Life-long Healthcare Solutions
for Women

SAMSUNG

HERA W10 Elite

Visionary change

Product Inquiry

Inspiring visionary change

Samsung HERA W10 Elite, the premier model of the HERA platform, aims to step up as a visionary leader of Obstetrics and Gynecology applications. Elegant images, intelligently automated precision features, fast operation, and ergonomics considering the medical environment provide healthcare professionals with diagnostic confidence. The up-to-date system is applied with powerful AI functions to free healthcare professionals from repetitive tasks, in particular, the ViewAssist™ function simplifies the workflow by automatically measuring and annotating numerous views with a simple click of a button. In addition, the MV-Flow™ 3D function can help detect tiny structures with better sensitivity and resolution, for enhanced clinical decisions. All of these countless advantages are vividly conveyed through the 27-inch OLED monitor. HERA W10 Elite is our commitment to support the life-long healthcare of women, diligently pursuing new possibilities in ultrasound diagnosis.

Enhanced AI features

Advanced MV-Flow™

Large OLED display

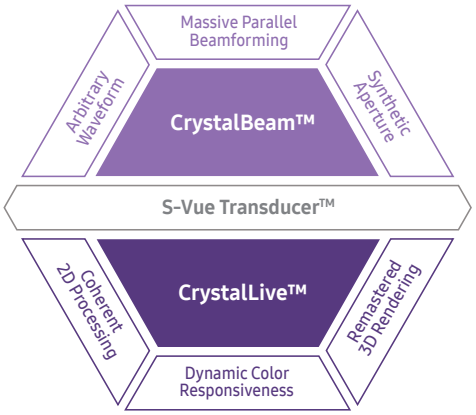
Wide bandwidth volume transducer

Visit Website

HERA,
an acronym that stands for Hyper-aperture and Enhanced Reconstruction Architecture, is Samsung's new preeminent ultrasound platform committed to deliver astonishing images. The HERA platform offers access to state-of-the-art ergonomics with a simple yet ingenious look for satisfaction in medical care.

Redefined imaging technologies powered by Crystal Architecture™

Crystal Architecture™, an imaging architecture that combines CrystalBeam™ and CrystalLive™, based upon S-Vue Transducer™, is to provide crystal clear image. CrystalBeam™ is a new beamforming technology beneficial in delivering high-quality image resolution and increased uniformity of images. 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.



Crystal Architecture™

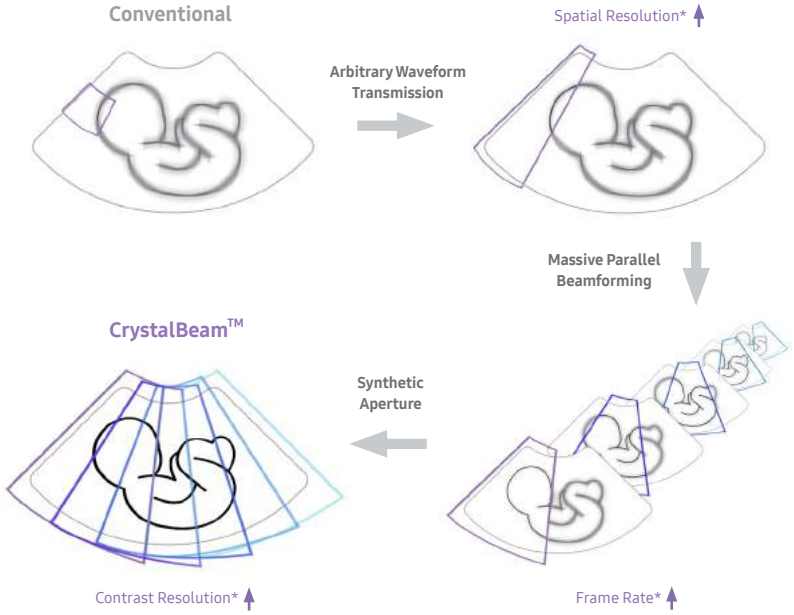
Fast Frame Rates
X10 Data Transfer Rate *

High-Quality Images
X11 Processing Power *

Fast Rendering
X3 GPU Memory *

A new beamforming for in-depth image creation

CrystalBeam™ utilizes Arbitrary Waveform Transmission, Massive Parallel Beamforming, and Synthetic Aperture technologies to produce a faster frame rate and improved image uniformity. Arbitrary Waveform Transmit refers to a widely-focused beam transmission technology that allows for more coherent images. Massive Parallel Beamforming and Synthetic Aperture enable more detailed and faster beam processing based on a large amount of acquired ultrasound data.



