

# V8

Performance  
Versatility  
Intelligence



# Combining performance and intelligence

The V8 ultrasound system powered by Samsung's Crystal Architecture™ combines exquisite image quality with a streamlined user interface enabled by Intelligent Assist tools. The reengineered workflow fulfills the needs of today's busy clinical environment. Samsung is continuously seeking new ways to elevate diagnostic confidence with greater image clarity, enhanced accuracy, and improved work efficiency.



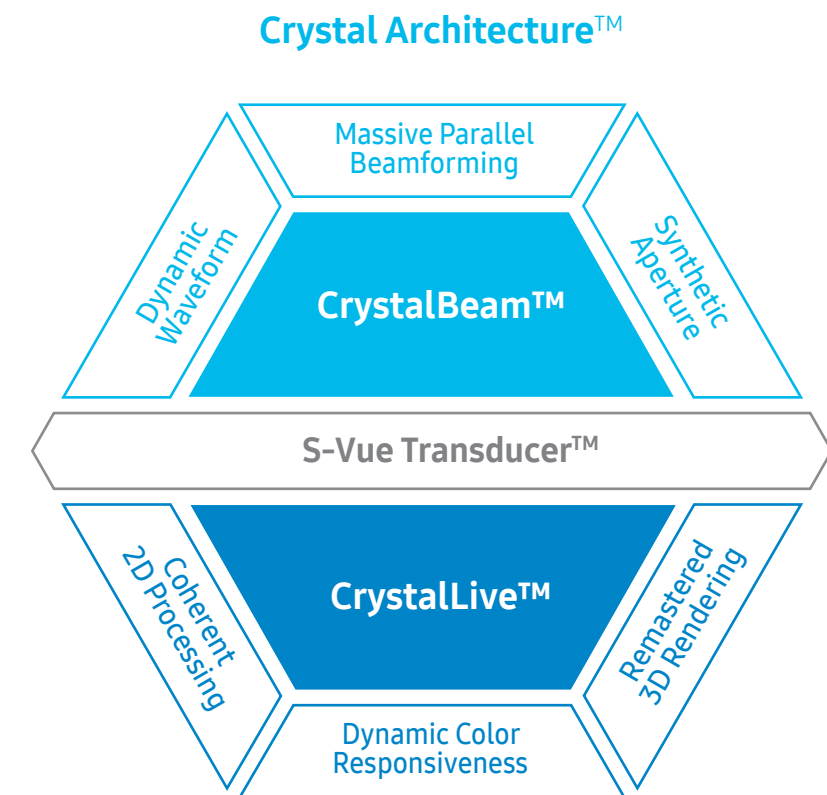
Scan here to watch the V8 product video



## Redefined imaging technologies powered by Crystal Architecture™

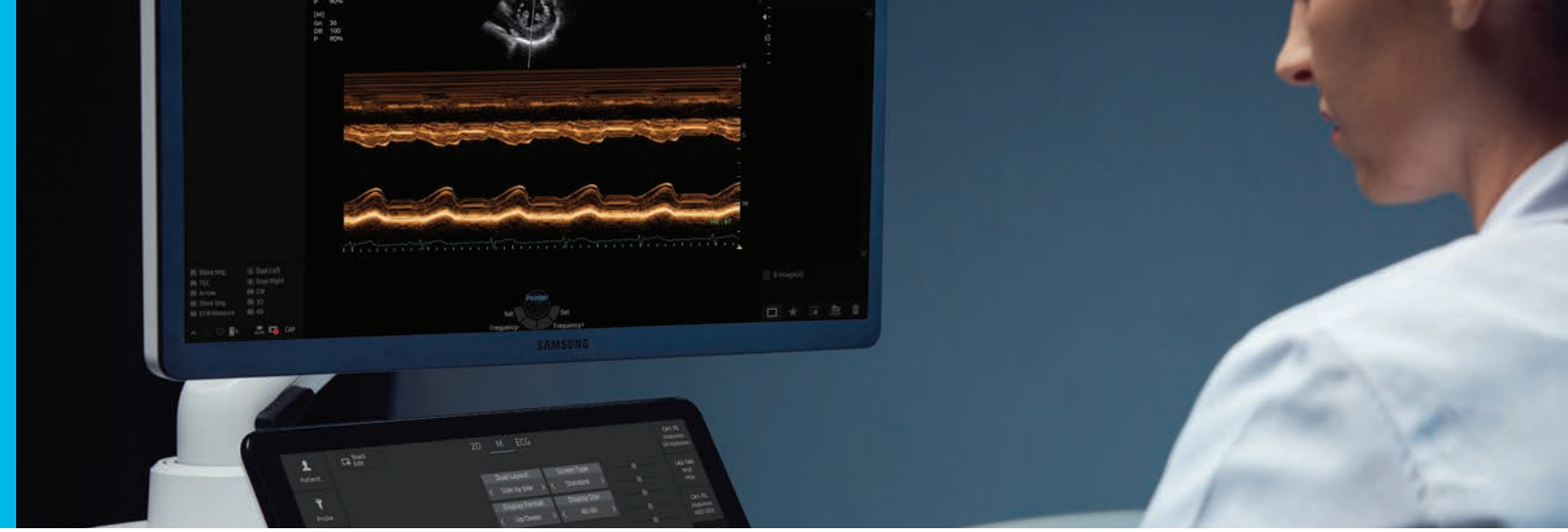
Crystal Architecture is the core of our exceptional image clarity and penetration, built upon a combination of innovative beamforming (CrystalBeam™), sophisticated image processing (CrystalLive™) and advanced S-Vue Transducers™ to produce clear, uniform and high resolution images.

