



# A Revolutionary Change in Advanced Diagnostics

RS85 Prestige has been revolutionized with novel diagnostic features across each application based on the preeminent imaging performance. The advanced intellectual technologies are to help you confirm with confidence for challenging cases, while the easy-to-use system supports your effort involved in the routine scanning. Especially, Samsung ultrasound's largest 27-inch OLED monitor enhances the diagnostic confidence of healthcare professionals by providing clear and stunning image quality.



Overview video

# Redefined imaging technologies powered by Crystal Architecture™

Crystal Architecture<sup>™</sup>, an imaging architecture that combines CrystalBeam<sup>™</sup> and CrystalPure<sup>™</sup>, while based upon S-Vue Transducer<sup>™</sup>, is to provide crystal clear image. CrystalBeam<sup>™</sup> is a new beamforming technology beneficial in delivering high-quality image resolution and increased uniformity of images. CrystalPure<sup>™</sup> is Samsung's up-to-date ultrasound imaging engine with enhanced 2D image processing, color signal processing, and advanced intellectual algorithm to offer outstanding image performance and efficient workflow during complex cases.



**Fast Frame Rates** 

X4 Data Transfer Rate \*

ریکی) High-Quality Images

X4 Processing Power\*



Fast Rendering X2 GPU Memory \*



**Crystal Architecture**<sup>™</sup>



CrystalBeam<sup>™</sup> utilizes Arbitrary Waveform Transmission, Massive Parallel Beamforming, and Synthetic Aperture technologies to produce a faster frame rate and improved image uniformity. Arbitrary Waveform Transmit refers to a widely-focused beam transmission technology that allows for more coherent images. Massive Parallel Beamforming and Synthetic Aperture enable more detailed and faster beam processing based on a large amount of acquired ultrasound data.



# Sophisticated 2D & Color Images Processed by CrystalPure™

CrystalPure<sup>™</sup> imaging engine help you to make more confident diagnoses with fundamental 2D images and enhanced color performance. It also lessens the incidence of clutter and boosts the level of color signal processing.

# Enhance hidden structures in shadowed regions

ShadowHDR™ selectively applies high-frequency and low-frequency of ultrasound to identify shadow areas where attenuation occurs.



### Clean up blurry areads in the image

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

### Suppresses speckle noise and enhances edge for dense expression

**PureVision™** is an image processing function that outputs with a good uniformity and clear image by performing speckle noise suppression and edge enhancement on B-mode.









Sophisticated 2D & Color Images Processed by CrystalPure™



## Visualize slow flow in microvascular structures

**MV-Flow™**<sup>1</sup> visualizes microcirculatory and slow blood flow to display the intensity of blood flow in color.

## Examine peripheral vessels with directional power Doppler

**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.

## Show blood flow in vessels in a 3D like display

LumiFlow<sup>™ 1</sup> is a function that visualizes blood flow in 3 dimensional-like to help understand the structure of blood flow and small vessels intuitively.







# Advanced Intelligence for Reliable Assessment

Our features enable healthcare professionals navigate and quantify ultrasound propagation in realtime, helping them to visualize and make their assessments with accuracy.

# Perform multi-modality fusion biopsies with high precision

**S-Fusion™**<sup>1</sup> enables simultaneous localization of a lesion using real-time ultrasound with other volumetric imaging modalities, enabling accurate targeting during interventional and other advanced clinical procedures.

### Hepato-renal index with ROI recommendation



HRI (Hepato Renal Index) is an index to quantify steatosis of a liver by comparing echogenicity between liver parenchyma with renal cortex. **EzHRI™**<sup>1</sup> places 2 ROIs on the liver parenchyma and renal cortex and provides HRI ratio.

# Quantitative measurement of liver fat with ultrasound signal attenuation

**TAI™**<sup>1</sup> provides quantitative tissue attenuation measurement to assess steatotic liver changes.

# Quantitative measurement of liver fat with ultrasound signal scatter distribution

**TSI™**<sup>1</sup> provides quantitative tissue scatter distribution measurement to assess steatotic liver changes.







## Quantify wall motion of the left ventricle

**Strain+™**<sup>1</sup> is a quantitative tool for measuring global and segmental wall motion of the left ventricle (LV). Three standard LV views and a Bull's Eye are displayed in a quad screen for easy assessment of the LV function.

### Measure ejection fraction of the left ventricle

AutoEF<sup>1</sup> is a feature which conveniently measures and quantifies Ejection Fraction. The volume at the end-systolic and end-diastolic points of the left ventricle is calculated, to assist in quick and efficient assessment of the heart function.

### **Contrast Enhanced Ultrasound**

**CEUS+**<sup>1</sup> is a contrast agent imaging technology. The micro-bubble contrast agent injected into the body through the vein or alike is subjected to perform nonlinear resonance due to stimulation of ultrasound energy.

# Display and quantify tissue stiffness in a non-invasive method

S-Shearwave Imaging™ <sup>1</sup> allows the noninvasive assessment of stiff tissues in various applications. The color-coded elastogram, quantitative measurements, display options, and user-selectable ROI functions are useful for accurate diagnosis.

