart™<sup>1</sup>

(Fetal heart examination)

The function provides 9 standard planes of the heart by using the fetal STIC data as well as important information about fetal heart development in an easy and accurate way in accordance with the AIUM guideline. In addition, it offers dedicated Preset, Predictive Cursor, Diagnostic Alert, and heart Diastole/Systole timepoints.



5D LB™<sup>3</sup>

## 5D LB™<sup>1</sup>

(Fetal long bone detection)

5D LB™ allows easy detection and measurement of fetal long bones from volume data, with intuitive visualization of the fetal structures. Evaluation of fetal condition becomes more efficient as 5D LB™ improves measurement accuracy while reducing exam time.

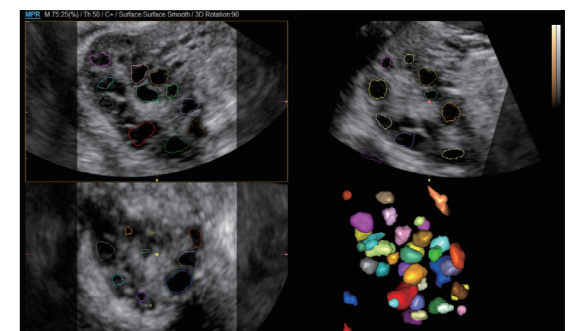


5D NT™<sup>3</sup>

## 5D NT™<sup>1</sup>

(Nuchal translucency measurement)

5D NT™ provides the midsagittal plane view automatically by rotating and magnifying the images when measuring the nuchal translucency (NT) of the fetus in early weeks.



Follicle measurement with 5D Follicle™<sup>2</sup>

## 5D Follicle™<sup>1</sup>

(Follicle measurement)

5D Follicle™ identifies and measures multiple ovarian follicles in one scan for rapid assessment of follicular size and status during controlled ovarian simulation. This feature uses 3D volume data to help acquire accurate measurement and reduces user variation.

# Quality 3D/4D rendering

With Samsung's advanced rendering technology, HS70A delivers realistic images that contain valuable anatomical information for precise obstetric evaluation.



## RealisticVue™<sup>1</sup>

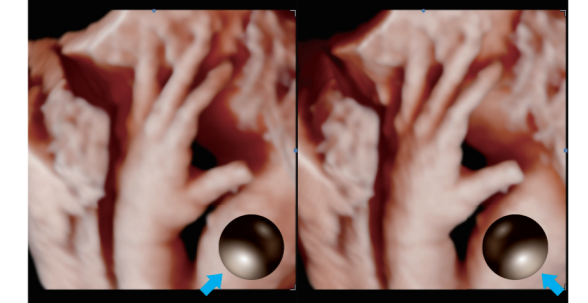
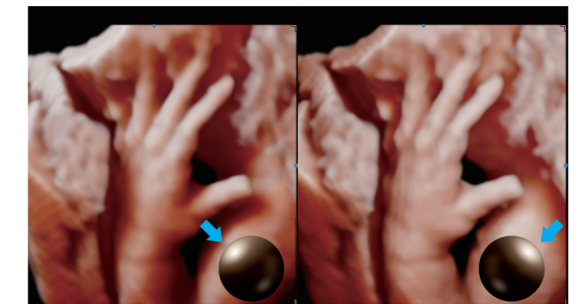
RealisticVue™ displays high resolution 3D anatomy with detailed expression and realistic depth perception. User selectable light source direction creates intricately graduated shadows for better defined anatomical structures.



Fetal hand with RealisticVue™<sup>3</sup>

## CrystalVue™<sup>1</sup>

CrystalVue™ is an advanced volume rendering technology that enhances visualization of both internal and external structures in a single rendered image using a combination of intensity, gradient and position.



RealisticVue™ with different light source directions<sup>3</sup>

## CrystalVue Flow™<sup>1</sup>

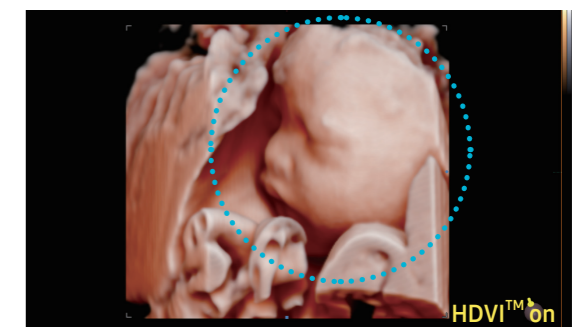
CrystalVue Flow™ is a volume rendering technology that provides additional information of blood flow morphology based on the CrystalVue™ features that visualizes the internal structures by projecting the 3D data, providing better understanding in the anatomic structures and surrounding vascular vessels.