Crystal Architecture empowers ultrasound professionals with diagnostic confidence on even the most challenging of patients returning attention to the individual patient and not excessive manipulation of controls.

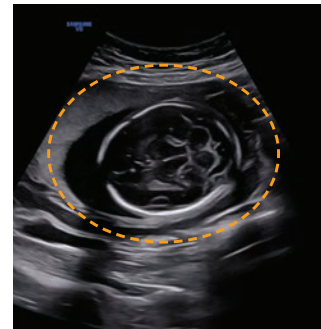


# Exquisite imaging quality for reliability and confidence

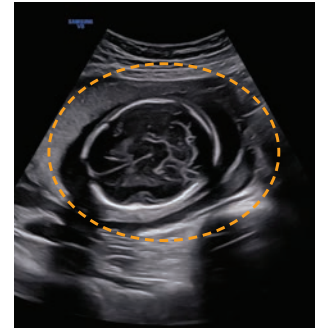
Exceptional image performance is powered by Samsung's core imaging engine, Crystal Architecture™. The premium digital imaging engine combines the benefits of enhanced 2D image processing and detailed expression of color signal processing.



**ShadowHDR™** is designed to suppress shadows and enhance the clarity of displayed grayscale images.



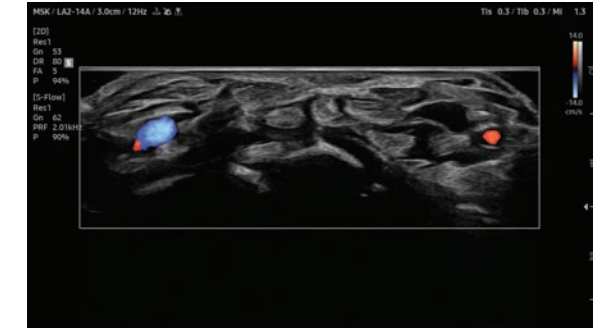
Fetal brain



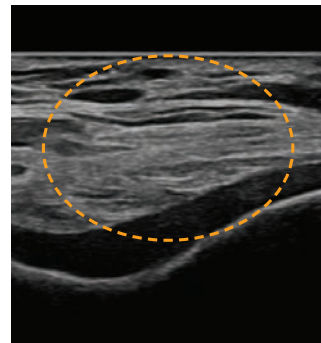
Fetal brain with ShadowHDR™



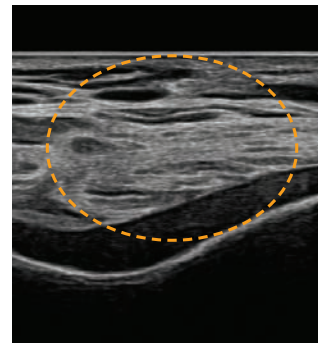
**S-Flow™**, a sophisticated color Doppler technology with greater sensitivity, S-Flow can detect low intensity blood flow. It enables accurate diagnosis when blood flow examination is especially difficult.



Finger flexor tendons with S-Flow™



Quadriceps tendon



Quadriceps tendon with HQ-Vision™



**HQ-Vision™** compensates for the natural signal distortion as sound propagates through tissue to display maximum pixel sharpness.



Kidney with MV-Flow™

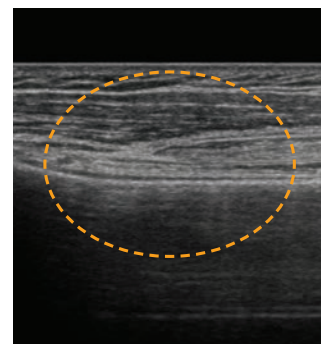


**MV-Flow™** is an advanced Doppler technology providing detailed documentation of microvascular perfusion into tissues and organs.

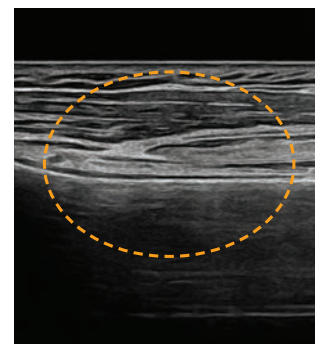
\*Optional Feature



**ClearVision™** is a proprietary noise reduction filter that improves interface definition and creates sharper 2D images for optimal diagnostic performance. ClearVision also provides application-specific optimization and advanced temporal resolution in live scan mode.



Biceps tendon

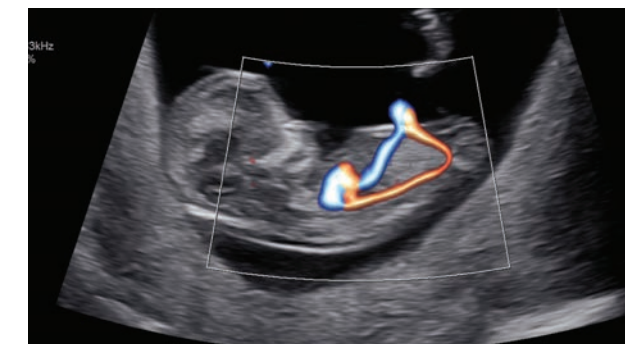


Biceps tendon with ClearVision™



**LumiFlow™** displays a three-dimensional "like" appearance to 2D color Doppler enhancing spatial comprehension of blood vessels.

