COMPREHENSIVE SELECTION OF TRANSDUCERS

Volume Transducers

CV1-8A
Abdomen, obstetrics, gynecology

EV3-10B
Obstetrics, gynecology, urology

Linear Array Transducers

L3-12A
Small parts, vascular, musculoskeletal

LA2-9A
Small parts, vascular, musculoskeletal

Convex Array Transducers

CA1-7A
Abdomen, obstetrics, gynecology, contrast

CA3-10A
Abdomen, obstetrics, gynecology

CA2-9A
Abdomen, obstetrics, gynecology

CF4-9
Pediatric, vascular

Endocavity Transducers

EA2-11B
Obstetrics, gynecology, urology

VR5-9
Obstetrics, gynecology, urology

E3-12A
Obstetrics, gynecology, urology

Phased Array Transducers

PA4-12B
Cardiac, pediatric

PM1-6A
Cardiac, TCD, abdomen

PA3-8B
Cardiac, pediatric, abdomen

* 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.
* 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.
* The Built-in Chair (WMH152) displayed with HERA I10 is an independent product designed to be compatible with HERA I10.
* All clinical images on this catalog are acquired by the HERA W10 ultrasound system.
* 13.2% decreased muscle activity for ultrasound scan task and 82.3% less peak pulling force for vaginal scan setting are result of a study conducted by collaboration between Samsung Medison and Prof. Yong-Ku Kong, Department of Industrial Engineering, Sungkyunkwan University.
* 52.5% reduced wrist burden for using transducer is a result of an experiment conducted at DFx Group of Global Technology Center, Samsung Electronics.

CT-HERA I10 V1.0-FTW-190620-EN

Ultrasound Reimagined

HERA I10

SAMSUNG

Ultrasound Reimagined

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

With the introduction of the HERA I10, ultrasound hasn't just been redesigned, it has been reimagined. With input from clinicians and patients, HERA I10 transforms and elevates the ultrasound experience from each user's perspective. A new form factor, a combination ultrasound system with Built-in Chair, allows for a more comfortable environment with refined imaging technologies for increased diagnostic confidence.

01 **Excellent Image Quality** for accurate diagnosis

02 **Relaxing Atmosphere** for the patients

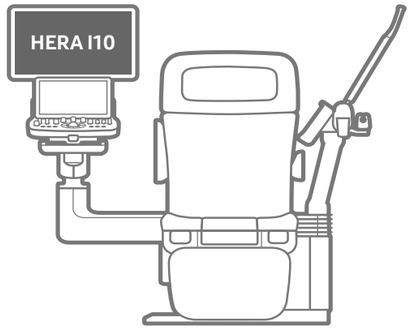
03 **Ergonomic Comfort** for healthcare professionals

ESK

Ergonomic Design Award

Samsung's elite team of designers and certified healthcare professionals collaborated to develop ergonomic and human-friendly ultrasound system, winning the Ergonomic Design Award.

* The Built-in Chair (WMH152) displayed with HERA I10 is an independent product designed to be compatible with HERA I10.



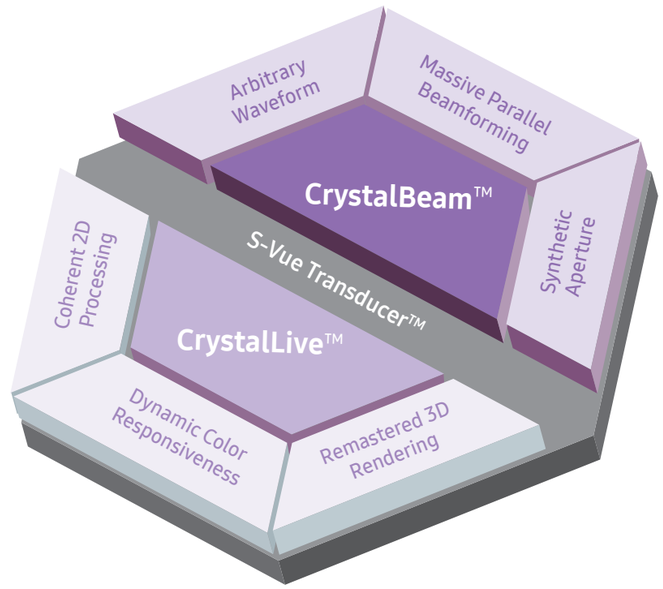
REDEFINED IMAGING TECHNOLOGIES POWERED BY Crystal Architecture™