* Compared to the Samsung WS80A

An enriched diagnostic system, excellence in utilization with AI

HERA W10 Elite's expert tools and technologies incorporate the latest artificial intelligence to advance the field. The growth of the fetus and women's health in detailed reports will help you build more confidence and increase the throughput of your diagnosis.

Measure fetal brain in one click

5D CNS+™ [1] uses intelligent navigation to provide 6 measurements from 3 transverse views of the fetal brain to enhance measurement reproducibility and streamlined workflow.

White paper

An automated reporting tool for fetal heart diagnosis

HeartAssist™, a feature based on Deep Learning technology, provides automatic classification of ultrasound image into measurement views required for fetal heart diagnosis and provides measurement results.

White paper

An automated classification and annotation of the images

ViewAssist™, a feature based on Deep Learning technology, provides automatic classification of the ultrasound images and annotation of the structures to help healthcare professionals in convenient measurement.

White paper

* ViewAssist™ fully covers global guidelines from 1st to 3rd trimester.

An automated fetal biometry measurement

BiometryAssist™, a feature based on Deep Learning technology, is an automatic technology for biometric measurement. It enables users to measure the fetal growth parameters with one click while maintaining exam consistency.

White paper

Examine fetal heart including blood flow dynamics

5D Heart Color™ [1] 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.

Assess the risk of infertility using volume data

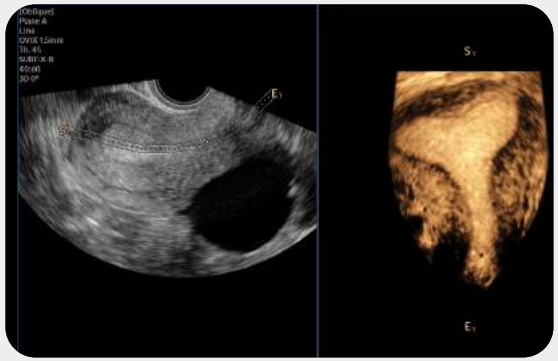
5D Follicle™ [1] identifies and measures multiple ovarian follicles in one scan for rapid assessment of follicular size and status during controlled ovarian simulation. This feature uses 3D volume data to help acquire accurate measurement and reduces user variation.

Estimate fetal weight for checking growth

5D Limb Vol.™ [1], is a semi-automated tool to quickly and accurately measure upper arm or thigh volumes from 3 simple seed points on a single volume data set. These measurements can then be used to calculate an accurate estimation of fetal weight as well as provide additional information regarding fetal nutritional status.

A feature to extract the centerline and thickness of endometrium

Uterine Contour [1] is a feature to help in identifying uterine malformation. It automatically extracts the centerline and thickness of the curved endometrium and provides a coronal view in 3D, flattened by the centerline. In addition, uterine malformation classification are reported according to the ESHRE/ESGE or ASRM guideline selection.

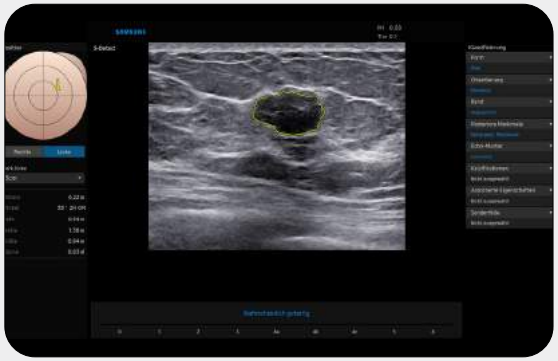


* ESHRE/ESGE : The European Society of Human Reproduction and Embryology / The European Society for Gynaecological Endoscopy
ASRM : The American Society for Reproductive Medicine

Analyze selected breast lesions and report breast assessment

S-Detect™ [1,3] **for Breast** analyzes selected lesions in the breast ultrasound study and shows the analysis data, applies BI-RADS ATLAS* to provide standardized reporting; and helps diagnosis with the streamlined workflow.

White paper



* Breast Imaging-Reporting and Data System, Atlas
It is a registered trademark of ACR and all rights reserved by ACR.