\*Optional Feature

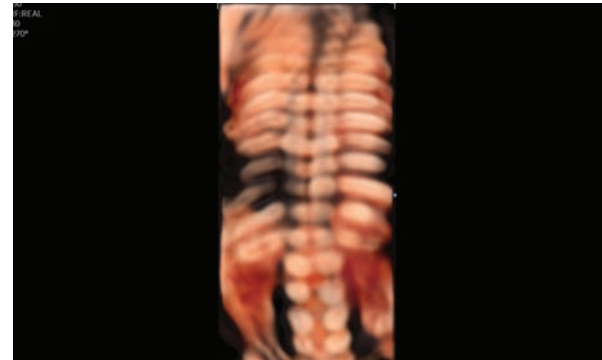


1st trimester with S-Flow™ & LumiFlow™



**CrystalVue™** is an advanced volume rendering technology that enhances visualization of both internal and external structures in a single rendered image. The resulting image reveals more definitive documentation of skeletal dysplasia, early neural tube defects, as well as first trimester brain development.

\*Optional Feature



Fetal spine with CrystalVue™



**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. From detailed understanding of complex pathology to patient consultation and education, RealisticVue is a versatile and important tool for effective diagnostics and communication.

\*Optional Feature

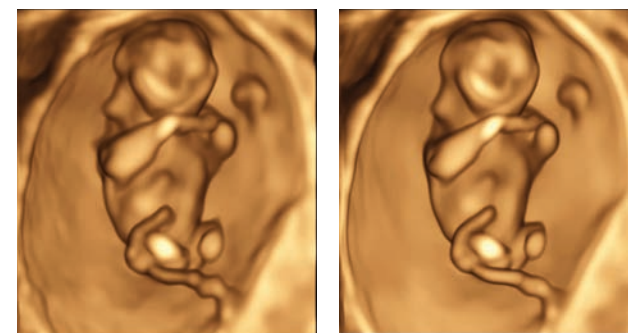


Fetal face with RealisticVue™



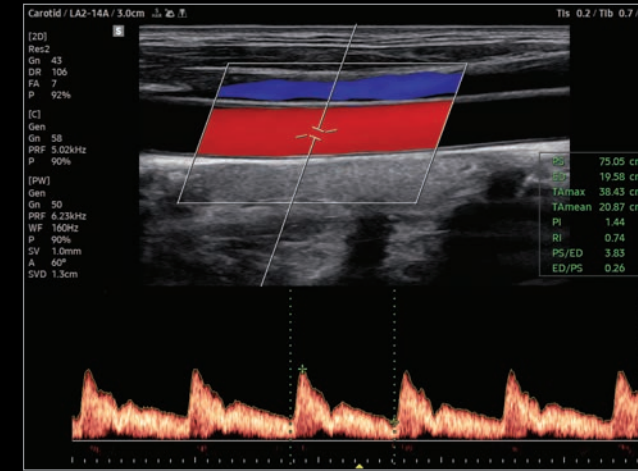
High Definition Volume Imaging (HDVI) provides detailed edge definition and exceptional clarity of three-dimensional anatomy. HDVI is especially useful when visualizing three-dimensional skeletal dysplasia and spinal defects.

