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 commercialized the Live 3D technology in 2001 and since becoming 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 V3.0-FT-151008-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.

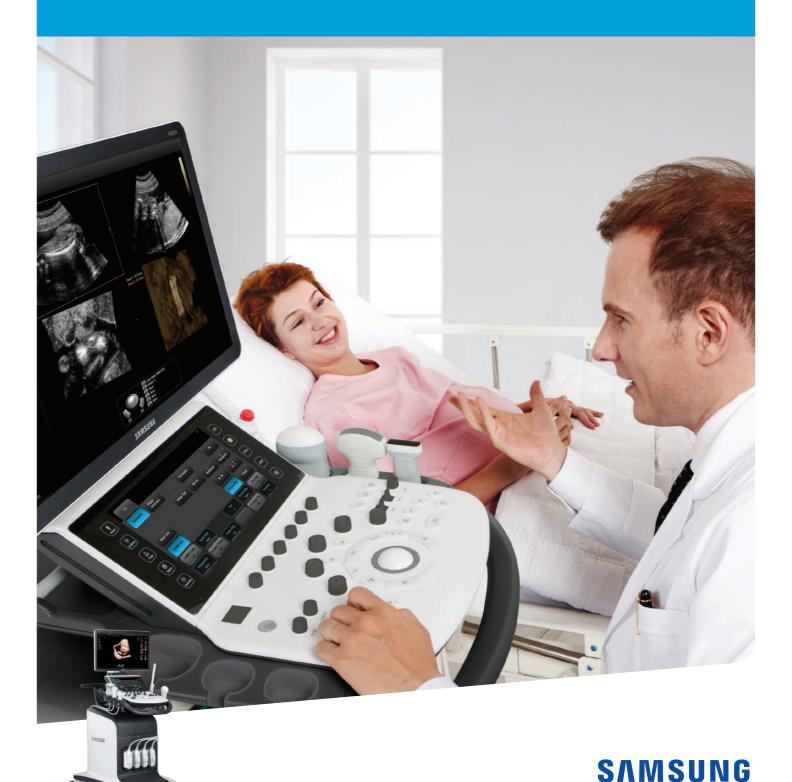
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The Premium Dimension

Ultrasound system **WS80A**



Redefining ultrasound for woman's health

The premium dimension in the ultrasound for women's health has opened up with WS80A, a groundbreaking ultrasound system that provides superior image performance for a variety of women's health exams. With stylish Samsung design and innovative features including the 5D technologies, MPI and ElastoScan™, WS80A redefines premium ultrasound for women's health.



Enhanced vision for diagnostic accuracy

Making accurate diagnosis on patients is absolutely critical for physicians, and WS80A is designed to satisfy those needs even for the most complex women's health exams. With state-of-the art image processing technologies, physicians get clearer, more detailed images that are both life-like and void of artifact noise on a crisp, high resolution LED monitor. Furthermore, advanced probe technologies such as single crystal add to the image performance by providing enhanced vision of the scanning areas, thus ensuring confidence in the users' clinical decisions.

Hybrid imaging engine evo

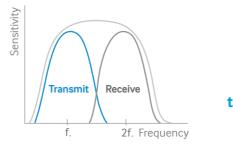
Hybrid imaging engine evo combines more powerful data processing and noise reduction capabilities to provide optimal 2D, 3D as well as color Doppler image quality with fast frame rates. This advanced system architecture provides more detailed 2D and 3D images to help improve diagnostic accuracy.

ClearVision™

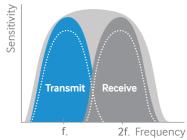
ClearVision™ offers speckle reduction, edge enhancement and contrast enhancement for clear and natural images. In addition, ClearVision™ improves on previous technology with application-specific optimization and advanced temporal resolution in live scan mode.

S-Vue transducers

The S-Vue transducers (CV1-8A, CA1-7A) 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.







Wide angle endocavity transducer

The 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.



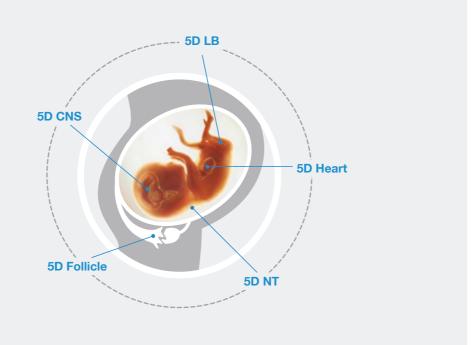
Uterus and ovary

 $^{{}^*\}mathsf{Compared} \text{ with the conventional Samsung transducers}$

5D advanced diagnostic solutions

Experience premium care in women's health

WS80A's 5D total solutions bring exceptional productivity in exam workflow. 5D Solutions allow utilization of the volume data providing diagnostic planes and measurements automatically. Also, it provides useful information to evaluate various fetal conditions or women's health issues.

