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.

CT-WS80A with Elite V3.0-FT-160406-EN

* Elite is a package of technologies for upgraded systems.

* S-Vue is not the name of a function, but is the name of Samsung's advanced transducer technology.

* In Canada and USA, strain value for ElastoScan is not applied.

* Availability of some products, features, options and transducers mentioned in this catalog may vary from country to country and is subject to varying regulatory requirements.

* 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.

Scan code or visit
www.samsungmedison.com/
to learn more

Vision of a new dimension

Ultrasound system
WS80A with Elite

SAMSUNG MEDISON CO., LTD.

SAMSUNG

Explore a new dimension
that you have never seen before

WS80A with Elite is designed to create new possibilities for ultrasound diagnosis, adopting a new dimension in diagnostic tools.
The finest image quality, advanced 5D diagnostic solutions and innovative rendering technologies help you make decisions with confidence and lead you to a new paradigm of women's health.

Consistent image quality from advanced imaging technologies

Hybrid imaging engine evo

Hybrid imaging engine evo combines more powerful data processing and noise reduction capabilities to provide optimal 2D, 3D as well as color Doppler image quality with fast frame rates. This advanced system architecture provides more detailed 2D and 3D images to help improve diagnostic accuracy.


Hardware + Software

S-Harmonic

This new harmonic technology improves image clarity, near to far. Reducing signal noise, S-Harmonic provides more uniform ultrasound images. Combined with the S-Vue transducers, S-Harmonic takes WS80A with Elite image quality one step further.

Fetal Heart in 4 chamber view

ClearVision™

ClearVision™ offers speckle reduction, edge enhancement and contrast enhancement for clear and natural images. In addition, ClearVision™ improves on previous technology with application-specific optimization and advanced temporal resolution in live scan mode.
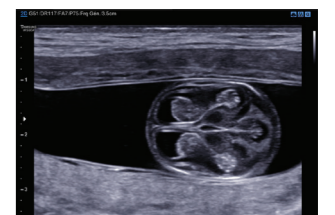
Fetal brain with ClearVision™

S-Vue transducers

The S-Vue transducers (CV1-8A, CA1-7A, CA2-9A, CA3-10A) provide broader bandwidth and higher sensitivity over conventional Samsung transducers. They enable higher resolution at depth thereby providing improved image quality even with technically challenging patients. In addition, the ergonomically designed and lightweight transducers enable users to experience less fatigue.

Sensitivity — Transmit | Receive — f. / 2f. Frequency

S-Vue transducer

Sensitivity — Transmit | Receive — f. / 2f. Frequency
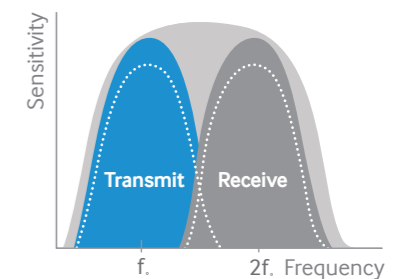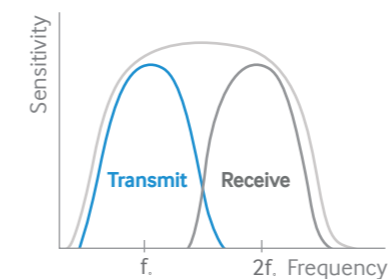
*Compared with the conventional Samsung transducers

Wide angle endocavity transducer

The new wide angle endocavity transducer (E3-12A) offers a field-of-view up to 210° allowing greater visualization of pelvic anatomy. It is often possible to visualize the entire cervix and uterus in normal anatomy as well as viewing left–right symmetry in the transverse plane.