\*Optional Feature



Early fetus

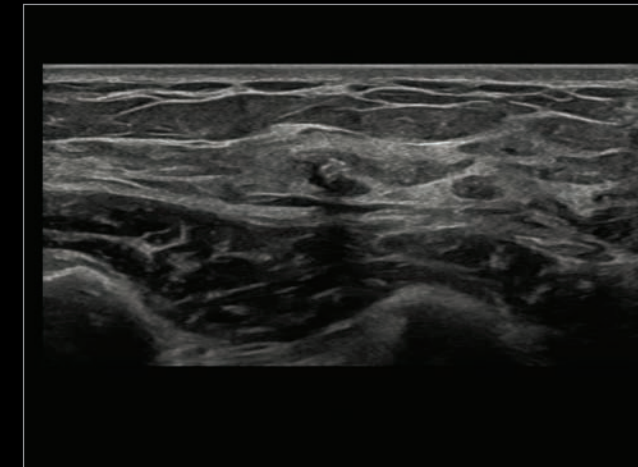
Early fetus with HDVI™



Common carotid artery Doppler



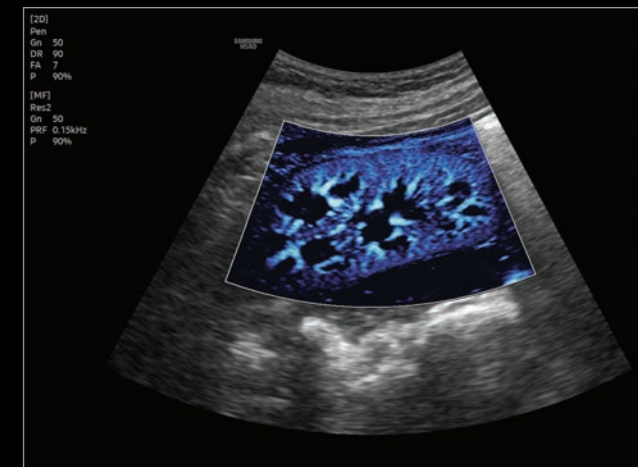
BPD/HC measurement with BiometryAssist™



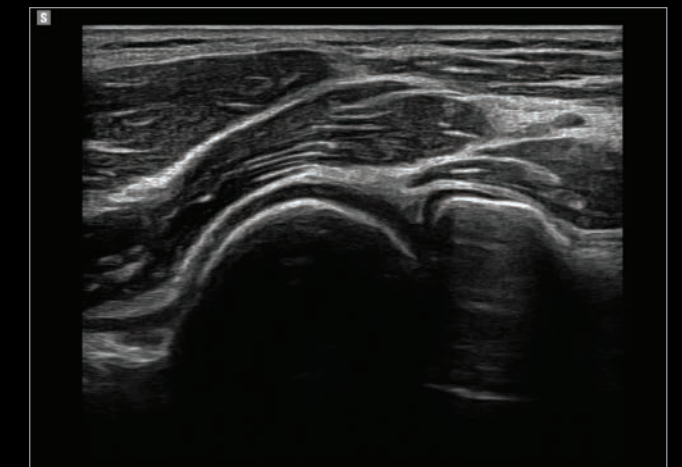
Calcification in breast tissue with ClearVision™



Umbilical cord with MV-Flow™



Kidney with MV-Flow™



Elbow with HQ-Vision™

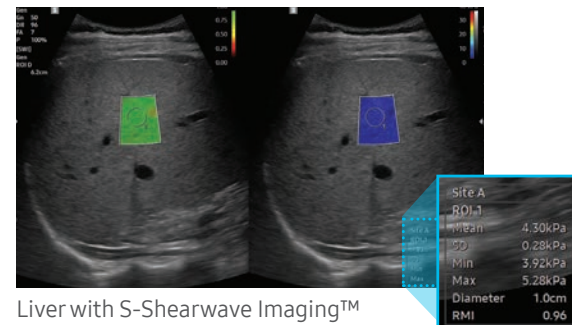
# Intelligent Assist tools for General Imaging

Intelligent Assist features create a simplified user interface. V8 is equipped with a range of tools and semi-automated features that guide users to an accurate diagnosis with enhanced diagnostic confidence.

## S-Shearwave Imaging™

**S-Shearwave Imaging™** allows for the non-invasive assessment of the stiffness for tissue/lesions in both liver and breast applications. Color-coded elastogram, quantitative measurements, dual or single display option, and user-selectable ROI functions are especially useful for more confident assessment of breast and liver diseases.

\*Optional Feature



Liver with S-Shearwave Imaging™

## EzHRI™



**EzHRI (Hepato Renal Index)** is a semi-automated process to quantify liver steatosis by comparing echogenicity of liver parenchyma to renal cortex. EzHRI positions two ROI on ultrasound image (liver and kidney) to calculate HepatoRenal Index.

\*Optional Feature

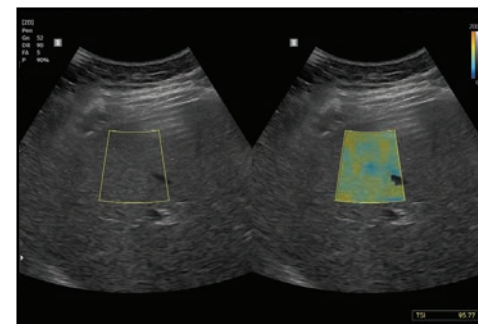


Liver using EzHRI™

## TAI™

**TAI (Tissue Attenuation Imaging)** provides quantitative tissue attenuation measurement to assess steatotic liver changes.

\*Optional Feature



Liver using TAI™

## TSI™

**TSI (Tissue Scatter Distribution Imaging)** provides quantitative tissue scatter distribution measurement to assess steatotic liver changes.

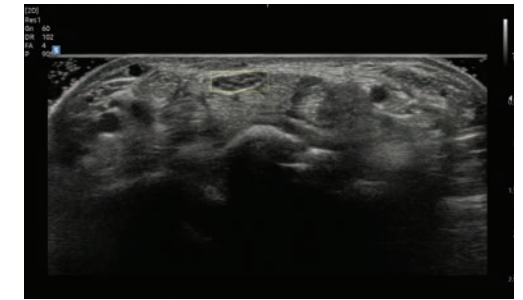
\*Optional Feature

## NerveTrack™



**NerveTrack™** is a function that detects and provides information of the location of nerve area in real-time during ultrasound scanning.

\*Optional Feature



NerveTrack™

## NeedleMate+™

**NeedleMate+™** dramatically enhances needle visualization when performing commonly used intervention procedures. Beam Steer allows the linear ultrasound image to be steered and improves needle visibility when the angle of insonation and the needle are perpendicular to each other.

## S-Fusion™

**S-Fusion™** enables simultaneous localization of a lesion using real-time ultrasound in conjunction with other volumetric imaging modalities. Samsung's auto registration helps quickly and precisely fuse the images, increasing efficiency and reducing procedure time. S-Fusion™ enables precise targeting during interventional and other advanced clinical procedures.

