Secure your care
Samsung Healthcare Cybersecurity

Bringing peace of mind to your hospital and patients

To address the 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.
- Sales and shipments are effective only after the approval by the regulatory affairs. Please contact your local sales representative for further details.
- This product is a medical device, please read the user manual carefully before use.
- S-Vue Transducer™ is the name of Samsung's advanced transducer technology.
- Optical Disk Drive is not available for this product.

1. Optional feature which may require additional purchase.
2. Clinical image acquired by the HS50 V1.00 ultrasound sytstem.
3. Clinical image acquired by the HS50 V2.00 ultrasound sytstem.
4. S-Detect™ for Breast and S-Detect™ for Thyroid are not available in Canada.
5. In the United States, certain classification items in S-Detect™ such as Margin, Posterior Features, and Echo Pattern are not automatically provided.
   Also the recommendations about whether results are benign or malignant in S-Detect™ are not applicable in the United States.
6. A purchase of Mobile Export option is required to use HelloMom™.
7. The superscript PE of PA1-5A transducer stands for Public edition.

CT-HS50 V2.05-OB-IMC-230630-EN

CE 0123

Simple yet powerful

Ultrasound system
HS50 Powered by CrystalLive™

Scan code or visit
www.samsunghealthcare.com
to learn more

Relentless Innovation
for your diagnostic confidence

SAMSUNG

Life-long Healthcare Solutions for Women

Samsung is committed to supporting life-long healthcare for women by diligently pursuing innovative healthcare solutions in Obstetrics and Gynecology ultrasound.

Samsung's HS50 ultrasound system adopts the integrated solution, combining high-quality imaging with advanced features to support healthcare professionals in making fast and accurate decisions.

Powered by CrystalLive™

Powered by CrystalLive™

CrystalLive™ is Samsung's ultrasound imaging engine with enhanced image processing capabilities including 2D image processing, 3D rendering and color signal processing. It provides realistic and coherent images in various modes. In addition, it also offers an efficient diagnostic environment by handling large amount of signal data quickly.
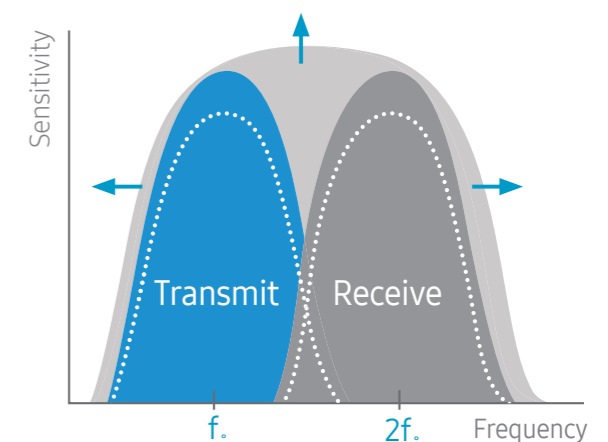
Samsung
Ultrasound System **HS50**

S-Vue Transducer™

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

S-Vue Transducer™
CA1-7AD, CA2-9AD, CV1-8AD, PA1-5A

Sensitivity

Transmit   Receive

f_0 $2f_0$ Frequency

* The image is for illustrational purposes only and might differ from the actual performance of the device.

Focusing on diagnostic solutions for women's health

The HS50 provides a versatile range of obstetric and gynecological capabilities for efficient and effective care. With its efficient diagnostic solutions, the HS50 supports your knowledge and experience to help you make clear, confident decisions.

Family Planning

Measure the size of follicles based on 2D

2D Follicle™ [1] is a function to measure the size of follicles based on 2D image and to provide information about the status during gynecologic examination.

Assess the risk of infertility

5D Follicle™ [1] measures the size of multiple follicles and provides information on their status during OB exams.