Uterus in wide angle view

5D total solutions for confident diagnosis

## 5D Heart Color
(Fetal heart examination)

5D Heart Color allows evaluation of fetal cardiac structures for potential blood flow disturbances, an important component of fetal cardiac examination. Using STIC volume datasets, color Doppler sonography is demonstrated in 9 standard fetal echocardiography views in a single display.
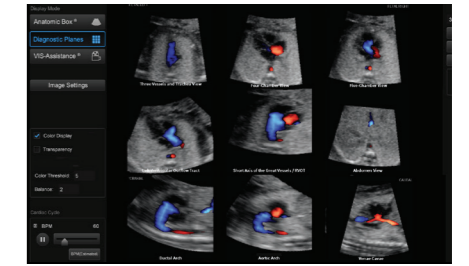
Fetal heart examination with 5D Heart Color

5D CNS+
### (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 streamline workflow. It includes axial, sagittal and coronal views with 9 planes following the international guidelines for assessing the fetal brain as set forth by the ISUOG.
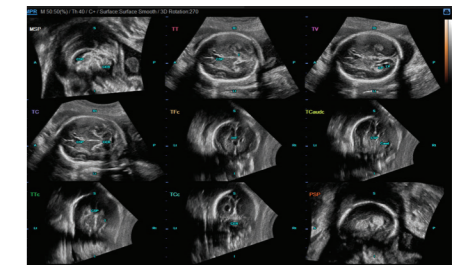
Fetal brain measurement with 5D CNS+

5D Limb Vol.
(Fetal weight estimation)

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. These measurements can then be used to calculate an accurate estimation of fetal weight as well as provide additional information regarding fetal nutritional status.
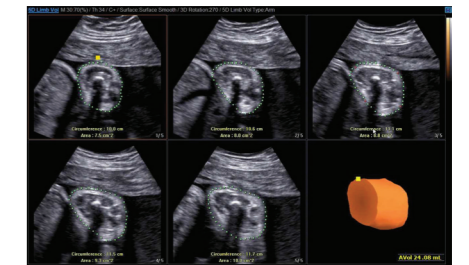
Fetal weight estimation with 5D Limb Vol.

## 5D NT
(Nuchal translucency measurement)

Operator dependency is reduced for the first trimester fetal nuchal translucency measurements with NT measurement solutions. 5D NT applies Realistic Vue™ to the automatically detected mid-sagittal view for intuitive confirmation.

NT measurement with 5D NT

5D Follicle
(Follicle measurement)

5D Follicle identifies and measures multiple ovarian follicles for rapid assessment of follicular size and status during gynecology examinations.
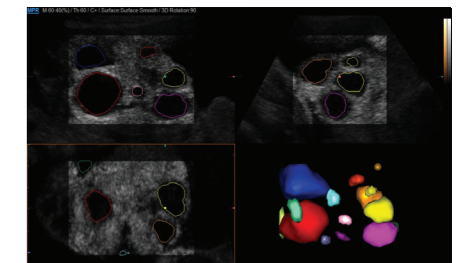
Follicle measurement with 5D follicle

* Above features may not be available in some countries.

The 5D total solutions of the WS80A with Elite allow utilization of the volume data to provide **diagnostic planes recommended by international guidelines** and **semi-automated measurements for greater efficiency**. These solutions help **reduce operator dependency** and **improve patient throughput.**

5D CNS+
5D Limb Vol.
5D Heart Color
5D Follicle
5D NT

Innovative fetal assessment with advanced rendering technologies

The innovative volume rendering technology of WS80A with Elite enables physicians to **access detailed information about internal and external structures of a fetus in 3D / 4D mode.**

Courtesy of Imperial College London, UK

Crystal Vue

Crystal Vue is an advanced volume rendering technology that enhances visualization of both internal and external structures in a single rendered image using a unique combination of intensity, gradient and position. The resulting image has the potential to enhance visualization and increase diagnostic confidence.
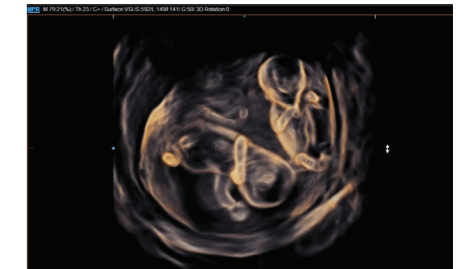
Early fetus in Crystal Vue

Realistic Vue™

Realistic Vue™ 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.