\*Optional Feature

## CEUS+™

**CEUS+™** is a contrast enhancement imaging technology that utilizes the characteristics of ultrasound contrast agents. The microbubble contrast agent injected into the body through the vein or alike is subjected to perform nonlinear resonance due to stimulation of ultrasound energy. In addition to the nonlinear signal generated by this method, the ultrasound contrast image is implemented by using the harmonic signal and thus utilized for the diagnosis based on the contrast characteristics over time.

\*Optional Feature

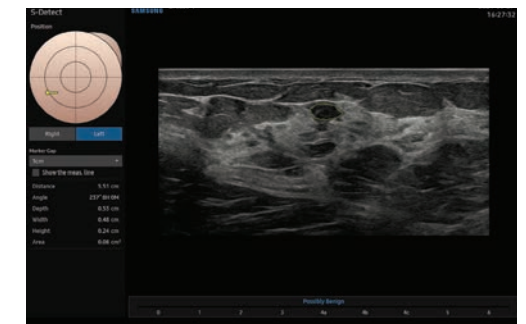
## S-Detect™ for Breast



**S-Detect™ for Breast** Performs detailed analysis of selected breast lesions incorporating BI-RADS ATLAS (Breast Imaging-Reporting and Data System Atlas) to provide standardized reporting for more comprehensive assessment and efficiency of breast examinations.

\*Optional Feature

\*BI-RADS ATLAS: It is a registered trademark of ACR and all rights reserved by ACR.



S-Detect™ for Breast

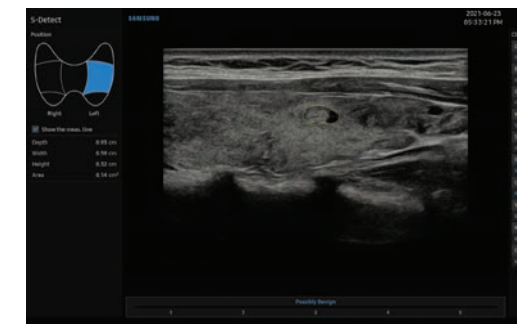
## S-Detect™ for Thyroid



**S-Detect™ for Thyroid** Performs detailed analysis of selected thyroid lesions incorporating ATA guidelines to provide standardized reporting for more comprehensive assessment of thyroid examinations while helping to streamline work flow.

\*Optional Feature

\*ATA: American Thyroid Association \*BTA: British Thyroid Association

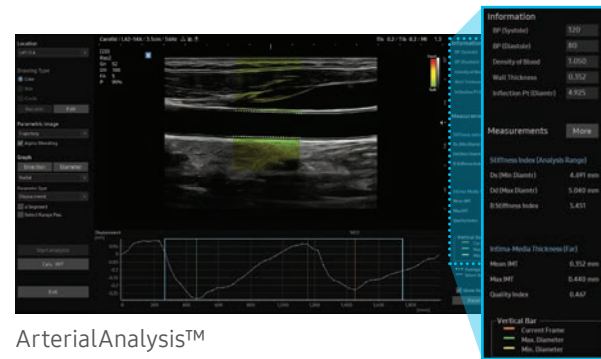


S-Detect™ for Thyroid

## ArterialAnalysis™

ArterialAnalysis™ detects functional changes of vessels, providing measurement values such as the stiffness, intima-media thickness and pulse wave velocity of the common carotid artery. Since the functional changes occur before morphological changes, this technology supports the early detection of cardiovascular disease.

\*Optional Feature



ArterialAnalysis™

## AutoIMT™

AutoIMT+ is a screening tool to analyze a patient's potential risk of cardiovascular disease. It allows easy intima-media thickness measurement of both the anterior and posterior wall of the common carotid with the click of a button.

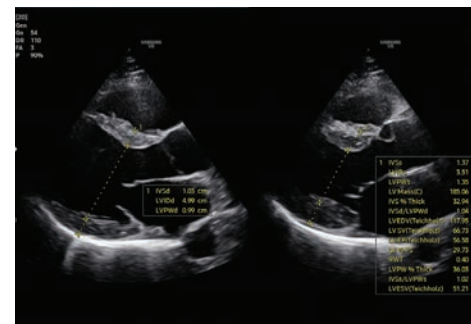
\*Optional Feature

## HeartAssist™



HeartAssist (for adults) is a semi-automatic measurement feature designed to recognize and quantify cardiac anatomy facilitating consistency of measurements and efficient workflow.

\*Optional Feature

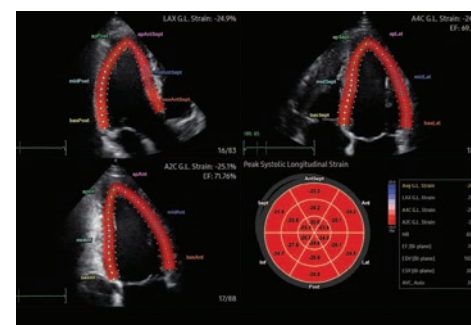


HeartAssist™

## Strain+

Strain+ is a quantitative tool for global and segmental wall motion of the left ventricle (LV). In Strain+, three standard LV views and a Bull's Eye are displayed in a quad screen for easy and quick assessment of the LV-function.

\*Optional Feature



Strain+

## StressEcho

StressEcho package includes wall motion scoring and reporting. It includes exercise StressEcho, pharmacologic StressEcho, diastolic StressEcho and free programmable StressEcho.

