

# Secure your care

Samsung Healthcare Cybersecurity

## Bringing peace of mind to your hospital and patients

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. 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.



### Intrusion prevention

Tools for protecting against cyber threats from external attacks

- Security tools include Anti-virus & Firewall
- Secured operating system



### Access control

Strengthened surveillance for tracking the access of patient information

- Account management
- Enhanced audit trail



### Data protection

Encryption functions for safeguarding data whether at-rest or in-transit

- Data protection
- Transmission security

#### 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 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.
- Beyond Experience™ is not the name of a function, but is Samsung's marketing terminology.
- Optical Disk Drive is not available for this product.
- The superscript PE of PA1-5A transducer stands for Public edition.

1. Optional feature which may require additional purchase.

2. Clinical image acquired by the HS50 V1.00 ultrasound system.

3. Clinical image acquired by the HS50 V2.00 ultrasound system.

4. Clinical image acquired by the HS50 V2.02 ultrasound system.

5. Clinical image acquired by the HS50 V2.03 ultrasound system.

6. S-Detect™ for Breast and S-Detect™ for Thyroid are not available in Canada.

In the United States, the Margin, Posterior Features, and Echo Pattern, the classification items of S-Detect for Breast are manual, thus these classification items are not automatically provided.

Also the recommendations about whether results are benign or malignant in S-Detect™ are not applicable in the United States.

7. Strain value for ElastoScan+™ is not applicable in Canada and the United States.

CT-HS50 V2.03-GI-IMC-201224-EN

# Simple yet powerful

Ultrasound system

HS50 Powered by CrystalLive™



Scan code or visit  
[www.samsunghealthcare.com](http://www.samsunghealthcare.com)  
 to learn more



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Relentless Innovation  
 for your diagnostic confidence

**SAMSUNG**

# Relentless Innovation for your diagnostic confidence

We make every endeavor to deliver innovative products and solutions that enable healthcare professionals to enhance diagnostic confidence.

Samsung's HS50 ultrasound system has adopted this integrated solution in order to provide exquisite image quality and expert tools that enable you to focus on your specific needs.



## Powered by CrystalLive™

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.

Samsung  
Ultrasound System **HS50**

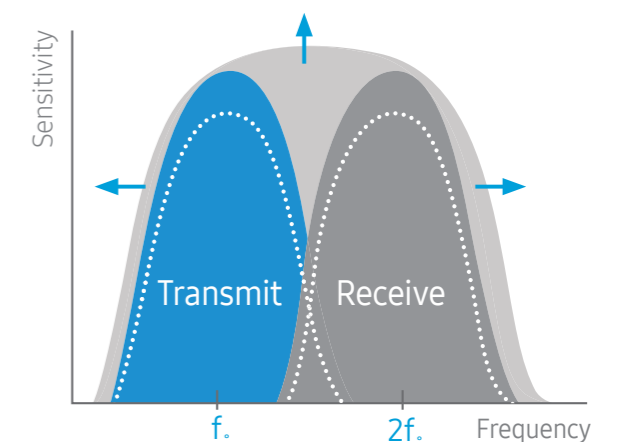


## S-Vue Transducer™

S-Vue Transducer™ provides more efficient piezoelectric properties, resulting in wider bandwidths that enable better penetration and higher quality resolution.



S-Vue Transducer™  
CA1-7AD, CA2-9AD, CV1-8AD,  
PA1-5A



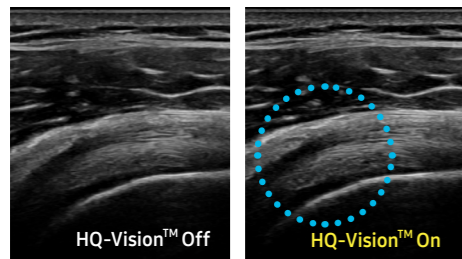
\* The image is for illustrational purposes only and might differ from the actual performance of the device.

# More Valuable Information

Samsung's advanced imaging technologies can provide new insights based on highly detailed images. This valuable information enables confident decision making.