# Detect functional changes of cardiovascular vessels

**ArterialAnalysis™**<sup>1</sup> detects functional changes of vessels, providing measurement values such as the stiffness, intima-media thickness, and pulse wave velocity of the common carotid artery.





## Intuitive multi-modality fusion imaging with high precision

**Panoramic+™**<sup>1</sup> imaging displays as an extended field-of-view so users can examine wide areas that do not fit into one image as a single image. Panoramic images provide data obtained the linear and convex transducers.

### Display needle tip clearly

NeedleMate+™<sup>1</sup> delineates needle location when performing interventions such as nerve blocks. Improved accuracy and efficiency in procedure are possible with beam steering added to NeedleMate+™.

Other features ElastoScan+™ 1, StressEcho 1

# Striking images for confidence









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# Enhanced Productivity and Facilitated Workflow

Collaborative solution and streamlined workflow of the RS85 Prestige will support your daily procedures by reducing keystrokes and by combining multiple actions into one.

### Customize frequently used functions

#### Touch Customization

allows the user to move frequently used functions to the first page.





# Real-time image sharing, discussion, and remote control of ultrasoundsystem

**SonoSync™**<sup>1,3</sup> is a real-time ultrasound image sharing solution that allows voice communication and remote controllability for effective collaboration between physicians and sonographers at different locations.



## Automatic transducer setting tool based on the worklist

**EzPrep™** is a function that automatically selects the transducer based on the worklist inputted in the ultrasound system and sets the Preset of the selected transducer.

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# Select transducer and preset combinations in one click

QuickPreset allows the user to select the most common transducer and preset combinations in one click.



### Build predefined protocols to ensure every step is followed every time

EzExam+TM<sup>1</sup> ensures the full investigation is performed, eliminating the risk of forgetting an image or loop capture, as well as measurement and transducer preset changes.



# Compare previous and current exam in a side-by-side display

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





### 27-inch OLED monitor 1.4

It is convenient to see images in various scanning environments by applying a 27-inch OLED monitor. OLED realistically represents the black color, suitable for diverse ultrasound image characteristics with a black background.

\* OLED: Organic Light Emitting Diode

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### WideScreen

WideScreen provides approximately 23% more lateral viewing information compared to normal screen, allowing ultrasonic examination with wider view at a glance.



### **Central Lock**

A single pedal controls a central lock mechanism to conveniently secure the console in place. This results in more efficient movements while the user is performing scanning procedures.





### 14 inch Tilting Touch Screen

Samsung's tilting touch screen can be adjusted to accommodate user's viewing preferences within any scanning environment.



### 6 way Control Panel

The 6 way adjustable control panel optimizes your work environment to reduce repetitive motions stress. When it's in off-mode, the control panel returns to the home position, allowing for easier and enhanced mobility.



### Maneuverable Wheel

4 swivel wheels allow easy steering, and a locking function.

# **Comprehensive selection of transducers**

### Curved array transducers



Abdomen, obstetrics, gynecology, pediatric, vascular, musculoskeletal Abdomen, obstetrics, gynecology, pediatric, vascular, musculoskeletal CAS-IDACAZ-8AAbdomen, obstetrics,<br/>gynecology, pediatric,<br/>vascular, musculoskeletalAbdomen, o

CA2-8A CA4-10M \* Abdomen, obstetrics, Pediatric, vascular

### Linear array transducers



### Phased array transducers







**PA3-8B** Cardiac, pediatric, abdomen



#### \* Ergonomic Transducer

These transducers have a newly designed ergonomic hand-grip and better weight distribution for comfortable scanning.



Cleaning and disinfection guide

### Samsung healthcare cybersecurity

To address the emerging need for cybersecurity, Samsung provides a solution to support our customers by offering the tools to protect against cyberthreats that may compromise invaluable 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









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#### About Samsung Medison CO., LTD.

Samsung Medison, an affiliate of Samsung Electronics, is a global medical equipment 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.
- \* Sales and shipments are effective only after the approval by the regulatory affairs. Please contact your local sales representative for further details.
- \* S-Vue Transducer™ is not the name of a function, but is the name of Samsung's advanced transducer technology.
- \* Strain value for ElastoScan+™ is not applicable in Canada and the United States.
- \* This product is a medical device, please read the user manual carefully before use.
- \* Prestige is not a product name but is a marketing terminology.
- 1. Optional feature which may require additional purchase.
- 2. In the United States, only shape and orientation items for S-Detect<sup>™</sup> are automatically provided.
- Also the recommendations about whether results are benign or malignant in S-Detect<sup>™</sup> are not applicable.
- 3. SonoSync<sup>™</sup> is an image sharing solution.
- 4. The size of the monitor without this option is 23.8 inch.

### **Eco Packaging**

Reusable packaging composed of eco-friendly recycled paper. It is Samsung's commitment to achieving carbon-neutral of the earth and environment.



Packaging



CT-RS85 Prestige-V2.06\_Vet-230220-EN

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