\*Optional Feature

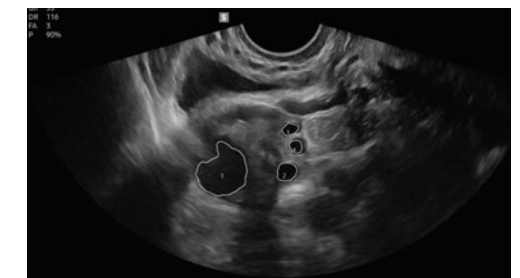
# Intelligent Assist tools for Women's Imaging

Simplified operation and enhanced diagnostic confidence for obstetrics and gynecology is achieved with built-in Intelligent Assist features. V8 is equipped with a range of tools and semi-automated features that guide healthcare professionals to an accurate diagnosis. V8 provides the time-saving features that women's healthcare professionals need in today's busy working environment.

## 2D Follicle™

2D Follicle™ identifies and measures the size of follicles based on a 2D image and provides information about the status during gynecology examinations.

\*Optional Feature

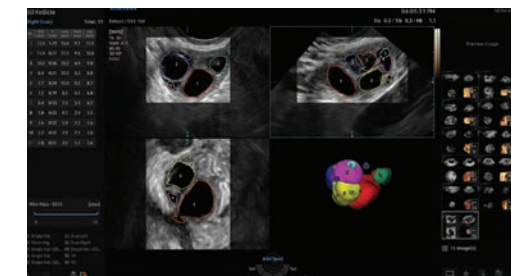


2D Follicle™

## 5D Follicle™

5D Follicle™ is a 3D volume measurement tool that identifies and measures multiple ovarian follicles for rapid assessment.

\*Optional Feature

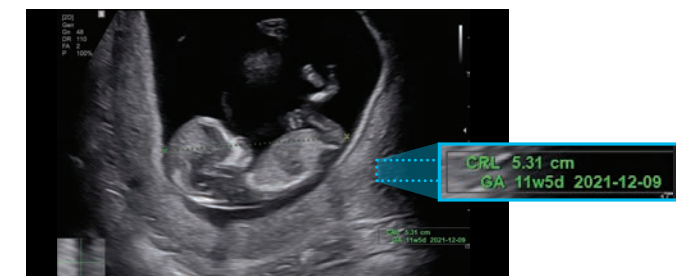


5D Follicle™

## BiometryAssist™



BiometryAssist™ is a semi-automatic technology for biometric measurement, Biometry Assist™, enables users to measure the growth of the fetus more quickly and with greater accuracy while maintaining exam consistency.



BiometryAssist™

## ViewAssist™

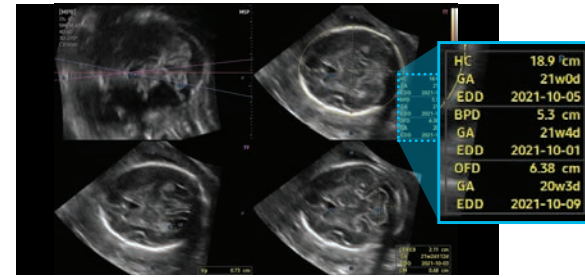
ViewAssist™ provides automatic recognition and text labeling of fetal cardiac anatomy to enhance clinical documentation and workflow.

\*Optional Feature

## 5D CNS+™

5D CNS+™ simplifies the fetal brain assessment by automatically providing nine planes simultaneously with biometric measurements. This innovative tool aids in visualization of intracranial anomalies.

\*Optional Feature

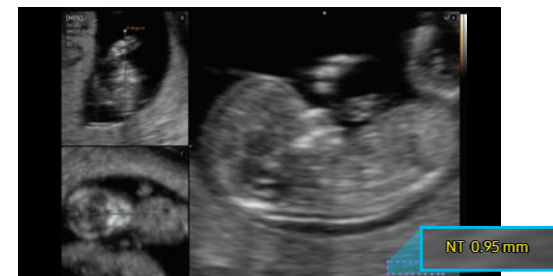


5D CNS+™

## 5D Heart Color™

5D Heart Color™ identifies 9 standard planes of the heart using fetal STIC data and important information about fetal heart development, complying with AIUM guidelines. It also offers dedicated Preset, Predictive Cursor, Diagnostic Alert, and heart Diastole/Systole timepoints.

\*Optional Feature



5D NT™

## 5D NT™

5D NT™ automatically locates the mid-sagittal plane from an acquired 3D dataset and measures the maximum NT distance, reducing inter-user variability.

\*Optional Feature

## 5D Limb Vol.™

5D Limb Vol.™ is a semiautomated tool to estimate fetal weight by quickly and accurately measuring upper arm or thigh volumes from 3 simple seed points on a single volume data set.

\*Optional Feature

## IOTA-ADNEX\*™

IOTA-ADNEX\* is an ovarian tumor classification solution of IOTA Group. Applying the ADNEX model to the system, it can perform all procedures from the initial scan to the final report in the ultrasound diagnosis system.