2nd trimester fetal face with Realistic Vue™

Intelligent image sharing

Wireless connection

Mobile Devices

USB memory

3D TV

Hello Mom

Hello Mom is an Android smartphone and iPhone application for pregnant mothers that can be wirelessly connected to WS80A with Elite to download fetal ultrasound images and movies. Mothers can then easily share the ultrasound images or movies with others, and they can also keep track of their babies' growth using Hello Mom.

 for Android / for iOS

* Hello Mom is not an application for diagnosis.

5D Cine

WS80A with Elite provides 3D stereo images through Samsung 3D Smart TV. Mothers can enjoy these realistic images at home.

* Above features may not be available in some countries.

Versatility for extensive diagnostic needs

The comprehensive suite of unique and diagnostic tools enables the WS80A with Elite to **meet the needs of many applications** and **extend the boundaries of its functionality**.

S-Detect™

By simply clicking a suspicious lesion, S-Detect™ draws the lesion borders, suggests the characteristics of the lesion and generates lesion dimensions. S-Detect™ uses the Breast Imaging-Reporting and Data System (BI-RADS®) scores for standardized reporting and classification of lesions.
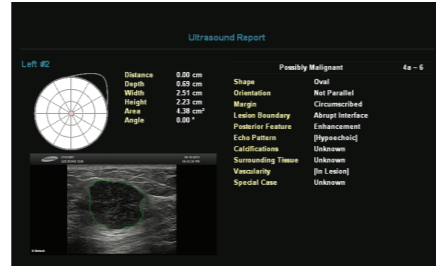
Exam report of S-Detect™

E-Breast™
(ElastoScan™ for Breast)

E-Breast technology calculates the strain ratio between the selected target and surrounding tissues. E-Breast™ requires only one ROI to be selected by the user, therefore enhancing efficiency and consistency.
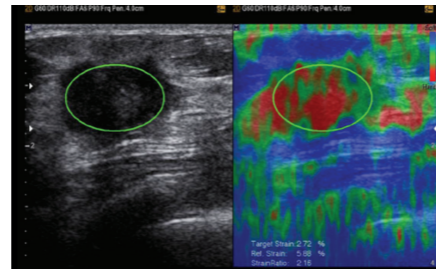
Breast elastography with strain index

E-Thyroid™
(ElastoScan™ for Thyroid)

An effective method for assessment and documentation of tissue stiffness, Elastoscan™ may prove an effective adjunct to conventional grayscale imaging, often providing more defined visualization of tumor images.
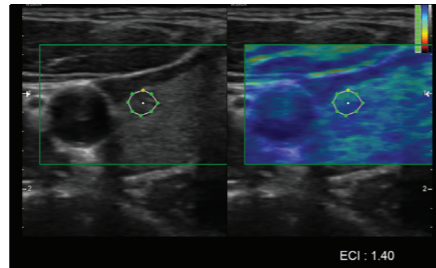
Thyroid elastography with ECI