Crystal Architecture™, an imaging architecture combining CrystalBeam™ and CrystalLive™, while based upon S-Vue Transdcuer™, produces crystal clear and uniform images. CrystalBeam™ is a new beamforming technology beneficial in delivering high-quality image resolution and increased uniformity of images. CrystalLive™ is Samsung's sophisticated 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.

X10 **Data Transfer Rate *** for fast frame rates

X11 **Processing Power *** for high-quality images

X3 **GPU Memory *** for fast rendering



Crystal Architecture™

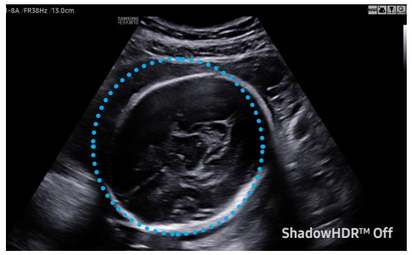
* Compared to the Samsung WS80A

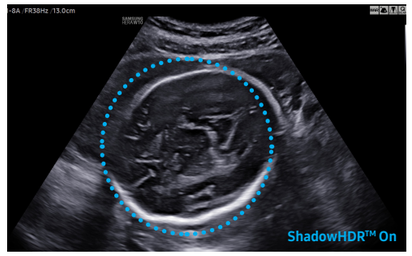
Sophisticated 2D Images Processed by CrystalLive™

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 area. ShadowHDR™ is a key feature that shows shadowy areas, making it especially applicable for use in highly attenuated regions, such as fetal head or spine.

ShadowHDR™

ShadowHDR™ selectively applies high-frequency and low-frequency of the ultrasound to identify shadowy areas such as fetal head or spine where attenuation occurs.

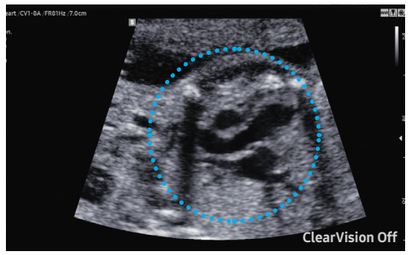


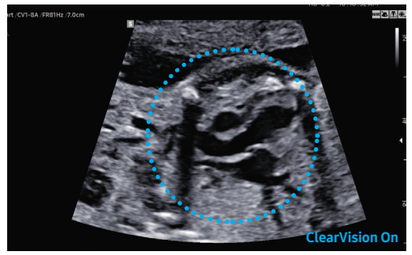


Fetal brain

ClearVision

ClearVision provides clearer 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.

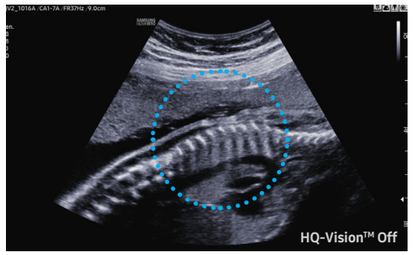


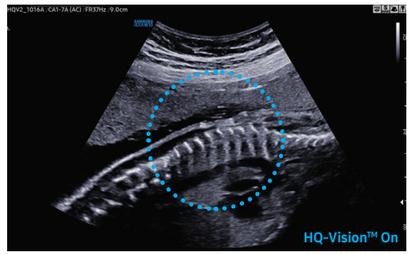


Fetal heart

HQ-Vision™

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





Fetal spine

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 more realistic depth perception, and can visualize the internal and external structures at once.

HDVI™ 2.0

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.