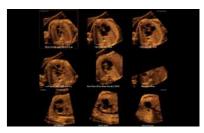


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5D Heart

(Fetal heart examination)

5D Heart allows interrogation of a STIC (spatiotemporal image correlation) volume dataset using "intelligent navigation" technology, which automatically generates nine standard fetal echocardiography views simultaneously in a single template.



Fetal heart examination with 5D Heart

5D CNS

(Fetal brain measurement)

5D CNS offers 6 measurements (BPD, HC, OFD, Vp, TCD, CM) from 3 transverse planes of a fetal brain which are the key indicators for intuitive fetal brain visualization. It improves throughput with only a 2 click operation.



Fetal brain measurement with 5D CNS

5D LB

(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.



Fetal long bone measurement with 5D LB

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 automatically detected mid-sagittal view for intuitive confirmation.

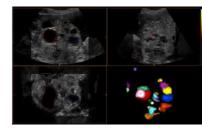


NT measurement with 5D NT

5D Follicle

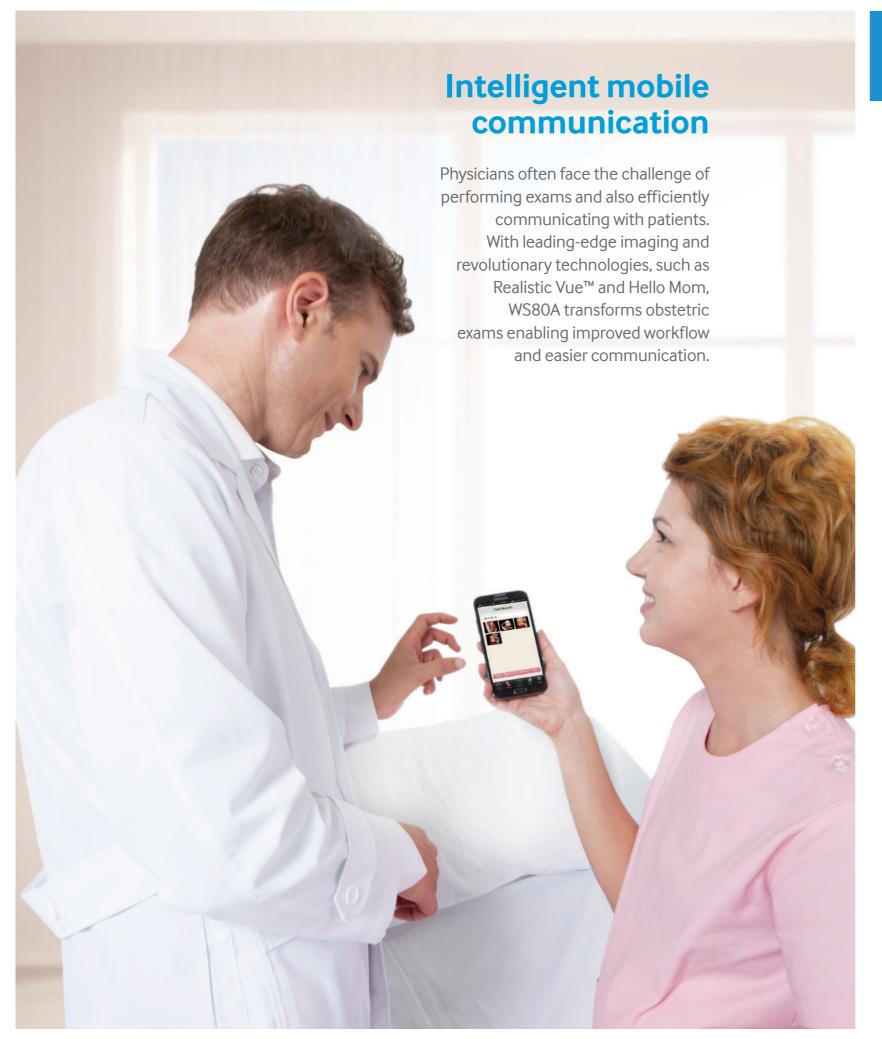
(Follicle measurement)

Sonographic parameters have been proven to be effective indicators when assessing in-vitro fertilization (IVF). WS80A's 5D Follicle finds follicles automatically and measures the size and the status of each follicle to provide useful information.



Follicle measurement with 5D follicle

^{*} Above features may not be available in some countries.