## HQ-Vision™

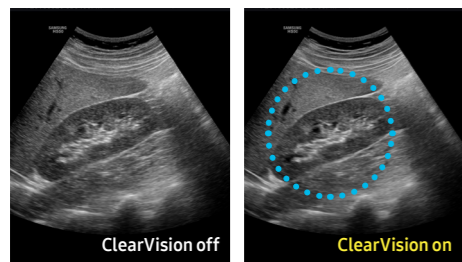
HQ-Vision™ provides clearer images by mitigating the characteristics of ultrasound images that are slightly blurred than the actual vision.



Shoulder<sup>4</sup>

## ClearVision

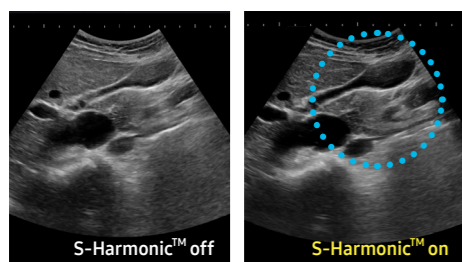
The noise reduction filter improves edge enhancement and creates sharper 2D images for optimal diagnostic performance. In addition, ClearVision provides application-specific optimization and advanced temporal resolution in live scan mode.



Kidney<sup>2</sup>

## S-Harmonic™

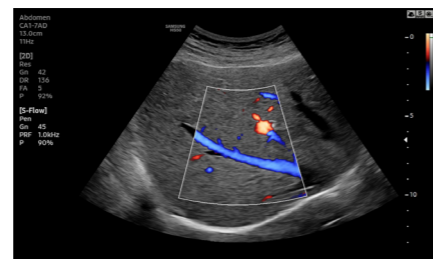
S-Harmonic™ mitigates the signal noise, enhances contrast, and provides uniform image performance of overall image area from near-to-far.



Pancreas<sup>2</sup>

## S-Flow™

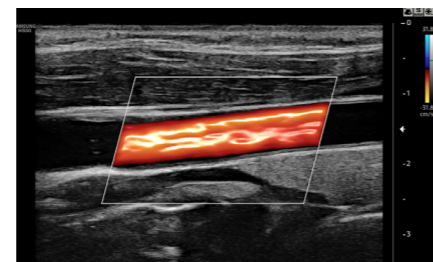
The function uses directional power doppler technology, enabling you to examine even the peripheral vessels. It displays information on the intensity and direction of blood flow.