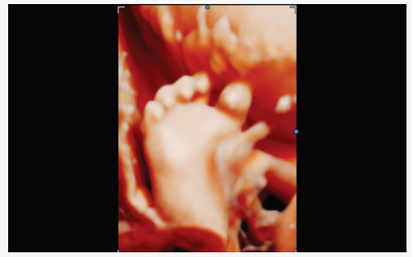
Fetal face with 3D

Fetal spine with 3D

RealisticVue™ *

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

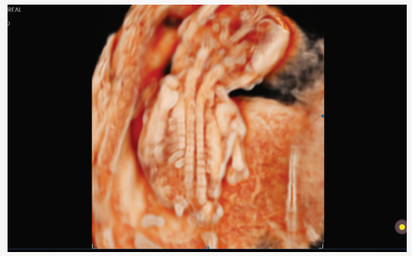
Fetal face with RealisticVue™



Fetal foot with RealisticVue™

CrystalVue™ *

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.



Fetal spine with CrystalVue™

Fetal profile with CrystalVue™

* Optional Extra

Detailed Expression of Blood Flow Dynamics

With the addition of CrystalLive, color performance and sensitivity have been improved to help clinicians more clearly visualize blood flow hemodynamics. New color signal processing allows for precise detection of peripheral blood vessels, microcirculatory blood flows, and volumes of slow blood flows.

S-Flow™

S-Flow™ is a directional power Doppler technology, which helps in diagnosis of complex forms of blood flow.

Umbilical cord with S-Flow™

Fetal circulation with S-Flow™

MV-Flow™ *

MV-Flow™ offers a novel alternative to power Doppler for visualizing slow flow of microvascularized structures. High frame rates and advanced filtering enable MV-Flow™ to provide a detailed view of blood flow in relation to surrounding tissue or pathology with enhanced spatial resolution.

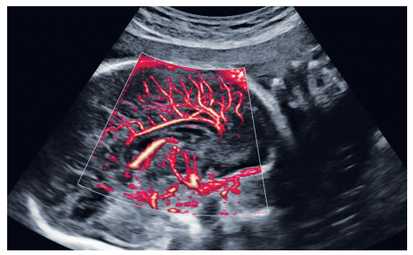
Placenta with MV-Flow™

BPD with MV-Flow™

LumiFlow™ *

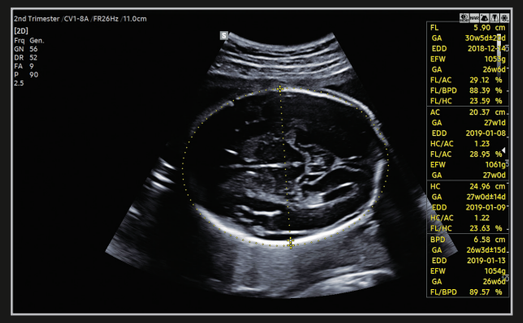
LumiFlow™ is a 3D effect on Color Doppler, which helps to understand the structure of blood flow and small vessels intuitively.

S-Flow™ with LumiFlow™ (Color cord)



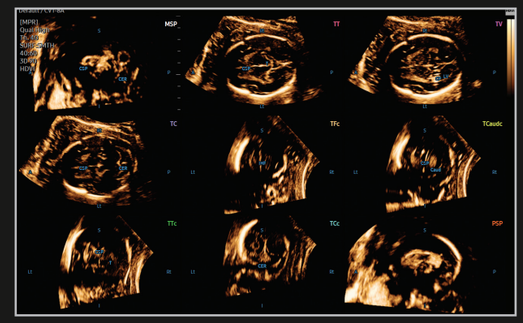
MV-Flow™ with LumiFlow™ (Fetal brain)

* Optional Extra



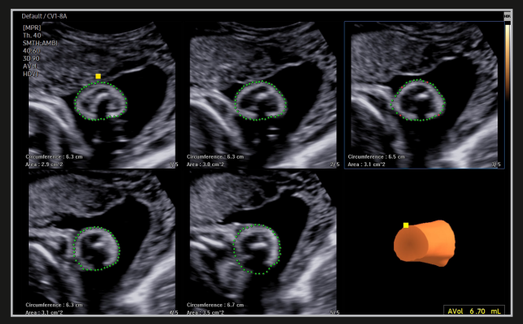
Fetal biometry estimation with BiometryAssist™

A semi-automatic technology for biometric measurement, BiometryAssist™, enables users to measure the growth of the fetus quickly while maintaining exam consistency.