## HDVI™<sup>1</sup>

HDVI™ gives outstanding image quality with clearer contrast, excellent tissue differentiation, edge depiction and speckle reduction. It allows consistent diagnosis with great confidence.



Fetal face<sup>3</sup>



# Trustworthy assistance in making the right decision

With its advanced quantification tools, the HS70A supports your knowledge and experience to help you to make clear, confident decisions.



## BiometryAssist™ (Fetal biometry estimation) <sup>1</sup>

A semi-automatic technology for biometric measurement, BiometryAssist™, enables users to measure the fetal growth parameters such as BPD, HC, AC and FL with one click while maintaining exam consistency.

## IOTA-ADNEX (Ovarian tumor classification) <sup>1</sup>

IOTA-ADNEX (International Ovarian Tumor Analysis-Assessment of Different NEoplasias in the adnexa) applies ADNEX\* model, an ovarian tumor classification solution of IOTA\*\* Group, to the system, and can perform all procedures from the initial scan to the final report in the ultrasound diagnosis system. When two ultrasound prediction factors are measured, the measurements are automatically populated and the classification result from the 5-step ADNEX model for ovarian tumors is provided.

\* ADNEX : Assessment of different neoplasias in the adnexa

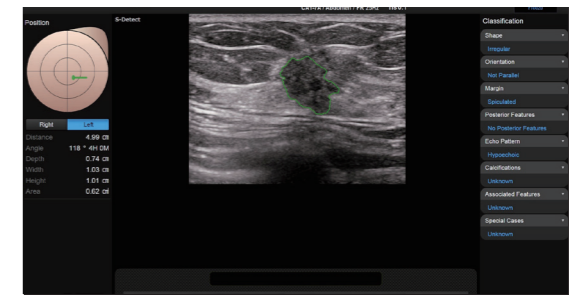
\*\* IOTA : International Ovarian Tumor Analysis

## S-Detect™

### S-Detect™ for Breast <sup>1, 4</sup>

The feature, which analyzes selected lesions in the breast ultrasound study and shows the analysis data, applies BI-RADS ATLAS\* (Breast Imaging-Reporting and Data System, Atlas) to provide standardized reporting; and helps diagnosis with the streamlined workflow.

\* It is a registered trademark of ACR and all rights reserved by ACR.



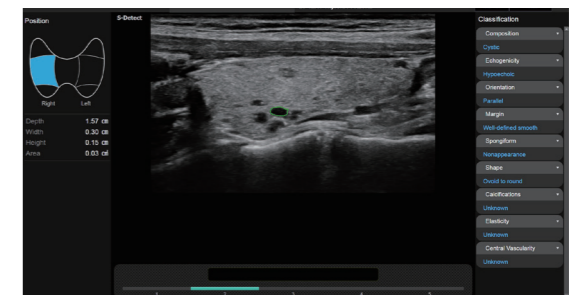
S-Detect™ for Breast <sup>3</sup>

### S-Detect™ for Thyroid <sup>1, 4</sup>

The feature, which analyzes selected lesions in the thyroid ultrasound study and shows the analysis data, provides standardized reporting based on the ATA and K-TIRADS guidelines; and helps diagnosis with the streamlined workflow.