Liver with S-Flow™<sup>3</sup>

## LumiFlow™<sup>1</sup>

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



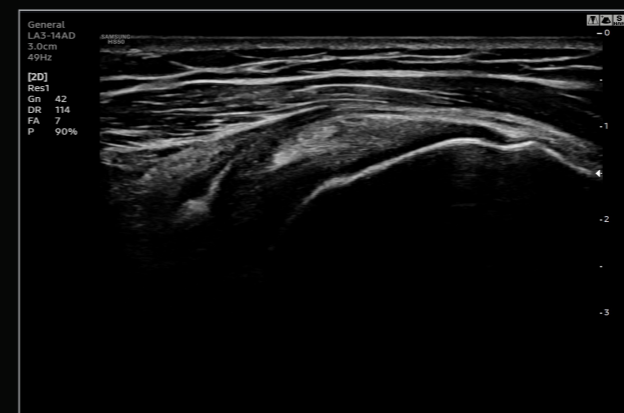
Carotid with LumiFlow™<sup>5</sup>



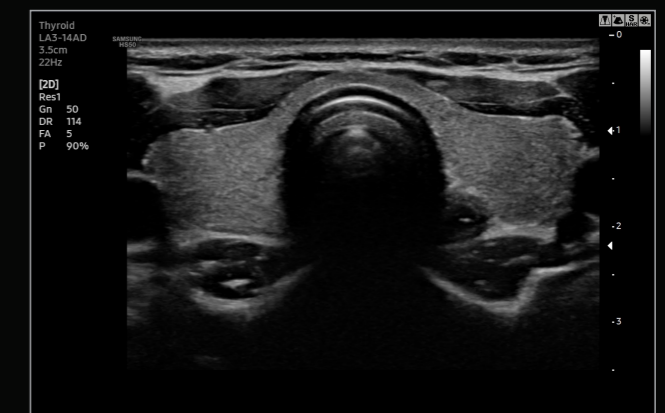
Liver<sup>3</sup>



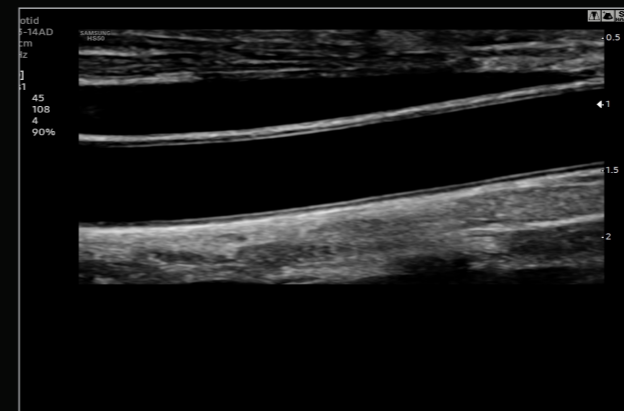
Pancreas<sup>3</sup>



Shoulder<sup>3</sup>



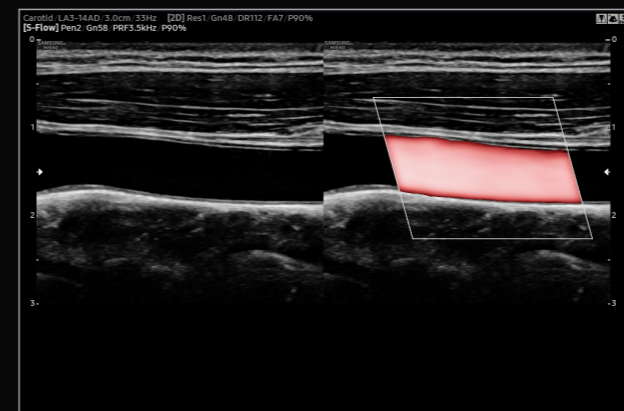
Thyroid<sup>3</sup>



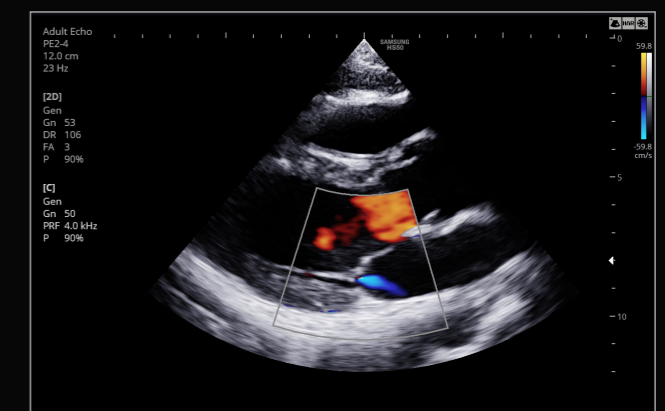
Carotid<sup>3</sup>



Carotid with color & PW<sup>3</sup>



Carotid with S-Flow™<sup>3</sup>



Parasternal long axis view with color<sup>3</sup>

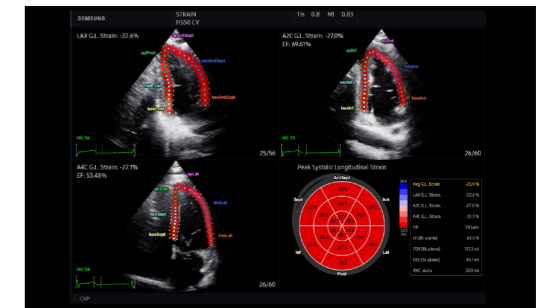
# Increased Consistency

Thanks to its specially designed solutions, including an extensive range of quantification functions, the HS50 creates consistency to ensure accurate measurement.