Fetal brain measurement with 5D CNS+™ *

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

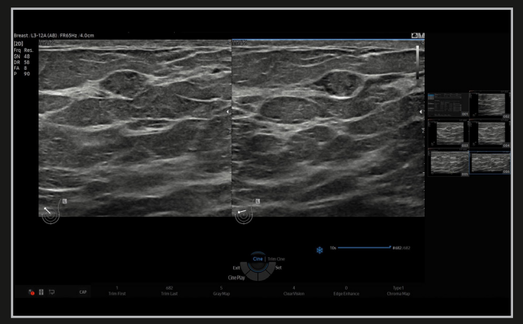


Fetal weight estimation with 5D Limb Vol.™ *

5D Limb Vol.™ 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.

MPI+ *

MPI+ 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.



Breast with WideScreen

WideScreen provides approximately 23% more lateral viewing information compared to the standard view on HERA I10, allowing ultrasonic examination with wider view at a glance.

Fetal hand with AmbientLight

Creating intricately graduated shades, AmbientLight improves depth expression of the surface. This 3D rendering feature is especially useful to see fetal face or hands in detail.

* Optional Extra

Relaxing Atmosphere
for the patients

HERA I10 delivers differentiated user experience for the satisfaction of the patients. Effortless usability and the clean system is the key of relaxing ultrasound examination for the patients.

Safe & Comfortable Position Change

When your patients walk into the exam room, they will see a warm and inviting environment with HERA I10. Help your patients gently ease into the ultrasound exam in a relaxing and comforting way. The powered, adjustable Built-in Chair has four programmable positions to help patients safely and comfortably move into the optimal position needed to capture the necessary images to provide a confident diagnosis. Take your patient satisfaction to a new level by elevating your ultrasound experience with HERA I10.

Hand Remote

Foot Controller*

Start Position

Full Flat Position

Abdomen Position

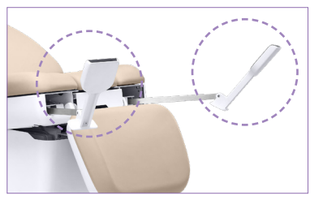
Lithotomy Position

Clean & Clutter-free Environment

The Paper Roll Hanger provides a convenient and easy way to maintain a clean and safe environment. The Transducer Station sustains the cable to not reach the patient's body. The ergonomic structure satisfies the patients to experience ultrasound exams in a clean and relaxing atmosphere.

Paper Roll Hanger

Transducer Cable Support



Stirrups for Foot Placement
(Lithotomy Position)

Transducer Cable Management

* Optional Extra

* The Built-in Chair (WMH152) displayed with HERA I10 is an independent product designed to be compatible with HERA I10.

Ergonomic Comfort
for healthcare professionals

With the HERA I10, healthcare professionals may experience less muscle strain and increased user satisfaction while scanning. Each component of the HERA I10 implements our philosophy: deliver ergonomic comfort and help users stay healthy.

Ample Leg Room & Relieved Muscle Strain

The conventional location of the system electronics is located at the backside of the Built-in Chair to offer plenty of leg room for the examiner. The Transducer Cable helps decrease muscle strain, reduces peak pulling force and wrist burden. The cable is coming from a higher position instead of a lower position like in conventional system, thus making the transducer feel lighter in operation.