A semi-automated measurement of LV MPI and RV MPI

MPI+ [1] is able to semi-automatically measure LV MPI and RV MPI, providing a high reproducibility. After acquiring Inflow/ Outflow Doppler, RV MPI proceeds alignment by utilizing synchronized signals of the heartrate and valve movement.

White paper

Increases the contrast resolution through thick slide volume

Slice A [1], is a feature that improves the contrast resolution of A Plane images. By compositing multiple A Plane images, it helps in analyzing tissues or structures that are difficult to see with only 2D images.

Other features E-Strain™ [1], E-Thyroid™ [1], E-Cervix™, 5D NT™ [1], ElastoScan+™ [1], S-Detect™ for Thyroid [1], IOTA-ADNEX [1], HyCosy [1]

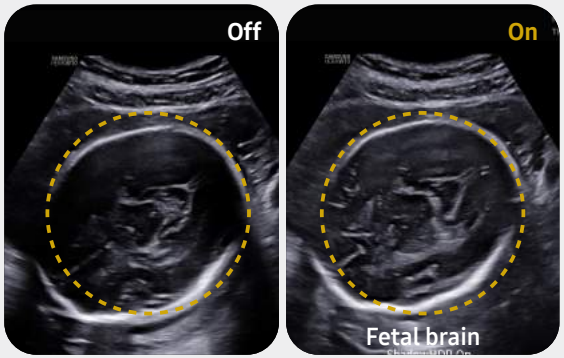
Sophisticated 2D images processed by CrystalLive™

CrystalLive™ helps you to make more confident diagnoses with fundamental 2D images. Some major advantages of 2D images include shadow-suppressed images, lessened halo artifacts, and mitigated blurred areas. ShadowHDR™ is a key feature that shows shadow areas, making it especially applicable for use in highly attenuated regions, such as the fetal head or spine.

Enhance hidden structures in shadowed regions

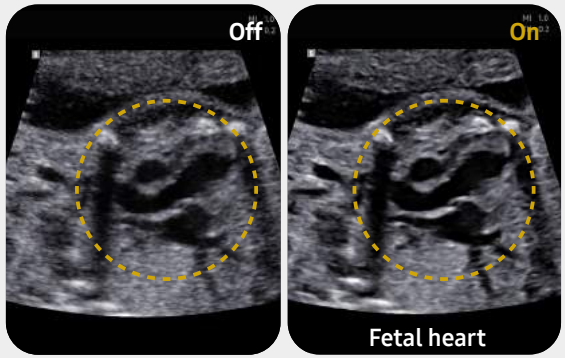
ShadowHDR™ selectively applies high-frequency and low-frequency of ultrasound to identify shadow areas where attenuation occurs.

White paper



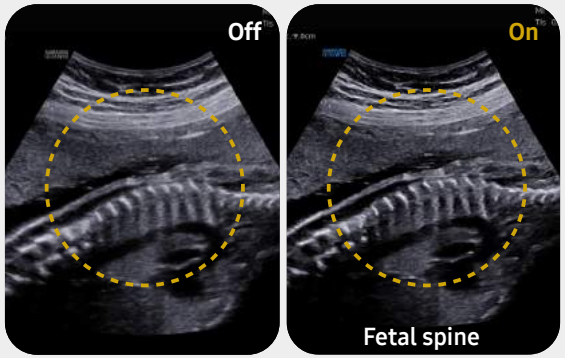
Noise reduction filter to improve 2D image quality

ClearVision provides clear tissue boundaries using the noise reduction filter and generates sharp 2D images. It reduces halo artifact that occurs when the tissue contour is enhanced, and removes noises on the tissue boundaries.



Clean up blurry areas in the image

HQ-Vision™ provides clear images by mitigating the characteristics of ultrasound images that are slightly blurred than the actual vision.



Realistic description of 3D/4D performance

CrystalLive™ in 3D/4D provides users with more realistic and high-resolution images. It outdoes conventional 3D imaging technologies in terms of viewing small parts and lighting effects. In addition, you are able to see 3D anatomy with a more realistic depth perception and can visualize the internal and external structures at once.

High Definition Volume Imaging

HDVI™ is a volume rendering technology that improves visualization of edges and small structures in volume data. Upgraded marginal expression and image saturation expresses the very details from angle to shadow of the fetus.