Healthy Pregnancy Biometry

Measure fetal biometry parameter in one click

A semi-automatic technology for biometric measurement, **BiometryAssist™** [1], enables users to measure the growth of the fetus more quickly and with greater accuracy while maintaining exam consistency.
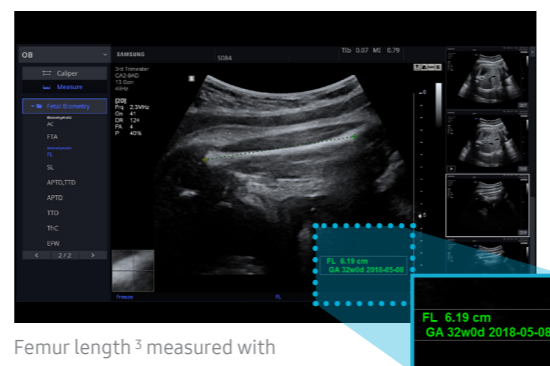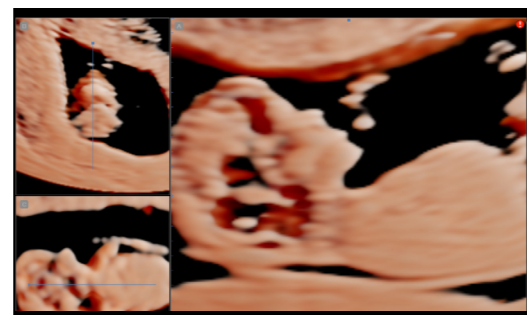
Femur length [3] measured with BiometryAssist™

Healthy Pregnancy Diagnosis

Measure NT using automatic detection of mid-sagittal plane

5D NT™ [1] provides the midsagittal plane view automatically by rotating and magnifying the images when measuring the nuchal translucency (NT) of the fetus in early weeks.
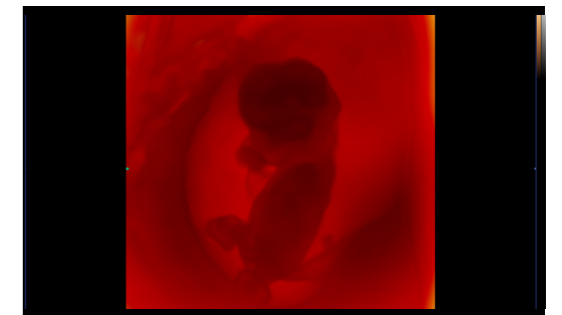
Nuchal translucency [3] with 5D NT™

Healthy Pregnancy Visualization

Express 3D anatomy in detailed and realistic view

RealisticVue™ [1] 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.

Early Fetus [3] with RealisticVue™

Healthy Birth

Support in deciding delivery method

LaborAssist™ [1] is a function that provides information of the progress of delivery by the automatic measurement of AoP (Angle of Progression) and the direction of the fetal head. This not only helps in effective communication between the healthcare professionals and mothers, but also assists in deciding a delivery method for the healthcare professionals.