ElastoScan™ for Gynecology

Highly sensitive ElastoScan™ for Gynecology helps identify early detection of lesions. It easily provides clinical information compared to conventional studies.
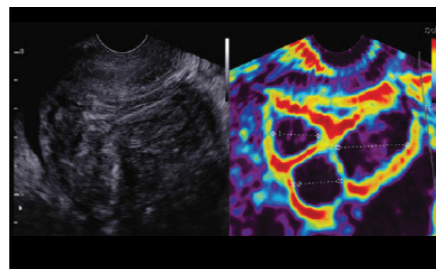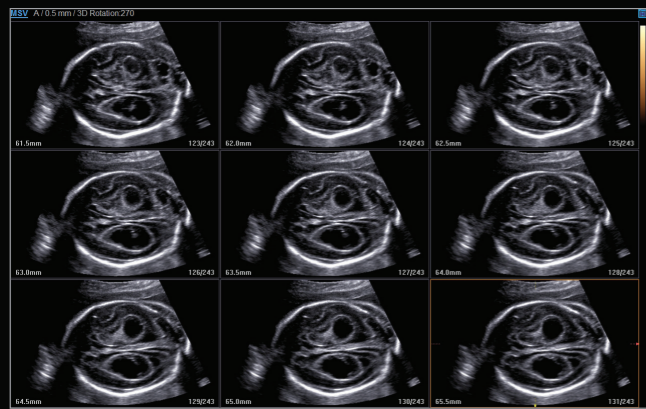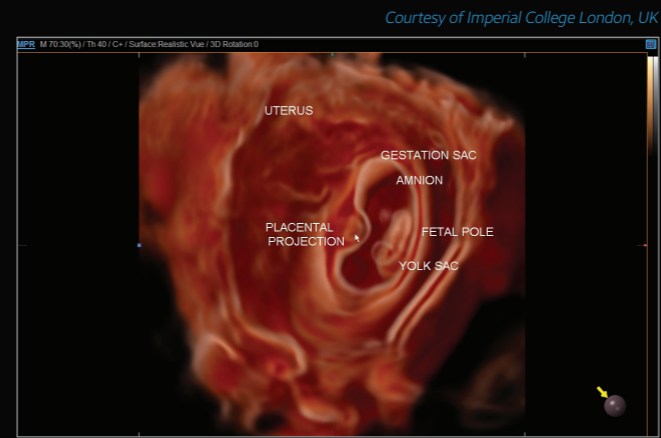

Elastography of Uterine with ElastoScan™

* Above features may not be available in some countries.

Exceptional image quality for women's health applications

Fetal brain with MSV™

Fetal heart in 4 chamber view with ClearVision™

UTERUS

GESTATION SAC

AMNION

PLACENTAL PROJECTION
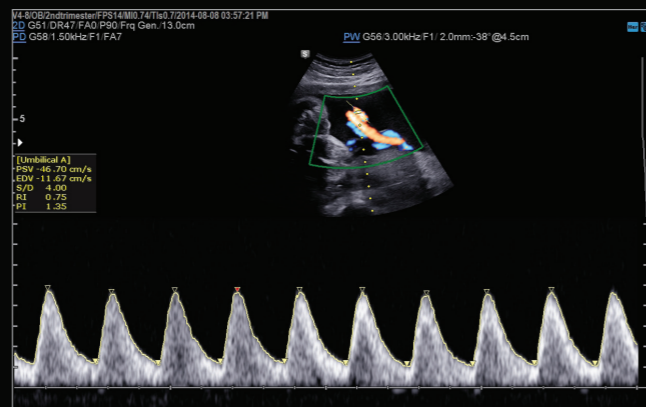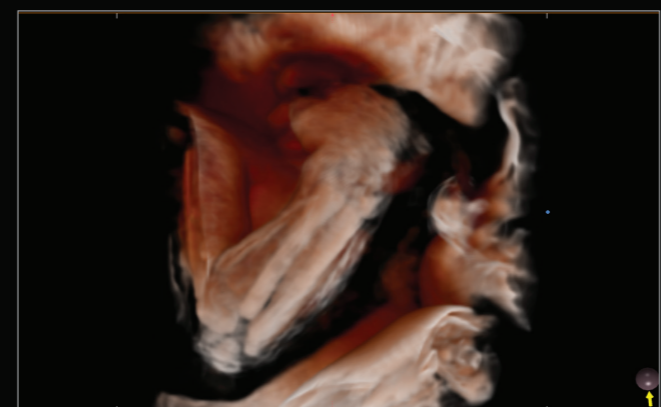
FETAL POLE