Express 3D anatomy in detail using a realistic view

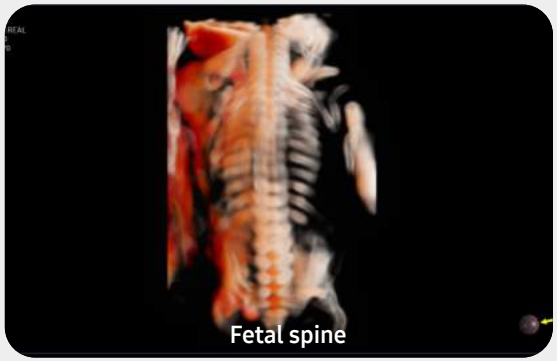
RealisticVue™[1] displays high resolution 3D anatomy with detailed expression and realistic depth perception. User selectable light source direction creates intricately graduated shadows for better defined anatomical structures.

White paper

Visualize internal and external structures using volume rendering

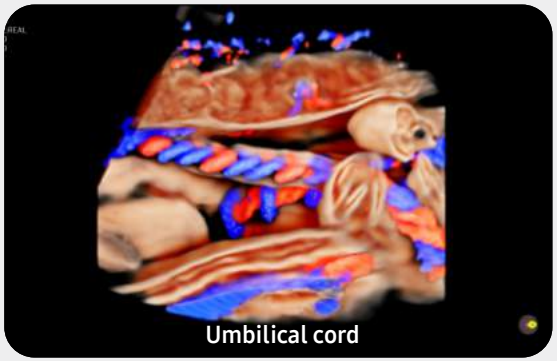
CrystalVue™[1] is an advanced volume rendering technology that enhances visualization of both internal and external structures in a single rendered image using a combination of intensity, gradient and position.

White paper



Volume rendering technology to visualize blood flow morphology

CrystalVue Flow™[1] 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.



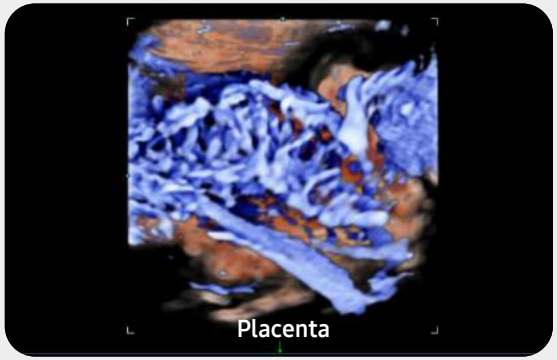
Advanced vessel description and flow characterization

The color imaging performance has been improved to clearly visualize the hemodynamics of the blood flow. A greater sensitivity resulting from new color signal processing and a realistic 3D visualization of blood flow help understand the microcirculatory blood flows, accurate detection of peripheral blood vessels, and volumes of slow blood flows.

Visualize slow flow in microvascular structures

MV-Flow™[1] visualizes microcirculatory and slow blood flow to display the intensity of blood flow (in 2D/3D mode). It is suitable for observation of microcirculatory and volume of slow blood flow.

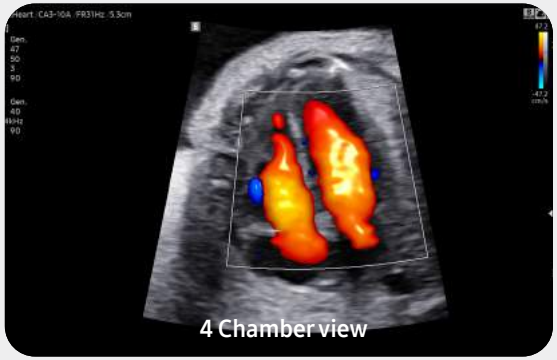
White paper



Show blood flow in vessels in a 3D like display

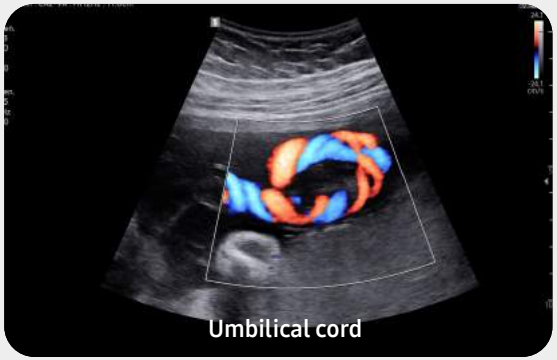
LumiFlow™ is a function that visualizes blood flow in three dimensional-like to help understand the structure of blood flow and small vessels intuitively.