* AoP complies with the metrics specified in the ISUOG Guideline.
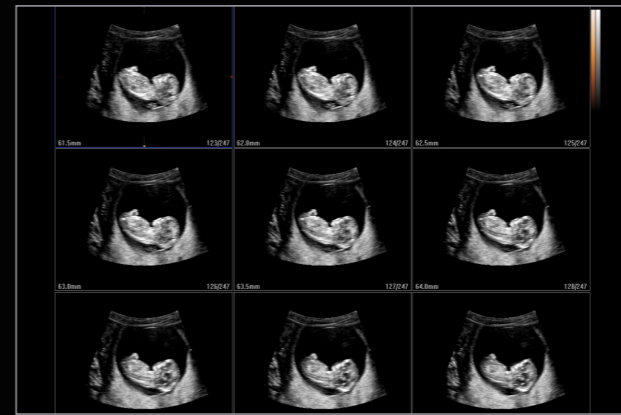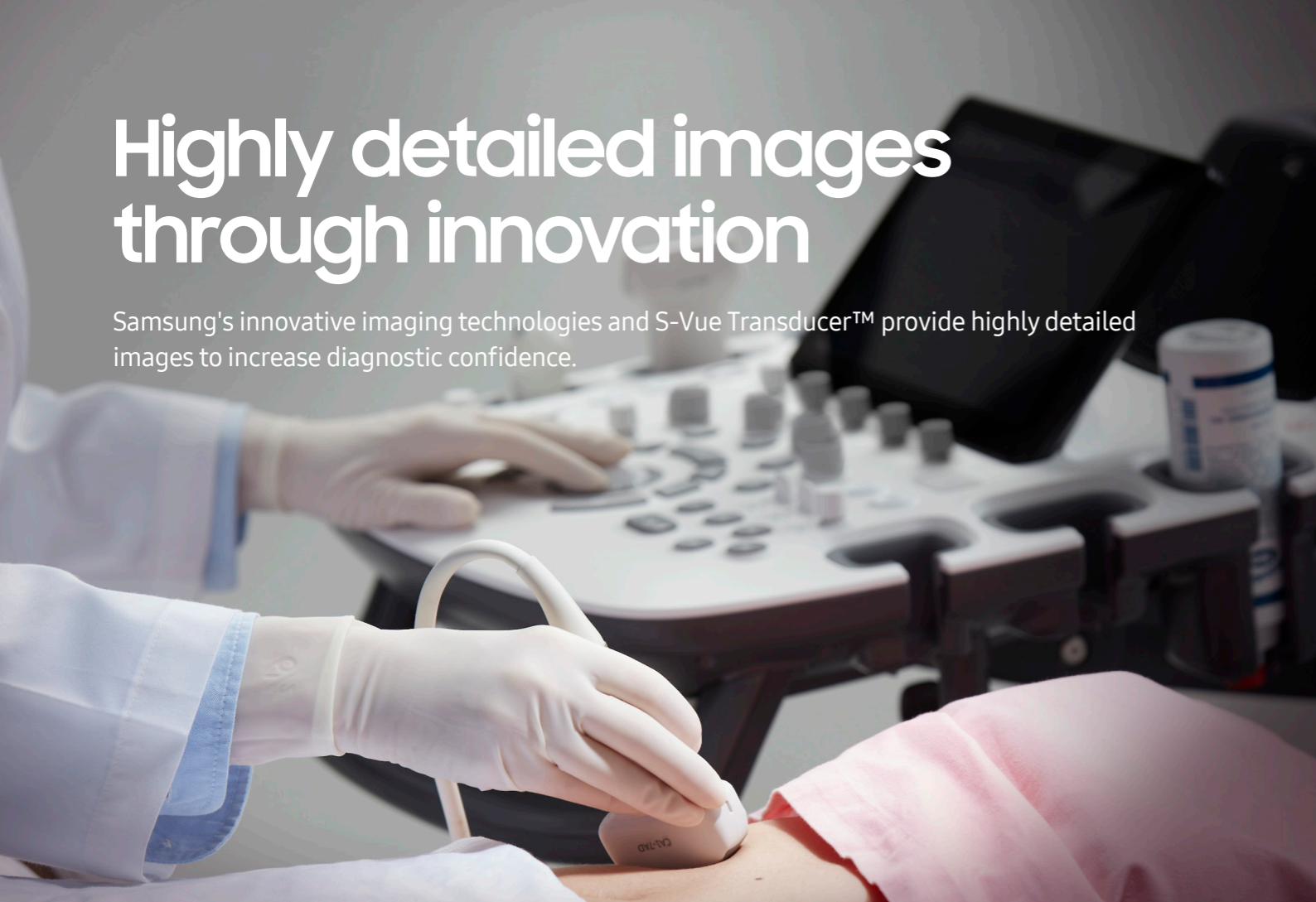
Gynecology & Breast Health

Analyze selected breast lesions and report breast assessment

S-Detect™ for Breast [1,4,5], 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.
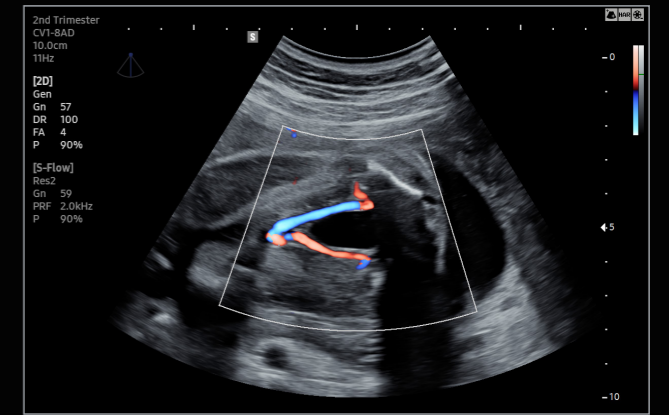
* It is a registered trademark of ACR and all rights reserved by ACR.