## Strain+<sup>1</sup>

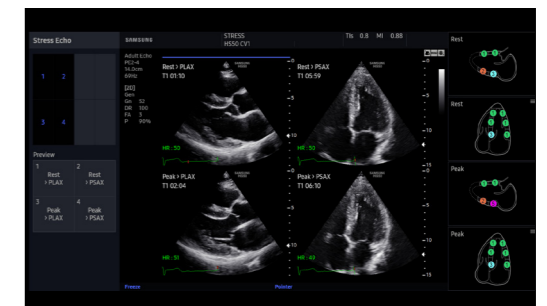
Strain+ is a quantitative tool for measuring global and segmental wall motion of the left ventricle (LV). In Strain+, three standard LV views and a Bull's Eye are displayed in a quad screen for easy and quick assessment of the LV function.



Adult echo<sup>2</sup>

## StressEcho<sup>1</sup>

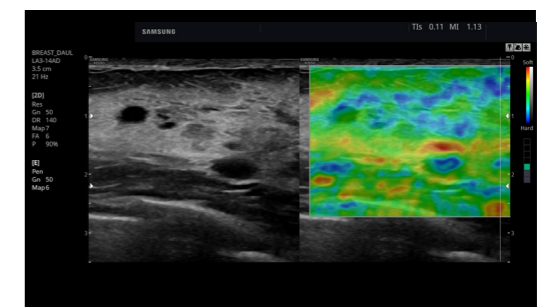
The StressEcho package includes wall motion scoring and reporting. It includes exercise StressEcho, pharmacologic StressEcho, diastolic StressEcho and free programmable StressEcho.



Adult echo<sup>2</sup>

## ElastoScan™<sup>1,7</sup>

A diagnostic ultrasound technique for imaging elasticity, ElastoScan™ detects the presence of solid masses in tissues and converts any stiffness into color images.



Breast<sup>2</sup>

## S-Detect™ for Thyroid<sup>1,6</sup>

The feature, which analyzes selected lesions in the thyroid ultrasound study and shows the analysis data, provides standardized reporting based on the ATA, BTA, EU-TIRADS and K-TIRADS guidelines; and helps diagnosis with the streamlined workflow.

- \* ATA: American Thyroid Association
- \* BTA: British Thyroid Association
- \* EU-TIRADS: European Thyroid Imaging Reporting and Data System
- \* K-TIRADS: Korean Thyroid Imaging Reporting and Data System

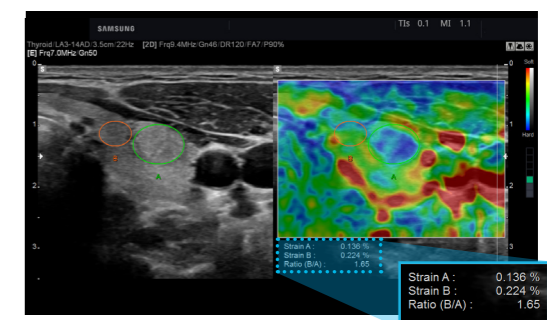
## S-Detect™ for Breast<sup>1,6</sup>

The feature, which analyzes selected lesions in the breast ultrasound study and shows the analysis data, applies BI-RADS ATLAS\* (Breast Imaging-Reporting and Data System, Atlas) to provide standardized reporting; and helps diagnosis with the streamlined workflow.

\* It is a registered trademark of ACR and all rights reserved by ACR.

## E-Strain™<sup>1</sup>

E-Strain™ is designed to enable quick and easy calculation of the strain ratio between two regions of interest for day-to-day practice. Simply by setting the two targets, you can receive accurate, consistent results and make informed decisions in many types of diagnostic procedures.



