

**ACUSON Origin ultrasound system**

# **Revolutionizing structural heart procedures**

Expand your imaging boundaries  
in structural heart imaging

Smart | Clear | Easy

3.0 software release

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**SIEMENS**  
**Healthineers** 

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## Smart | Clear | Easy

### Smart features with one click

The ACUSON Origin ultrasound system's AI integration offers advancements in quantitative capabilities to support consistent and reproducible measurements. ACUSON Origin is equipped with state-of-the-art imaging technology to help meet the demands of the most challenging interventions and patient populations.

**4D Heart<sup>AI</sup>** provides instant insights and real-time results for comprehensive cardiac profiling pre and post procedure:

- Offers dual-modality advancement with 4D Auto Contouring of both ventricular chambers in TEE
- Enables analysis for irregular heartbeats and the ability to edit frames, AVC, and Pre-A. The ability to quantify and average up to five beats. Plus, analysis without ECG (single beat).
- Attain 96% accuracy in detecting LV ED and ES volumes through 4D Heart<sup>AI</sup><sup>1</sup>, supporting precise clinical data acquisition

**AI Measure** allows one click instant Doppler analysis of one cardiac beat or multiple.

**Trace<sup>AI</sup>** measures circumference and max/min diameters, providing precise contours of orifice-type structures on MPRs, with an impressive overall accuracy of more than 95%.

### Clear unmatched imaging capabilities

ACUSON Origin boasts superb image quality with alternative imaging capabilities, setting a new standard in cardiac ultrasound.

**AcuNav Lumos 4D ICE catheter** – Intracardiac echocardiography (ICE) for excellent visualization and precise guidance:

- Enhanced MPR bi-plane and improved image quality in 2D, MPR, and 4D imaging
- Dedicated bi-plane control on the ACUSON Origin for streamlined 4D workflow
- Introduction of 3D calipers and labeled markers for anatomical identification and precise measurements during procedures
- Enhanced real-time 4D color flow Doppler with industry-leading volume rates for advanced detail visualization
- Provide alternative imaging options for patients not suitable for TEE or moderate sedation

New in the 3.0 software release: Z6T TEE new 4D "Res" setting, better VR detail with reduced smoothing, and enhanced color performance for sharper, more diagnostic 2D and 4D TEE imaging.

<sup>1</sup> Algorithm Study Report Unified Heart pg. 23 and 24. Comparison for chamber volumes between manual and auto+ edits for LVEDV and LVESV.





## Easy workflow redefined

**UltraArt** provides real-time quad-display to allow users to select their image preference from a touch screen display. UltraArt reduces speckle and enhances contrast to provide a realistic tissue presentation and patient-specific processing that adapts to differences in tissue.

**InFocus imaging** eliminates reliance on traditional focal zones, ensuring consistent sharpness across the entire image. Seamlessly encompasses the depth range from near to far field, setting a new industry benchmark. Outpaced competitors by eight years in integrating this groundbreaking innovation first.

**AutoFlash artifact suppression technology** effectively limits flashing and ghosting color artifacts due to motion without requiring user interaction. Restores conventional image processing when motion stops, ensuring clarity and precision.

Simplify your workflow with the ACUSON Origin's user-centric design, offering:

- Intuitive touch screen and controls positioned for effortless access
- Ergonomically designed console reducing repetitive motion, ensuring ease of use
- Customizable workflows to optimize efficiency for doctors, sonographers, and patients
- Lighter<sup>2</sup>, smaller<sup>2</sup>, and easily maneuverable, making the system highly adaptable
- Capture Preview: Instantly review and select optimal cardiac cycles before saving, improving accuracy and workflow efficiency

<sup>2</sup> Compared to ACUSON SC2000

# Unleash the power of precision with ACUSON Origin and AcuNav Lumos

Experience the future with Siemens Healthineers' ACUSON Origin and AcuNav Lumos. Elevate your structural heart procedures with superb clarity, precision, and efficiency. Don't settle for limitations – embrace the technology that pushes boundaries and empowers your practice to achieve exceptional patient outcomes.

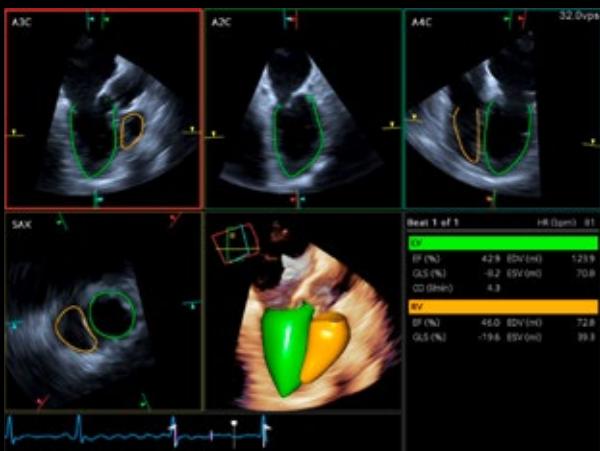
Contact us today to learn more about how the ACUSON Origin can transform your approach to structural heart interventions.