Highly detailed images through innovation

Samsung's innovative imaging technologies and S-Vue Transducer™ provide highly detailed images to increase diagnostic confidence.
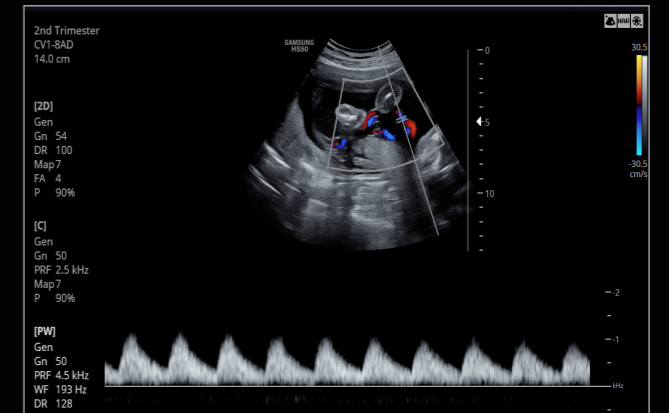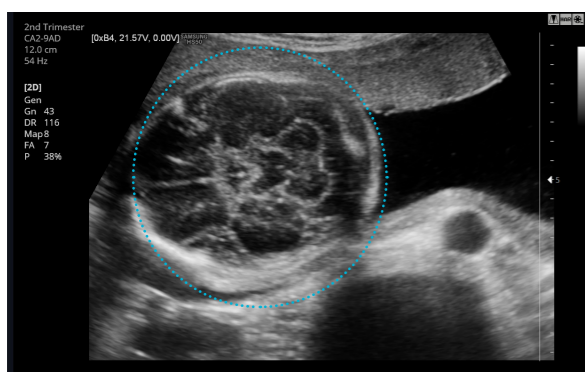
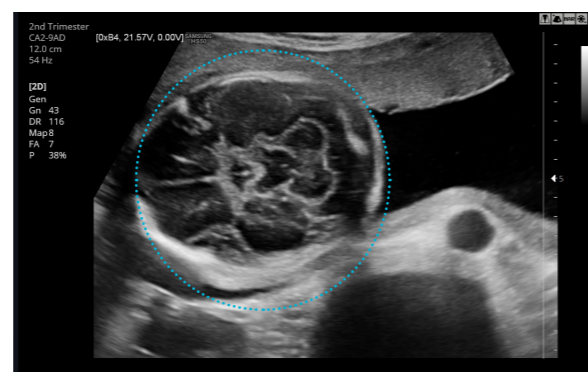## Reduce noise to improbe 2D image quality

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

Fetal brain [2]

Fetal brain [2] with ClearVision

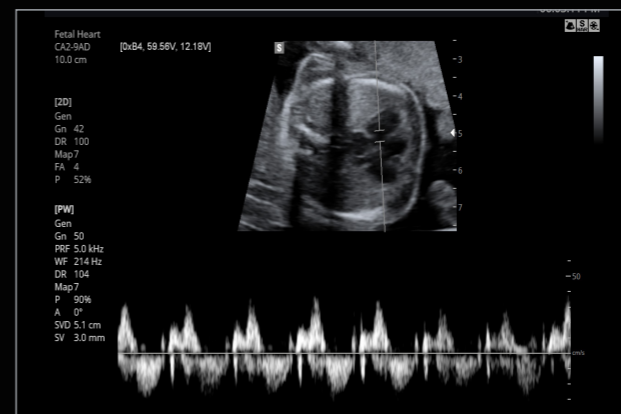## Show blood flow in vessels in a 3D like display

LumiFlow™ [1] is a function that visualizes blood flow in three dimensional-like to help understand the structure of blood flow and small vessels intuitively.

Early fetus [2] with MSV

Umbilical artery [3]

Fetal heart [2]

Umbilical cord [2] with PW

1st trimester [2]

Fetal abdomen [2]

Fetal heart [2] with PW

Fetal brain [2]

Enhanced Efficiency

The HS50 has been designed to enhance efficiency through reducing keystrokes, enabling you to streamline your workflow by combining multiple actions into one. Its user-oriented design also enables you to focus on your patient, reducing the complexity and stress of operating the system.

Build predefined protocols for streamlined process

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.

Compare previous and current exam in a side-by-side display

EzCompare™ allows easy access to previously taken exams to evaluate corresponding views in a side-by-side display. For greater efficiency, EzCompare™ automatically matches the image settings, annotations, and bodymarkers from the prior study.
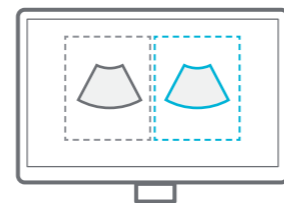
Magnify the region of interest in a picture-in-picture window

When placing a caliper, **Measure Navigation** automatically magnifies the area of interest using a picture-in-picture window to allow more precise placement of the calipers. This is especially useful when measuring small structures or when accuracy is critical.
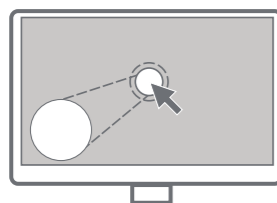
Select transducer and preset combinations in one click

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.
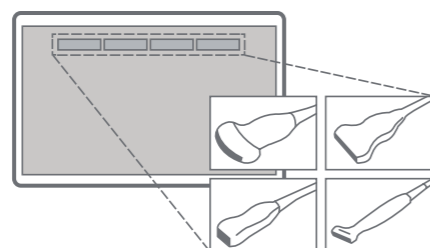
View images in wider screen

WideScreen provides approximately 27% more lateral viewing information compared to normal screen, allowing ultrasonic examination with wider view at a glance.
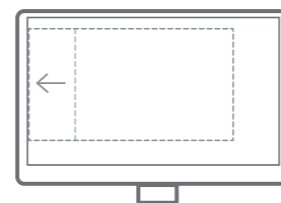
Simple transfer of fetal ultrasound images and clips

HelloMom™ [1,6] is a simple and secure image sharing solution that generates a QR code for the selected fetal images to be transferred. HelloMom™ allows pregnant women and their family to download fetal ultrasound images simply by scanning the QR code with their smartphones, reducing the hassle of installing a separate application.