\* ATA : American Thyroid Association

K-TIRADS : Korean-Thyroid Imaging Reporting and Data System

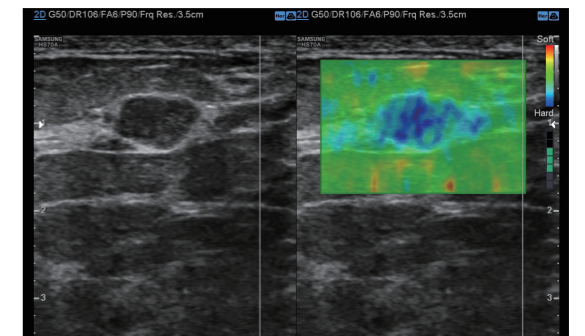


S-Detect™ for Thyroid <sup>3</sup>

## ElastoScan™

### E-Breast™ (ElastoScan™ for Breast) <sup>1, 5</sup>

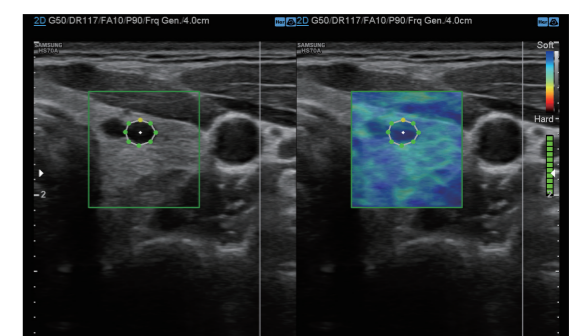
E-Breast™ is a technology that calculates the strain ratio between the selected target and surrounding fatty tissues. Especially, it requires only one ROI to be selected by the user. This simplified process enhances consistency and reduces the chance of error by eliminating the step of manual selection of the surrounding fatty tissue region.



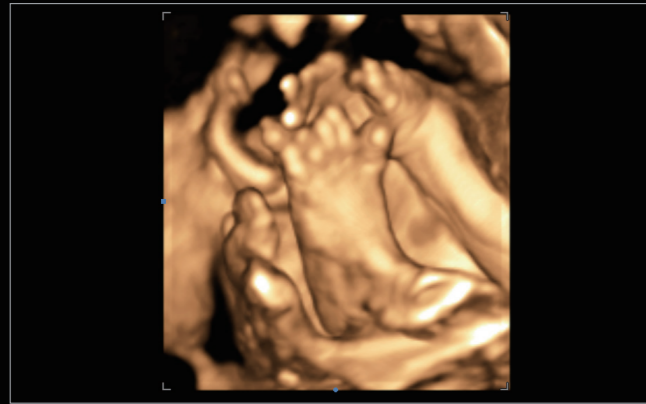
ElastoScan™ <sup>6</sup>

### E-Thyroid™ (ElastoScan™ for Thyroid) <sup>1, 5</sup>

E-Thyroid™ uses the pulsations of the adjacent common carotid artery (CCA), eliminating the need for manual transducer compression and offering greater consistency in the ElastoScan™ image. E-Thyroid™ provides an elasticity contrast index that is calculated by comparing the elasticity of the lesion and normal tissue within the ROI.



E-Thyroid™ <sup>3</sup>



Fetal foot at 24 weeks<sup>3</sup>



Fetal face with RealisticVue™<sup>3</sup>



Fetal heart in 4 chamber view<sup>3</sup>



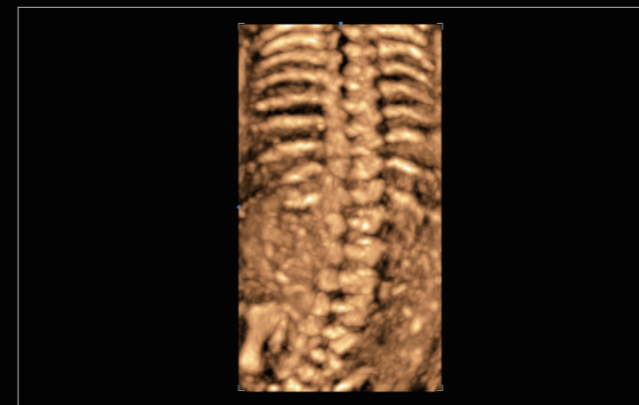
Fetal heart in aortic arch view<sup>2</sup>