White paper



Examine peripheral vessels with directional Power Doppler

S-Flow™ the function uses directional power Doppler technology, enabling you to examine even the peripheral vessels. It displays information on the intensity and direction of blood flow.

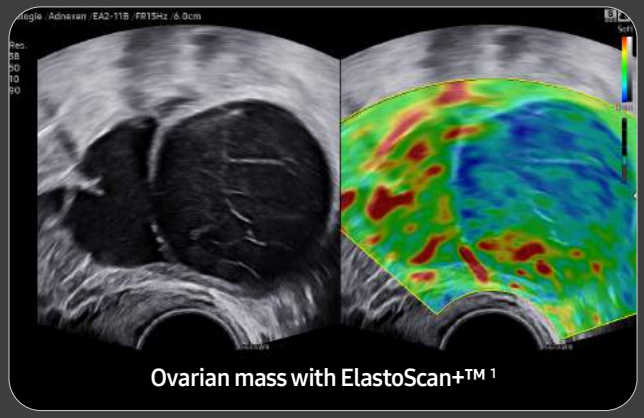


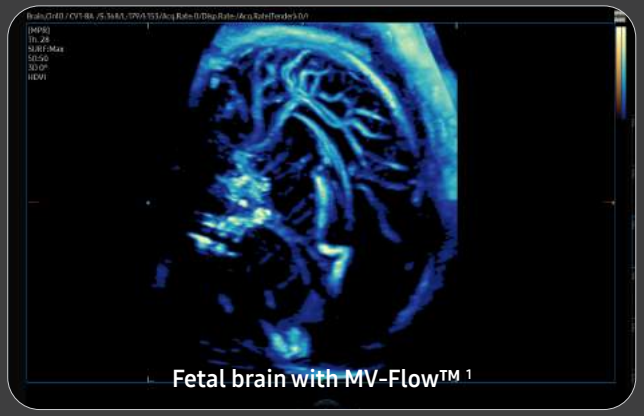
Striking images for confidence

Image gallery

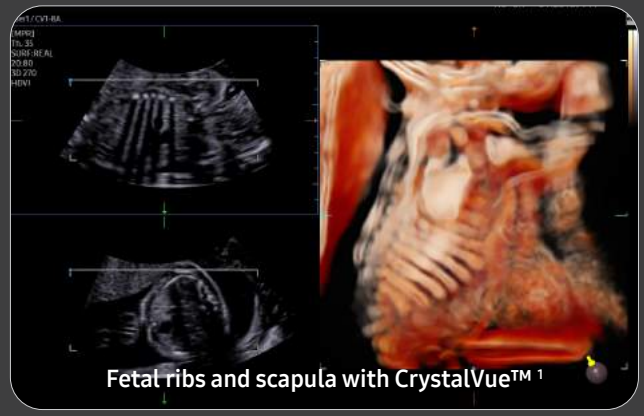
Auto annotation with ViewAssist™

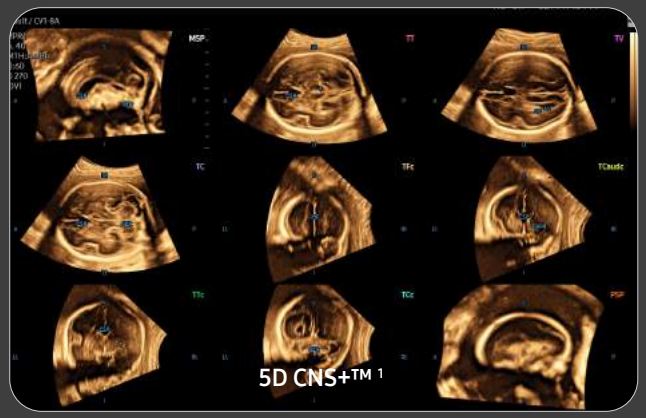

Fetal circulation with MV-Flow™ [1]


Ovarian mass with ElastoScan+™ [1]