1 **Gel warmer** [1]

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

2 **Solid State Drive (SSD)**

The HS50 uses advanced solid state drives. These stable and dependable drives allow faster bootup, better frame rates, and fast processing speeds.

3 **Use the system when AC power is temporarily unavailable**

BatteryAssist™ [1] provides the system with battery power. It enables users to perform scans and transport the ultrasound system to other locations in environments where AC power may not be available temporarily.

4 **Clever use of space**

With its reduced weight and compact size, the HS50 takes up minimal space and can move freely. In addition, its streamlined rear profile allows you to park the HS50 in small spaces.

21.5 inch

10.1 inch

Printer Space
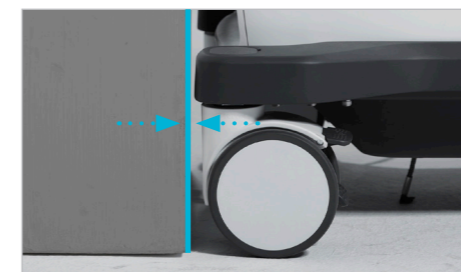
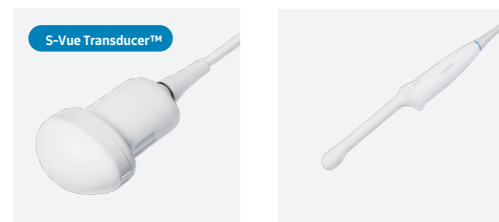# Comprehensive selection of transducers

Curved array transducers

CA1-7AD
abdomen, obstetrics, gynecology, musculoskeletal, pediatric, vascular, urology

CA2-9AD
abdomen, obstetrics, gynecology, musculoskeletal, pediatric, vascular, urology

CA4-10M
abdomen, obstetrics, gynecology, musculoskeletal, pediatric, vascular, urology
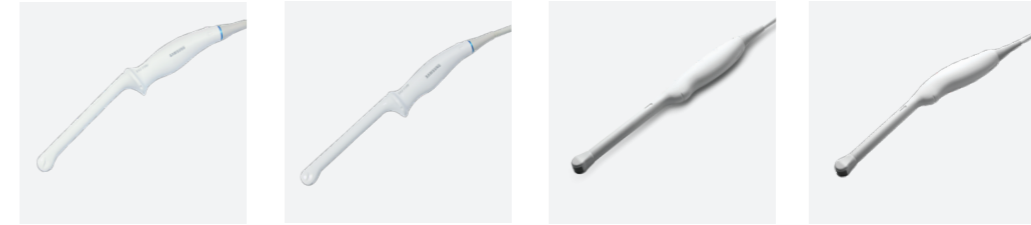
Linear array transducers

LA3-14AD
small parts, vascular, musculoskeletal, abdomen, obstetrics, gynecology, pediatric

LA3-16A
small parts, vascular, musculoskeletal, abdomen, obstetrics, gynecology, pediatric

LA2-9A
small parts, vascular, musculoskeletal, abdomen, obstetrics, gynecology, pediatric

LA3-16AI
small parts, vascular, musculoskeletal, abdomen, obstetrics, gynecology, pediatric

Volume transducers

CV1-8AD
abdomen, obstetrics, gynecology, musculoskeletal, pediatric, vascular, urology

EV2-10A
obstetrics, gynecology, urology

Endo-cavity transducers

EA2-11AV
obstetrics, gynecology, urology

EA2-11AR
obstetrics, gynecology, urology

ER4-9
obstetrics, gynecology, urology

EVN4-9
obstetrics, gynecology, urology

Phased array transducers

PA1-5A[PE 7]
abdomen, cardiac, vascular, pediatric

PA3-8B
abdomen, cardiac, vascular, pediatric

PA4-12B
abdomen, cardiac, vascular, pediatric

CW transducers

CW6.0
cardiac, vascular

DP2B
cardiac, vascular

TEE transducers

MMPT3-7
cardiac