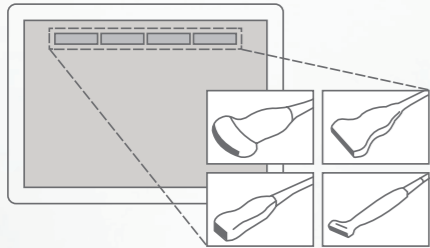
Thyroid<sup>3</sup>

# Enhanced Efficiency

The HS50 has been designed to enhance efficiency through reducing keystrokes, enabling you to streamline your workflow by combining multiple actions into one. Its user-oriented design also enables you to focus on your patient, reducing the complexity and stress of operating the system.

## 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.



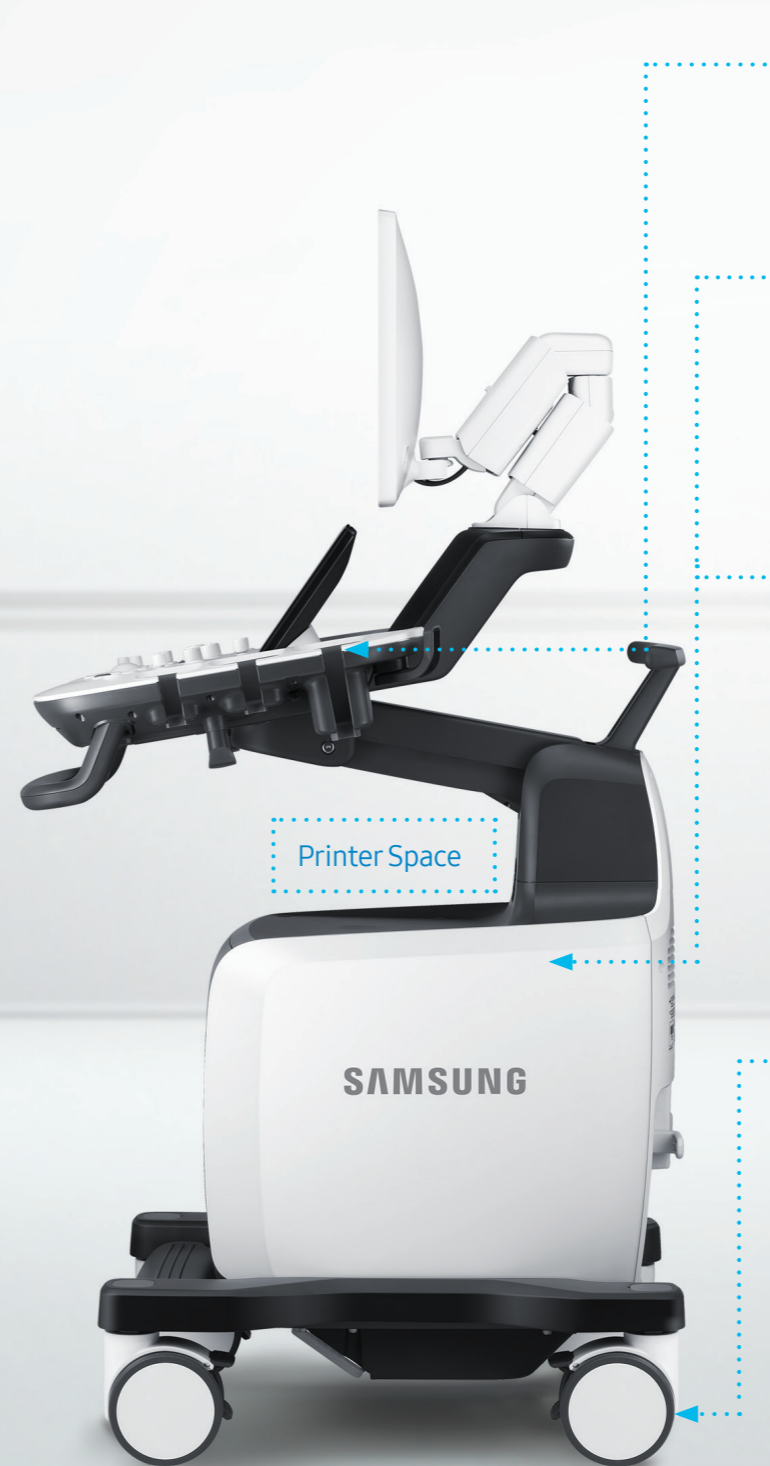
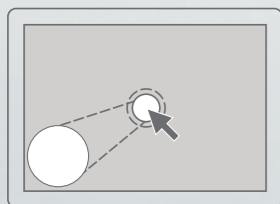
## EzCompare™