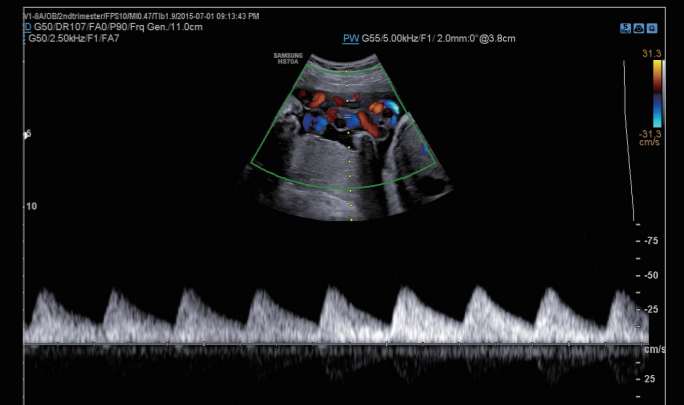
NT at 12 weeks<sup>3</sup>



Fetal abdomen at 30 weeks<sup>2</sup>



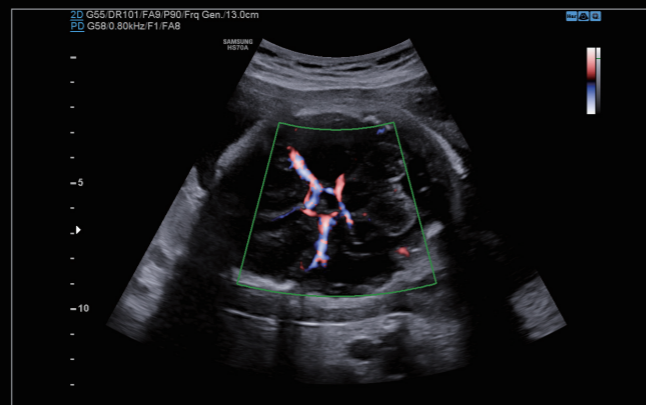
Fetal spine at 24 weeks<sup>3</sup>



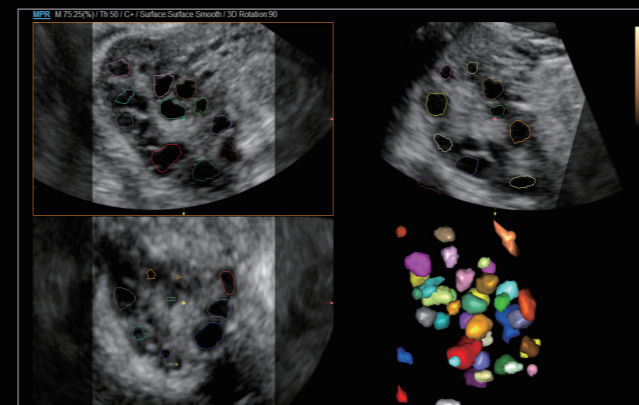
Umbilical artery with PW<sup>2</sup>



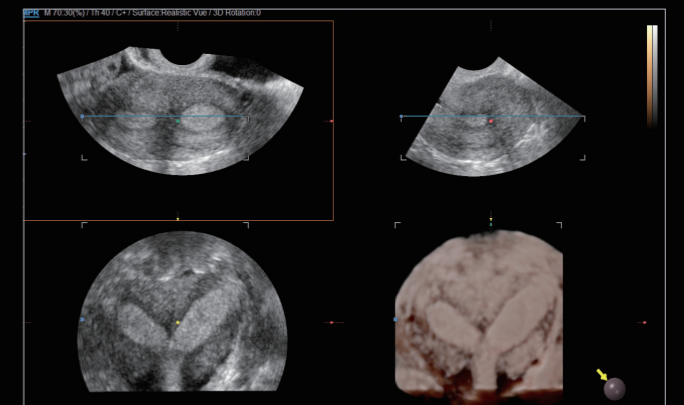
Fetal brain at 26 weeks<sup>3</sup>



Fetal brain with S-Flow™<sup>3</sup>



5D Follicle™<sup>2</sup>



Bicornate uterus<sup>2</sup>

# Intuitive, streamlined workflow

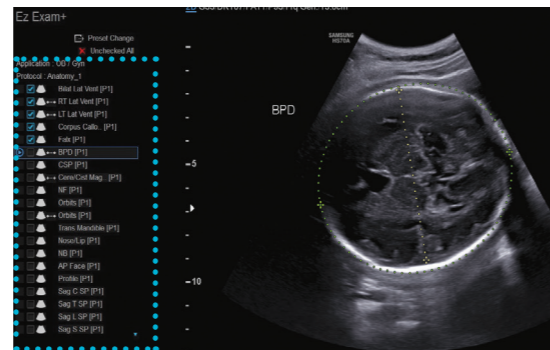
## QuickPreset

With one touch, the user can select the most common transducer and preset combinations. QuickPreset increases efficiency to make a full day of scanning simple and easy.