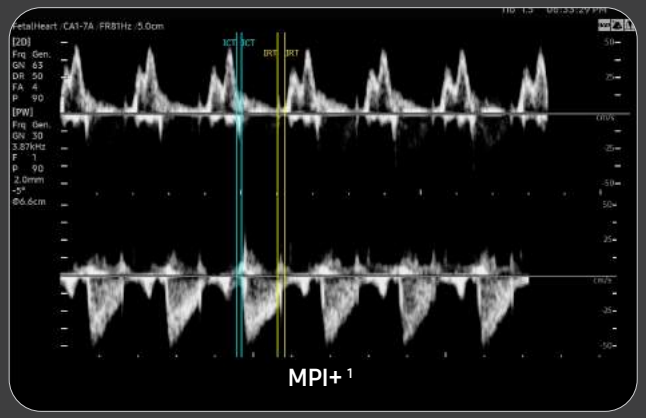

Fetal brain with MV-Flow™ [1]

5D Limb Vol.™ [1]

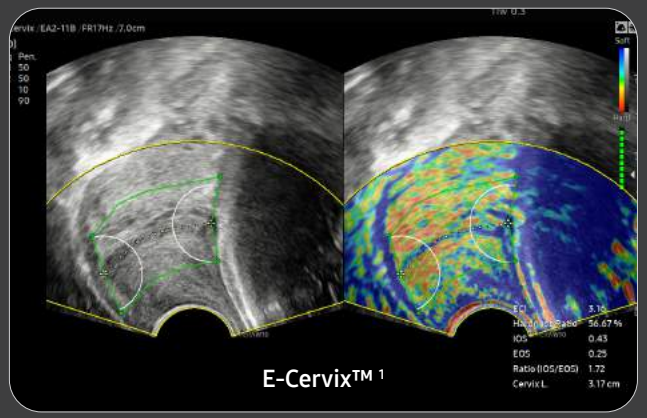

Fetal ribs and scapula with CrystalVue™ [1]



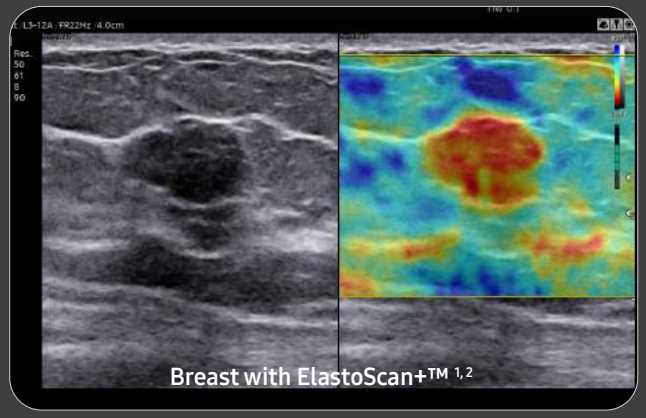
5D CNS+™ [1]



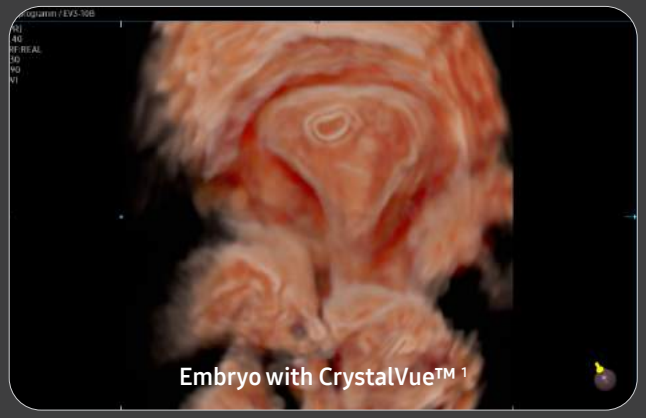
MPI+ [1]



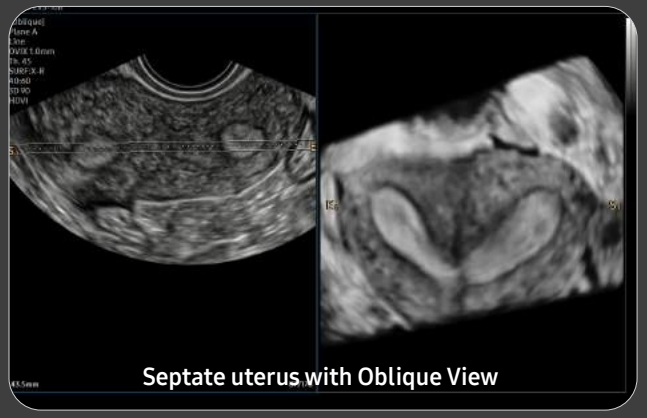
E-Cervix™ [1]