YOLK SAC

Embryo in Crystal Vue
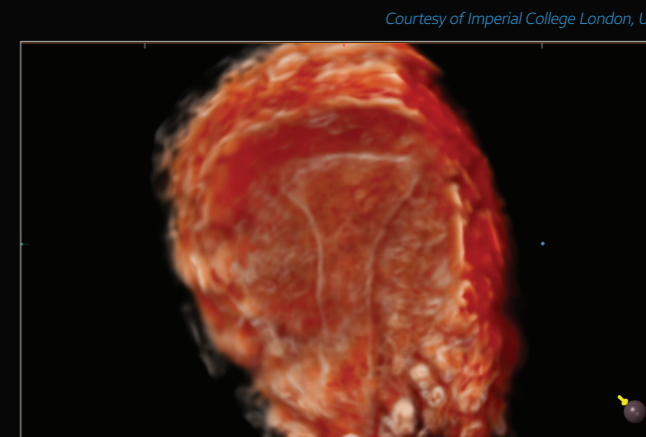

Realistic Vue at 14 week
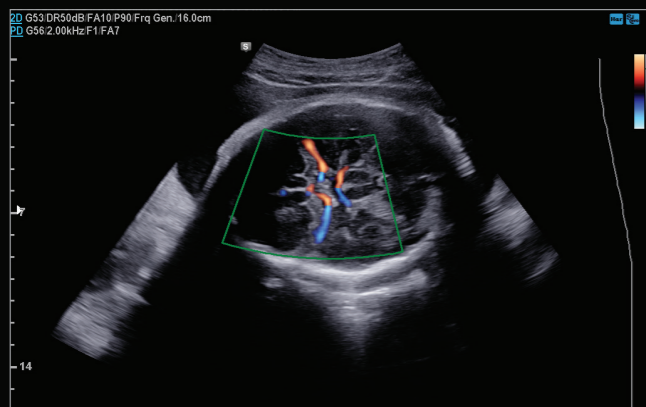

Fetal abdomen with ClearVision™
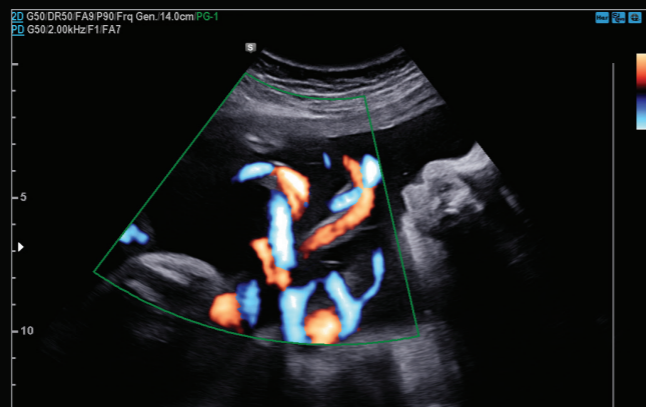

Umbilical artery with PW

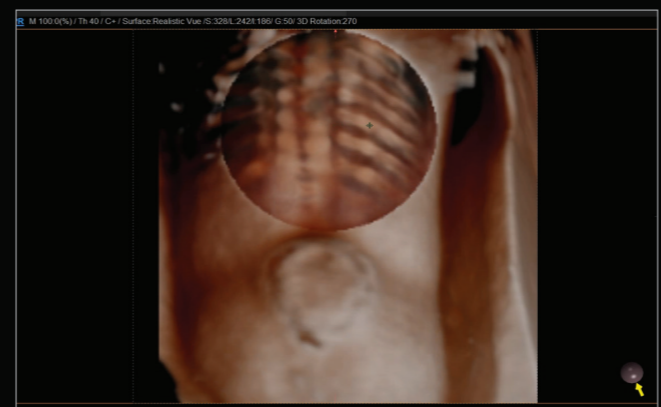Ulna and radius in Crystal Vue

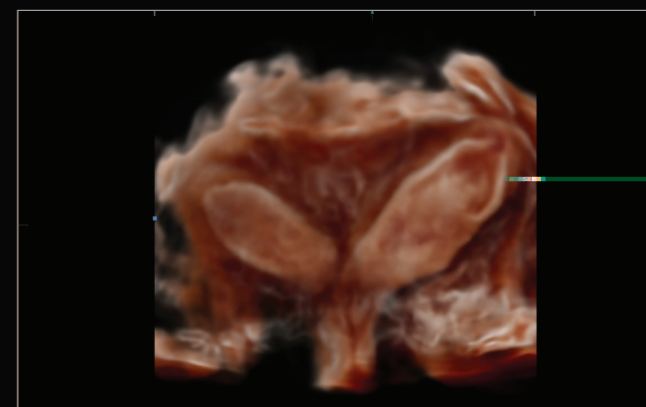

Uterus in Crystal Vue

Middle cerebral artery with S-Flow™

Umbilical cord with S-Flow™

Fetal spine in Crystal Vue

Bicornuate uterus in Crystal Vue

Designed for your convenience

With design aspects that enable clinicians to focus on imaging through features such as the large LED monitor and digital TGC, WS80A with Elite reduces stress when operating the system. It provides a comfortable environment as well as streamlined user interface.