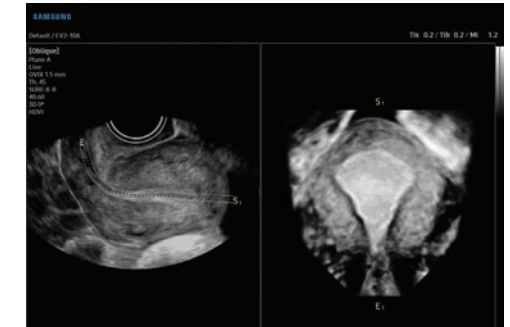
\* IOTA-ADNEX: International Ovarian Tumor Analysis-Assessment of Different Neoplasias in the adnexa

\*Optional Feature

## Uterine Contour™

Uterine Contour™ allows healthcare professionals to accurately examine the endometrium of the uterus by automatically detecting the coronal plane of the uterus from a 3D acquisition. In addition, it provides 2 classification options (ESHRE/ESGE, ASRM) to assist in analyzing and assigning the uterine shape and classification within a patient's report.

\*Optional Feature



Uterine Contour™

## UterineAssist™

UterineAssist™ is based on Deep Learning technology, automatically measures the size and shape of the uterus, assisting in detecting signs of uterine-related abnormalities, as well as reducing scan time.


\*Optional Feature

## E-Cervix™

E-Cervix™ measures stiffness of the cervical area. Using elasticity images that help predict preterm birth and induced labor, it enhances reproductivity and reduces inter-observer variation by using a sum of various elastograms acquired for several seconds.

\*Optional Feature

## LaborAssist™

 LaborAssist™ provides information of the progress of delivery by the automatic measurement of AoP (Angle of Progress) and the direction of the fetal head. This not only helps in effective communication between the healthcare professionals and mothers, but also assists in making delivery decisions for the healthcare professionals.

\* AoP complies with the metrics specified in the ISUOG Guideline.

\*Optional Feature

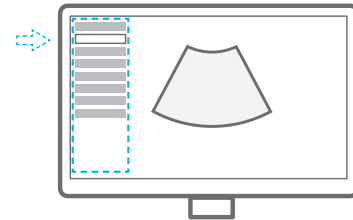


# Reengineered workflow and design

Streamline workflow to enhance efficiency with V8's convenient features that minimize steps and keystrokes. The redesigned user interface provides quick & easy access to routine system functions.

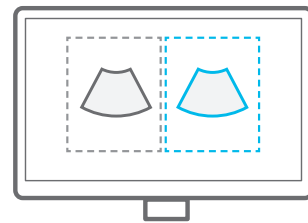
## EzExam+™

EzExam+™ transforms the ultrasound examination into a well-organized streamlined process. EzExam+ enables the user to create an efficient diagnostic environment storing optimized and preferred protocols within the EzExam+ function control.



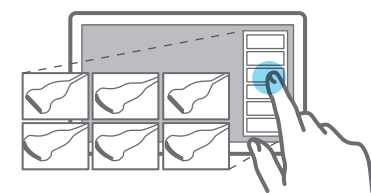
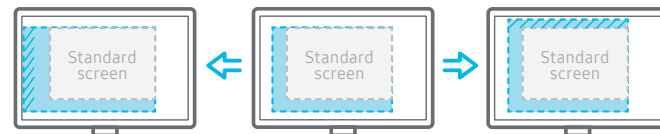
## EzCompare™

EzCompare™ automatically matches the image settings, annotations, and bodymarkers from the prior study.



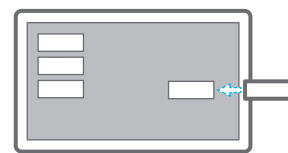
## See images in expanded view

Ultrasound exams can be performed while viewing images/cines in a variety of expanded ratios.



## QuickPreset

With one touch, the user can select the most common transducer and preset combinations. Quick Preset maximizes efficiency to make a full day of scanning simple and easy.



## TouchEdit

A customizable touchscreen allows the user to move frequently used functions to the first page.



Access directly to RIS from the system

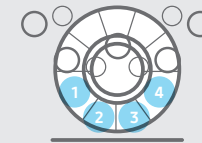
## RIS Browser

Function that improves the workflow by allowing access to RIS through the embedded browser in the system. This allows for post processing without the need to move to a PC after scanning.



## 1 14 inch tilting touch screen

Samsung's tilting touch screen can be adjusted to accommodate user's viewing preferences.



## 2 Assign functions to the buttons near the trackball

Depending on the ultrasound inspection items, the functions assigned to the buttons around the trackball can be utilized to reduce the hassle of menu selection.



## 3 Save image data directly to USB with ADVR™ Option

QuickSave function allows image data to be saved directly onto a USB drive during the exam.