Breast with ElastoScan+™ [1,2]

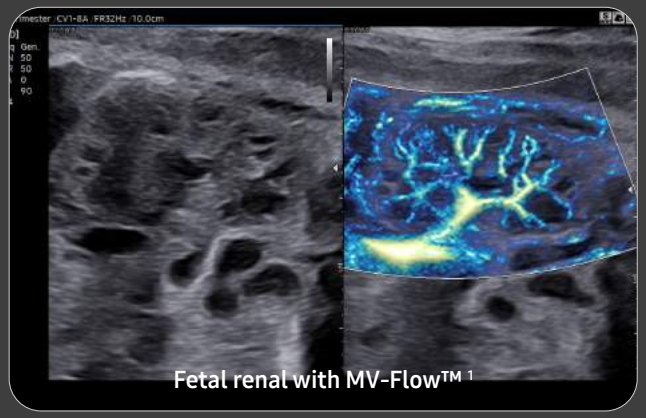


Embryo with CrystalVue™ [1]



Septate uterus with Oblique View

Placental perfusion (MV-Flow™ [1] with LumiFlow™)



Fetal renal with MV-Flow™ [1]

Intra uterine device with CrystalVue™ [1]

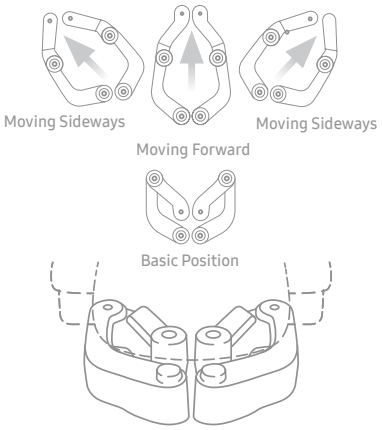
State-of-the-art ergodynamics for your comfort and productivity

FreeForm™ refers to Samsung's new design theme. It was developed to provide a more comfortable diagnostic experience by reducing the need for movement from one spot to another. Our goal is to satisfy the user's working environment by applying a mechanism to the control panel in its wide moving range, as well as by considering a user's arms reach. This enables it to offer a sufficient amount of space for the user's knee.

Control panel moving mechanism

An internal study showed that Samsung's Control Panel Moving Mechanism reduces shoulder stress by about a third compared to the previous model. It does this by providing users with more space near the control panel area, resulting in less repetitive strain from hours of scanning. Users can now pull the control panel and rotate its angle at the same time.

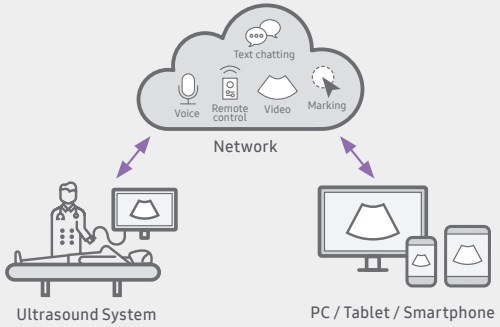
* Control panel usability study compared to the Samsung WS80A. Tested using same body postures.



Control Panel Swivel Mechanism

Effective real-time collaboration customizable for the way you work

We believe that a truly great system offers customer-centric working conditions. The collaborative solution enables users to cooperate, monitor, and educate in real-time regardless of where the users are located. The streamlined workflow supports your daily procedures by reducing keystrokes and by combining multiple actions into one. Users have the option of customizing its diagnostic settings based on personalized protocol, resulting in a more simplified exam process and faster workflow.



Real-time image sharing solution

SonoSync™ [1,4] is available in PC and smartphone, etc. as a real-time image share solution that allows communication for care guide and training between doctors and sonographers. In addition, voice chatting, text chatting and real-time marking functions are provided for better communication; and the MultiVue function is included that allows monitoring multiple ultrasound images on a single screen.

Learn more

Simple transfer of fetal ultrasound images and clips

HelloMom™ [1,5] supports simple and secure transfer of fetal ultrasound images and clips wirelessly from the ultrasound system directly to an external device. These images can be shared easily with others.