EzCompare™ allows easy access to previously taken exams to evaluate corresponding views in a side-by-side display. For greater efficiency, EzCompare™ automatically matches the image settings, annotations, and bodymarkers from the prior study.



## Measure Navigation

When placing a caliper, Measure Navigation automatically magnifies the area of interest using a picture-in-picture window to allow more precise placement of the calipers. This is especially useful when measuring small structures or when accuracy is critical.



## Gel warmer<sup>1</sup>

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



## Solid State Drive (SSD)

The HS50 uses advanced solid state drives. These stable and dependable drives allow faster bootup, better frame rates, and fast processing speeds.



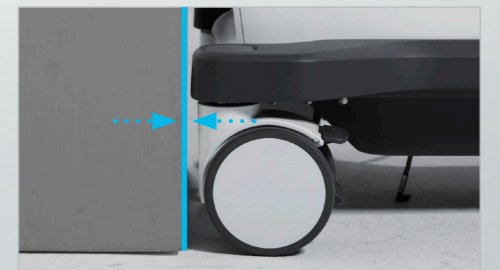
## BatteryAssist™<sup>1</sup>

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.



## Clever use of space

With its reduced weight and compact size, the HS50 takes up minimal space and can move freely. In addition, its streamlined rear profile allows you to park the HS50 in small spaces.



# Comprehensive selection of transducers

## Curved array transducers



**CA1-7AD**  
abdomen,  
obstetrics, gynecology,  
musculoskeletal, pediatric,  
vascular, urology



**CA2-9AD**  
abdomen,  
obstetrics, gynecology,  
musculoskeletal, pediatric,  
vascular, urology



**CF4-9**  
abdomen,  
obstetrics, gynecology,  
musculoskeletal, pediatric,  
vascular, urology



**CA2-6BM**  
abdomen

## Linear array transducers



**LA3-14AD**  
small parts,  
vascular, musculoskeletal,  
abdomen, obstetrics,  
gynecology, pediatric



**LA3-16A**  
small parts,  
vascular, musculoskeletal,  
abdomen, obstetrics,  
gynecology, pediatric



**LA2-9A**  
small parts,  
vascular, musculoskeletal,  
abdomen, obstetrics,  
gynecology, pediatric



**LA3-16AI**  
small parts,  
vascular, musculoskeletal,  
abdomen, obstetrics,  
gynecology, pediatric

## Volume transducers



**CV1-8AD**  
abdomen,  
obstetrics, gynecology,  
musculoskeletal,  
pediatric,  
vascular, urology



**EV2-10A**  
obstetrics,  
gynecology, urology

## Endo-cavity transducers



**EA2-11AV**  
obstetrics,  
gynecology, urology



**EA2-11AR**  
obstetrics,  
gynecology, urology



**ER4-9**  
obstetrics,  
gynecology, urology



**EVN4-9**  
obstetrics,  
gynecology, urology

## Phased array transducers



**PA1-5A<sup>PE</sup>**  
abdomen,  
cardiac, vascular, pediatric



**PA3-8B**  
abdomen,  
cardiac, vascular,  
pediatric



**PA4-12B**  
abdomen,  
cardiac, vascular,  
pediatric

## CW transducers



**CW6.0**  
cardiac,  
vascular



**DP2B**  
cardiac,  
vascular

## TEE transducers



**MMPT3-7**  
cardiac