⇩13.2%
Decreased Muscle Activity **
for ultrasound scan task

⇩82.3%
Less Peak Pulling Force **
for vaginal scan setting

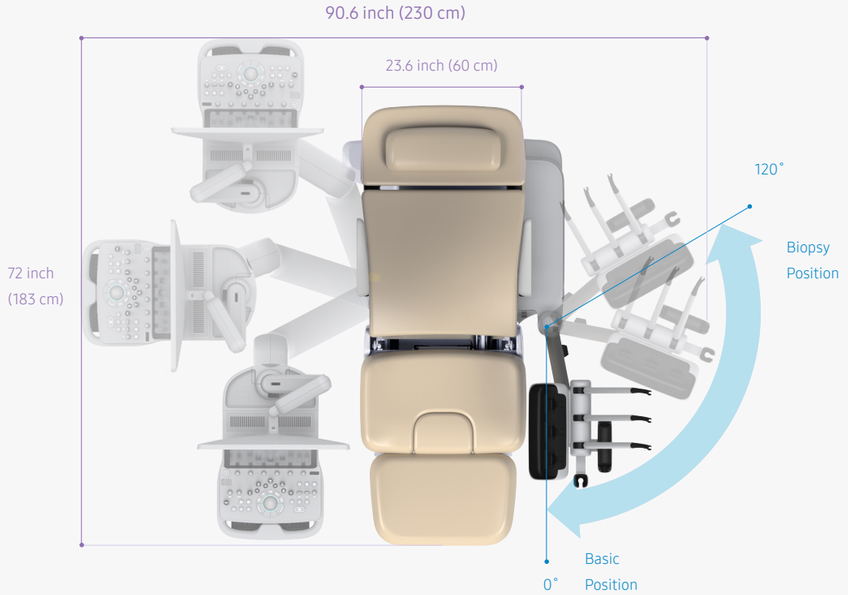
⇩52.5%
Reduced Wrist Burden **
for using transduer

** Compared to the Samsung WS80A

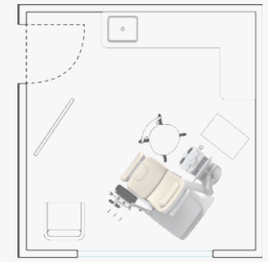
* The Built-in Chair (WMH152) displayed with HERA I10 is an independent product designed to be compatible with HERA I10.

HERA I10 Dimensional Information

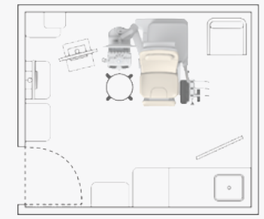
Maximum Size : Length 7.5ft (230cm) x Width 6ft (183cm) x Height 5.7ft (175cm)



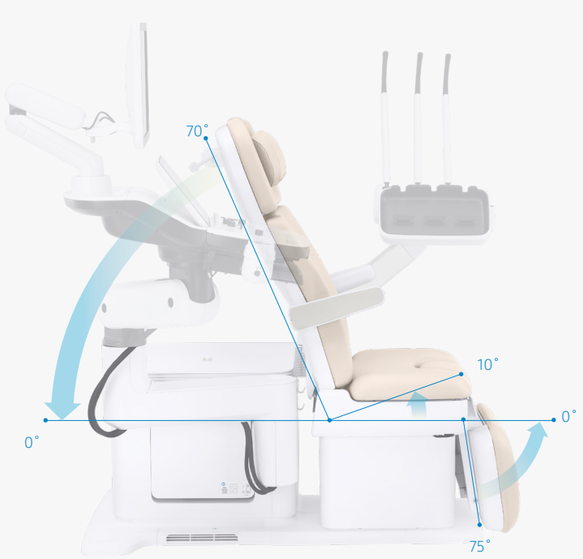
Room Layout 1 11.8 ft x 11.8 ft

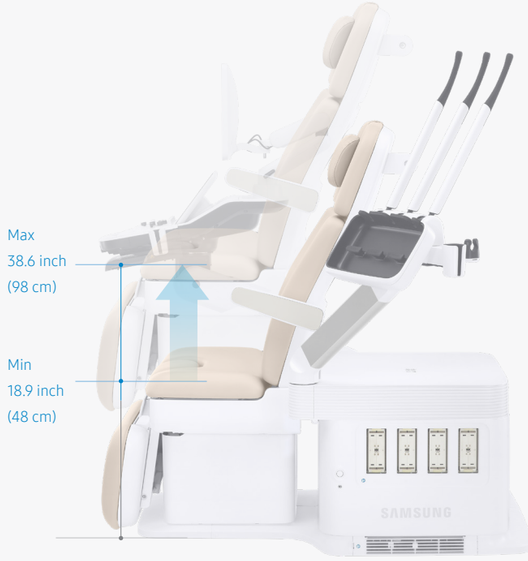


Room Layout 2 11.8 ft x 10.2 ft



Fully automatic chair movement, wheel chair accessible seat height





Samsung Healthcare Cybersecurity

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.

Intrusion Prevention

Access Control

Data Protection