## Spotlight: Structural heart image guidance

Siemens Healthineers has sold over 2 million catheters and 24 years of pioneering 2D and 4D ICE.





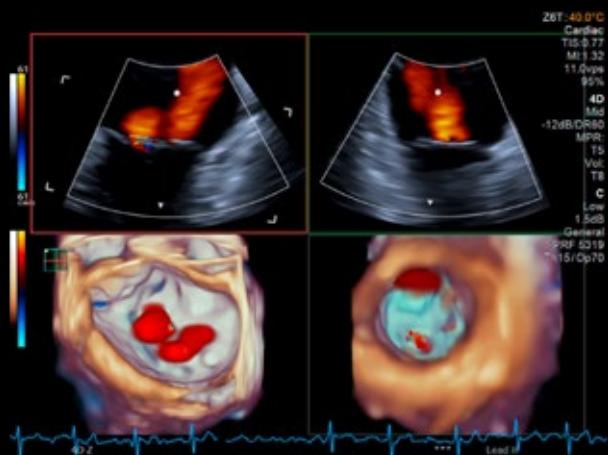
4D Heart<sup>AI</sup> illustrating feature functionality to contour both ventricles simultaneously and dynamically at 32 VPS.



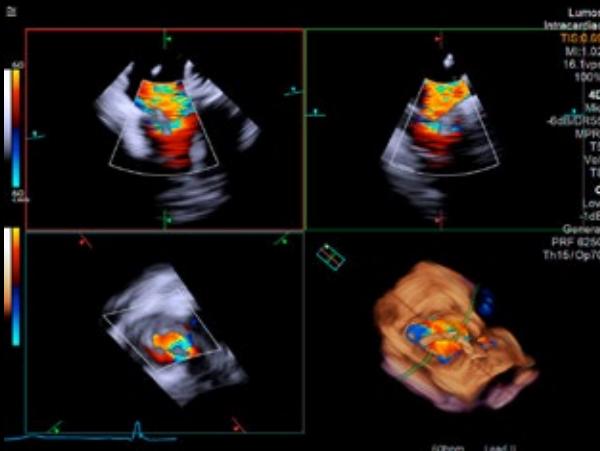
TEE imaging with color Doppler post Watchman placement follow-up, noting a para-device leak.



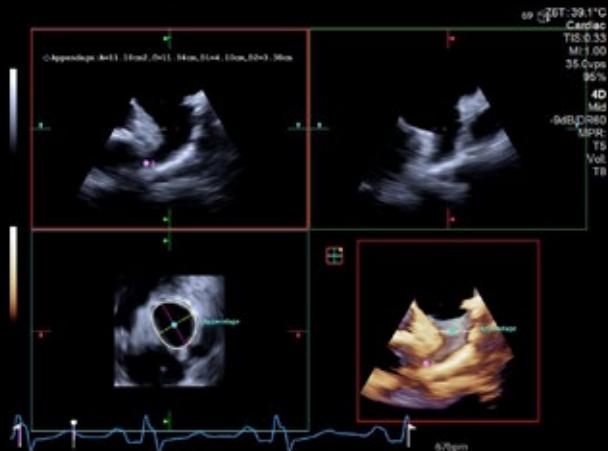
AcuNav Lumos 2D ICE imaging of the left atrial appendage. Note the image quality, definition and resolution.



4D TEE image illustrates the color definition and clarity in both the MPRs and the 4D imaging looking from the LA (left) and from the LV (right) with 4D color, noting two distinct jets.



AcuNav Lumos 4D ICE image demonstrating significant TR in MPRs as well as the realtime 4D color volume imaging at 16.1 VPS.



Trace<sup>AI</sup> with AcuNav Lumos provides precise sizing of the left atrial appendage for occluder device placement, measuring max/min diameters and circumference for accurate device sizing.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features, which do not always have to be present in individual cases.

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At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. Sustainably. As a leader in medical technology, we want to advance a world in which breakthroughs in healthcare create new possibilities with a minimal impact on our planet. By consistently bringing innovations to the market, we enable healthcare professionals to innovate personalized care, achieve operational excellence, and transform the system of care.

Our portfolio, spanning in vitro and in vivo diagnostics to image-guided therapy and cancer care, is crucial for clinical decision-making and treatment pathways. With the unique combination of our strengths in patient twinning<sup>1</sup>, precision therapy, as well as digital, data, and artificial intelligence (AI), we are well positioned to take on the greatest challenges in healthcare. We will continue to build on these strengths to help overcome the world's most threatening diseases, enable efficient operations, and expand access to care.

We are a team of more than 73,000 Healthineers in over 70 countries passionately pushing the boundaries of what is possible in healthcare to help improve the lives of people around the world.

<sup>1</sup> Personalization of diagnosis, therapy selection and monitoring, aftercare, and managing health.

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