1 23-inch LED monitor

The WS80A with Elite features a 23-inch full HD LED display, delivering excellent contrast resolution, image clarity and vibrant color in any lighting condition.
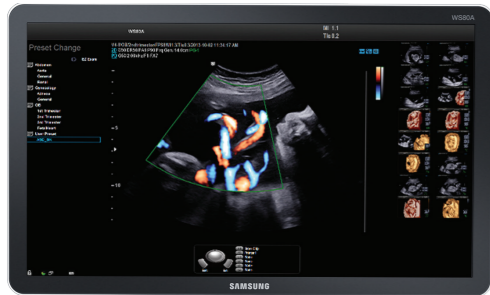
2 10.1-inch touchscreen

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

3 Default gel warmer

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

4 Transducer cable hangers

Users can arrange the transducer cables neatly on the 2 hangers on either side of the system.

5 Adjustable control panel

Smooth up and down lift allows you to adjust the system to your preferred height without straining.

6 Additional EC transducer holder

The WS80A with Elite features endocavity transducer holders. One is side-mounted on the console for convenience when performing gynecological scanning and the other endocavity transducer holder is positioned conveniently behind the console for discrete storage when not in use.

Superior transducers for superior imaging

The transducer line-up for WS80A with Elite includes superior S-Vue transducers and a wide-angle endocavity transducer that are optimized for women's health imaging.

Curved array transducers

CA2-9A S-Vue
• Application : abdomen, obstetrics, gynecology

CA3-10A S-Vue
• Application : abdomen, obstetrics, gynecology, pediatric, vascular

CA1-7A S-Vue
• Application : abdomen, obstetrics, gynecology

CA2-8A
• Application : abdomen, obstetrics, gynecology

CF4-9
• Application : pediatric, vascular

C2-6
• Application : abdomen, obstetrics, gynecology

SC1-6
• Application : abdomen, obstetrics, gynecology

Linear array transducers

LA2-9A
• Application : small parts, vascular, abdomen, musculoskeletal

LA4-18B
• Application : small parts, vascular, musculoskeletal

LA3-16A
• Application : small parts, vascular, musculoskeletal

L5-13
• Application : small parts, vascular, musculoskeletal

L3-12A
• Application : small parts, vascular, obstetrics, musculoskeletal

Volume transducers

CV1-8A S-Vue
• Application : abdomen, obstetrics, gynecology

LV3-14A
• Application :musculoskeletal, small parts, vascular

V4-8
• Application : abdomen, obstetrics, gynecology

V5-9
• Application : obstetrics, gynecology, urology

Endocavity transducers

EA2-11B
• Application : obstetrics, gynecology, urology

VR5-9
• Application : obstetrics, gynecology, urology

E3-12A
• Application : obstetrics, gynecology, urology

Phased array transducers
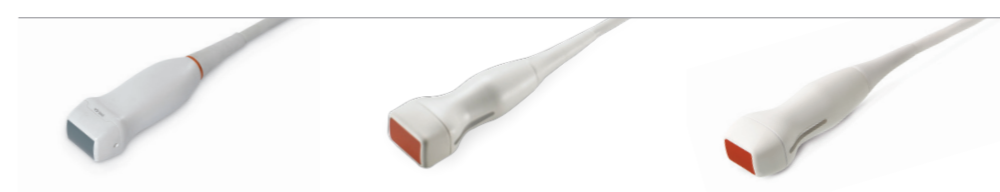
PM1-6A
• Application : abdomen, cardiac, TCD

PE2-4
• Application : abdomen, cardiac, TCD

PA3-8B
• Application : abdomen, pediatric, cardiac