## EzExam+™

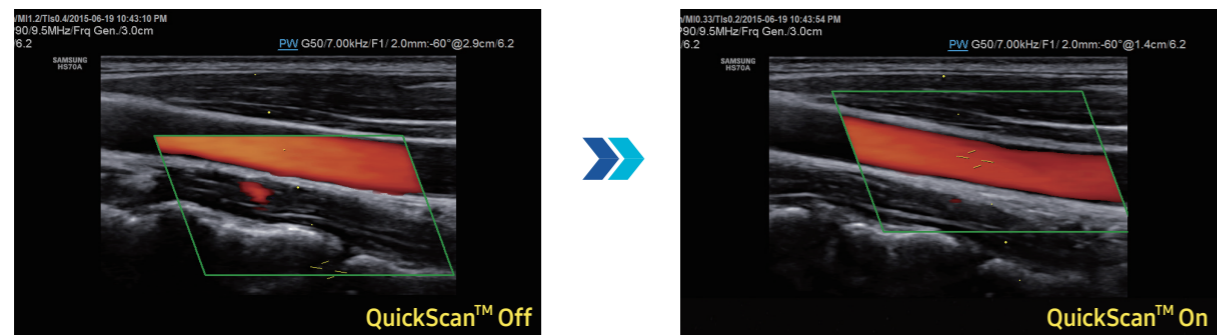
EzExam+™ enables you to build or use a predefined protocol, and assign protocols for examinations that are regularly performed in the hospital in order to reduce the number of steps that you have to go through. For fetus diagnosis, in particular, you can arrange the examination order according to the fetus position using the touchscreen, and automatically apply the BodyMarker, Annotation, Measurement, etc.



Set up display of EzExam+™<sup>2</sup>

## QuickScan™

QuickScan™ technology provides intuitive optimization of gray scale and Doppler parameters. QuickScan™ enables users to adjust ROI box location with one touch of a button.



CCA<sup>2</sup>

## 23.8-inch Full HD LED monitor \*

The HS70A features a 23.8-inch full HD LED monitor, delivering excellent contrast resolution, image clarity and vibrant color in any lighting condition.

## Gel warmer

Two-level adjustable gel warmer maintains ultrasound gel at a comfortable temperature.



## 10.1-inch touch screen

The 10.1-inch touchscreen is highly sensitive, allowing an efficient interaction during the examination.

## Low noise

This exceptionally quiet device allows physical exams to be performed, including auscultation, while the ultrasound system is turned on.



\* The monitor size subject to change and may vary upon regions.

# Comprehensive selection of transducers

## Curved array transducers



- CA1-7A**  
• Application : abdomen, obstetrics, gynecology, musculoskeletal
- CA2-9A**  
• Application : abdomen, obstetrics, gynecology
- CA3-10A**  
• Application : abdomen, obstetrics, gynecology, pediatric
- CA2-8A**  
• Application : abdomen, obstetrics, gynecology
- CF4-9**  
• Application : pediatric, vascular

## Linear array transducers



- LA4-18B**  
• Application : small parts, vascular, musculoskeletal
- L3-12A**  
• Application : small parts, vascular, musculoskeletal, obstetrics, abdomen
- LA3-16A**  
• Application : small parts, vascular, musculoskeletal
- LA2-9A**  
• Application : abdomen, small parts, vascular, musculoskeletal
- LA3-16AI**  
• Application : musculoskeletal, intraoperative

## CW transducers



- LM4-15B**  
• Application : small parts
- DP2B**  
• Application : cardiac

## Volume transducers



- CV1-8A**  
• Application : abdomen, obstetrics, gynecology
- EV2-10A**  
• Application : obstetrics, gynecology, urology

## Endocavity transducers



- EA2-11B**  
• Application : obstetrics, gynecology, urology
- VR5-9**  
• Application : obstetrics, gynecology, urology

## TEE transducer



- MMPT3-7**  
• Application : cardiac

## Phased array transducers



- PA1-5A**  
• Application : abdomen, cardiac, TCD
- PE2-4**  
• Application : abdomen, cardiac, TCD
- PA3-8B**  
• Application : abdomen, cardiac, pediatric
- PA4-12B**  
• Application : cardiac, pediatric