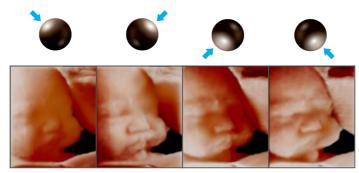
Realistic image rendering and Samsung's enhanced sharing technology

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™



Realistic Vue™ with different directions of the light

Intelligent image sharing

Wireless connection USB memory

Hello Mom

Hello Mom is an Android smartphone and iPhone application for pregnant mothers that can be wirelessly connected to WS80A 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

5D Cine

3D TV

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

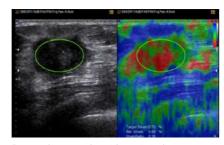
^{*} Above features may not be available in some countries.

Efficiency in diagnosis

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.

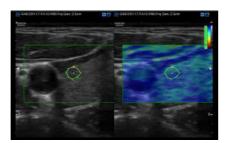


Breast elastography with strain index

E-Thyroid™

(ElastoScan™ for thyroid)

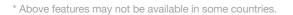
An effective method for assessment and documentation of tissue stiffness, Elastoscan™ may prove an effective adjunct to conventional grayscale imaging, often providing more defined visualization of tumor images.

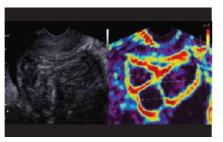


Thyroid elastography with ECI

ElastoScan[™] for gynecology

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





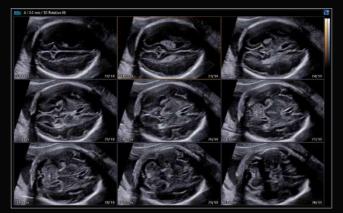
Elastography of uterine with ElastoScan $^{\text{\tiny TM}}$

For higher patient throughput

In order to meet the demands of the increasingly busy clinical environments, hospitals have to continuously enhance their productivity. Capabilities of WS80A include automated functions that improve the diagnostic workflow. Thus, exams can be performed faster, leading to higher patient throughput and increased productivity of the department.



Ideal image quality for women's health applications



26 weeks fetal brain with MSV™



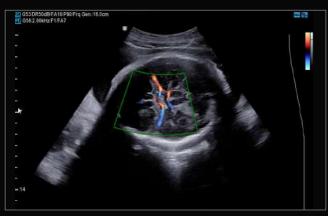
14 weeks fetus with Realistic Vue™



Fetal heart in 4 chamber view with ClearVision™



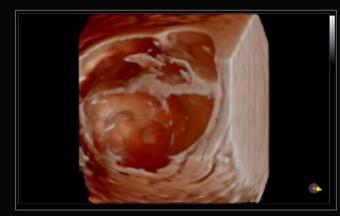
26 weeks fetal heart in 3 chamber view with ClearVision™



Middle cerebral artery with S-Flow™



Umbilical cord with S-Flow™



Ovarian cyst with Realistic Vue™



Ovarian cysts with S-Flow™



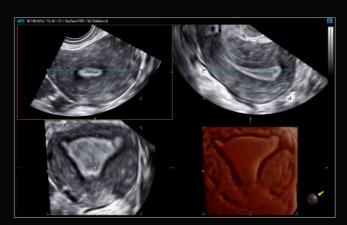
26 weeks fetal thorax and abdomen with ClearVsion™



Mild pyelectasis with ClearVision™



Uterus with Oblique View, HDVI™



Uterus with Realistic Vue™

The Premium Dimension

Stress-free performance

With design aspects that enable physicians to focus more on imaging through features such as touch screen and digital TGC, WS80A reduces stress and labor when operating the system. It provides a more beneficial environment, allowing the users more time to concentrate on an efficient and effective diagnosis.

1 21.5-inch LED monitor

The WS80A features a 21.5-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 Adjustable control panel

Smooth up and down lift allows the user to adjust the system to the user's preferred height without straining.







4 Transducer cable hangers

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



5 Default gel warmer

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



6 Additional EC transducer holder

An additional endocavity (EC) transducer holder on the system prevents stressful situations where users accidentally knock over EC transducers which do not perfectly fit in standard transducer holders.



Superior transducers for superior imaging

Curved array transducers



CA1-7A

 Application: abdomen, obstetrics, gynecology



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



• Application : abdomen, obstetrics, gynecology

C2-6



SC1-6

· Application: abdomen, obstetrics, gynecology

Endocavity transducers



VR5-9

 Application: obstetrics, gynecology, urology



 Application: obstetrics, gynecology, urology



EA2-11B

• Application: obstetrics, gynecology, urology

Linear array transducers



L5-13

• Application : small parts, vascular, musculoskeletal



L3-12A

 Application: small parts, vascular, musculoskeletal



LF5-13

· Application: small parts, vascular, musculoskeletal

Volume transducers



CV1-8A

• Application : abdomen, obstetrics, gynecology

· Application: abdomen, obstetrics, gynecology



V5-9

• Application : obstetrics, gynecology, urology

Samsung Ultrasound WS80A I 15 The Premium Dimension