Learn more

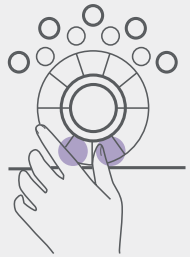
Energy Efficiency

Select transducer and preset combinations in one click

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.

Contextual Button

Contextual Button depending on the user's choice of ultrasonic inspection items, the required diagnostic functions may be assigned to the control panel buttons to reduce the hassle of menu selection.



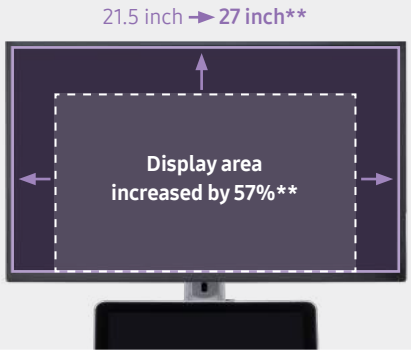
Easily manipulate volume data from the touchscreen

TouchGesture intuitively allows you to rotate, zoom, crop, and move 3D images right from the touchscreen.

Increased monitor size by 57%**

It is convenient to see images in various scanning environments by applying a **27 inch OLED monitor**. OLED realistically represents the black color, suitable for diverse ultrasound image characteristics with a black background.

* OLED: Organic Light Emitting Diode
** Compared to Samsung HERA W10



Fast boot up with MobileSleep

Booting-up from sleep mode saves about 63% of your time, when compared to a normal boot-up. MobileSleep enters to the sleep mode quickly for easy maneuverability of the system.

Comprehensive selection of transducers

Volume transducers

CV1-8A
Abdomen, Obstetrics, Gynecology

EV2-12*
Obstetrics, Gynecology, Urology

EV2-10A*
Obstetrics, Gynecology, Urology

EV3-10B
Obstetrics, Gynecology, Urology

Linear array transducers

LA2-14A
Small parts, Vascular, Musculoskeletal, Abdomen, Obstetrics

L3-12A
Small parts, Vascular, Musculoskeletal, Abdomen

LA2-9A
Small parts, Vascular, Musculoskeletal, Abdomen

Wide bandwidth volume endo-cavity transducer

EV2-12* provides wider bandwidth over conventional Samsung transducers and enables a superb resolution to cover various applications such as fetal heart and brain in 8 weeks, fetal brain development in 2nd/3rd trimester, and gynecology.

* EV2-12 will be released in April. 2023

Convex array transducers

CA1-7A
Abdomen, Obstetrics, Gynecology, Pediatric, Musculoskeletal, Vascular

CA3-10A
Abdomen, Obstetrics, Gynecology, Pediatric, Musculoskeletal, Vascular

CA2-9A
Abdomen, Obstetrics, Gynecology

CF4-9
Pediatric, Vascular

Cleaning and disinfection guide

Endocavity transducers

EA2-11AR*
Obstetrics, Gynecology, Urology

EA2-11AV*
Obstetrics, Gynecology, Urology

Phased array transducers

PA1-5A*
Cardiac, TCD, Abdomen

PA4-12B
Cardiac, Pediatric

PM1-6A
Cardiac, TCD, Abdomen

PA3-8B
Cardiac, Pediatric, Abdomen

*** Ergonomic transducers (EA2-11AR, EA2-11AV)**
These endocavity transducers have a newly designed ergonomic hand- grip and better weight distribution for comfortable scanning.

Samsung healthcare cybersecurity

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

Learn more

Intrusion prevention

Access control

Data protection

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 may not be commercially available in some 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.

1. Optional feature which may require additional purchase.
2. Strain value for ElastoScan+™ is not applicable in the United States and Canada.
3. In the United States, only shape and orientation items for S-Detect™ are automatically provided.
   Also the recommendations about whether results are benign or malignant in S-Detect™ are not applicable.
4. SonoSync™ is an image sharing solution.
5. A purchase of Mobile Export option is required to use HelloMom™.

Eco Packaging

Reusable packaging composed of eco-friendly recycled paper. It is Samsung's commitment to achieving carbon-neutral of the earth and environment.

Learn more

Recycled Materials

Eco Packaging

CT-HERA W10 Elite V1.03-230307-EN

CE 0123

SAMSUNG MEDISON CO., LTD.