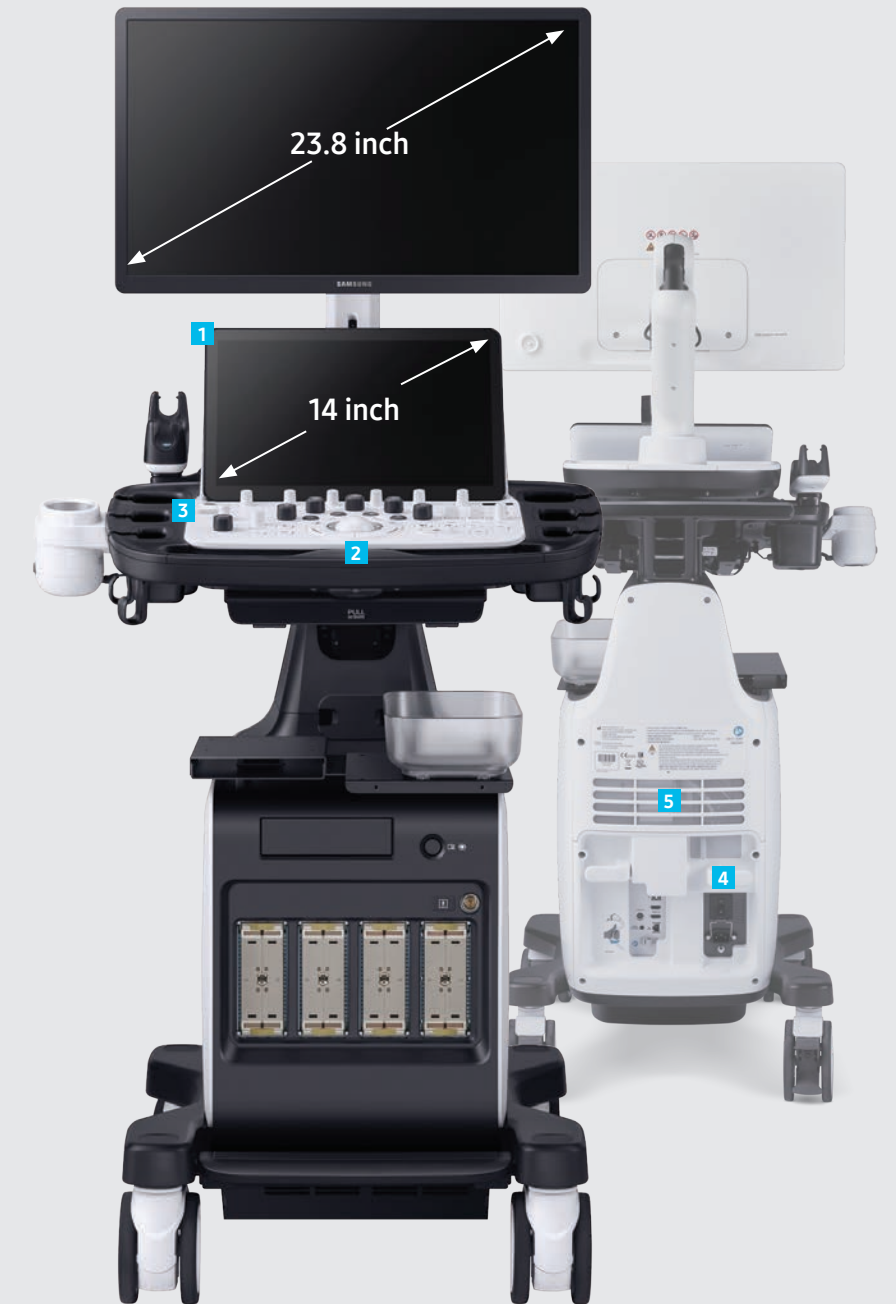
## 4 Use the system when AC power is temporarily unavailable

BatteryAssist™ provides the system with battery power. This serves two important purposes. It enables users to perform scans and transport the ultrasound system to other locations in environments where AC power may not be available temporarily.



## 5 Effective cooling system

An effective airflow system cools down the ultrasound system by continuously letting heat out and reducing fan noise.





# Comprehensive selection of transducers

## Curved array transducers



**CA1-7S**  
Abdomen, Obstetrics,  
Gynecology, Pediatric,  
Musculoskeletal, Vascular,  
Urology, Thoracic



**CA3-10A**  
Abdomen, Obstetrics,  
Gynecology, Pediatric,  
Musculoskeletal, Vascular,  
Urology, Thoracic



**CA4-10M**  
Abdomen, Obstetrics,  
Gynecology, Pediatric,  
Musculoskeletal, Vascular,  
Urology

## Phased array transducer



**PA1-5A**  
Cardiac, Vascular, Abdomen,  
Pediatric, TCD, Thoracic



**PA3-8B**  
Cardiac, Vascular, Abdomen,  
Pediatric, TCD, Thoracic

## Linear array transducers



**PA4-12B**  
Cardiac, Vascular, Abdomen,  
Pediatric, TCD, Thoracic



**LA2-14A**  
Small parts, Vascular,  
Musculoskeletal, Abdomen,  
Pediatric, Thoracic



**LA4-18A**  
Small parts, Vascular,  
Musculoskeletal, Abdomen,  
Pediatric



**LA3-22AI**  
Intraoperative,  
Musculoskeletal



**LA2-9S**  
Abdomen, Musculoskeletal,  
Pediatric, Small Parts,  
Vascular

## Endocavity transducers



**EA2-11AR**  
Obstetrics, Gynecology,  
Urology



**EA2-11AV**  
Obstetrics, Gynecology,  
Urology



**miniER7**  
Obstetrics, Gynecology,  
Urology



**CV1-8A**  
Abdomen, Obstetrics,  
Gynecology, Urology



**EV2-10A**  
Obstetrics, Gynecology,  
Urology

## CW transducers



**DP2B**  
Cardiac, Vascular, TCD



**CW6.0**  
Cardiac, Vascular, TCD



**MMPT3-7**  
Cardiac

## TEE

## SAMSUNG

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1-V8-104 rev01

## Secure your care Samsung Healthcare Cybersecurity



### Intrusion Prevention

Security tools (Anti-virus & Firewall)  
Windows 10



### Access Control

Account management  
Audit log



### Data Protection

Data encryption  
EMR/DICOM Secure Transmission