

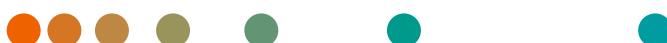
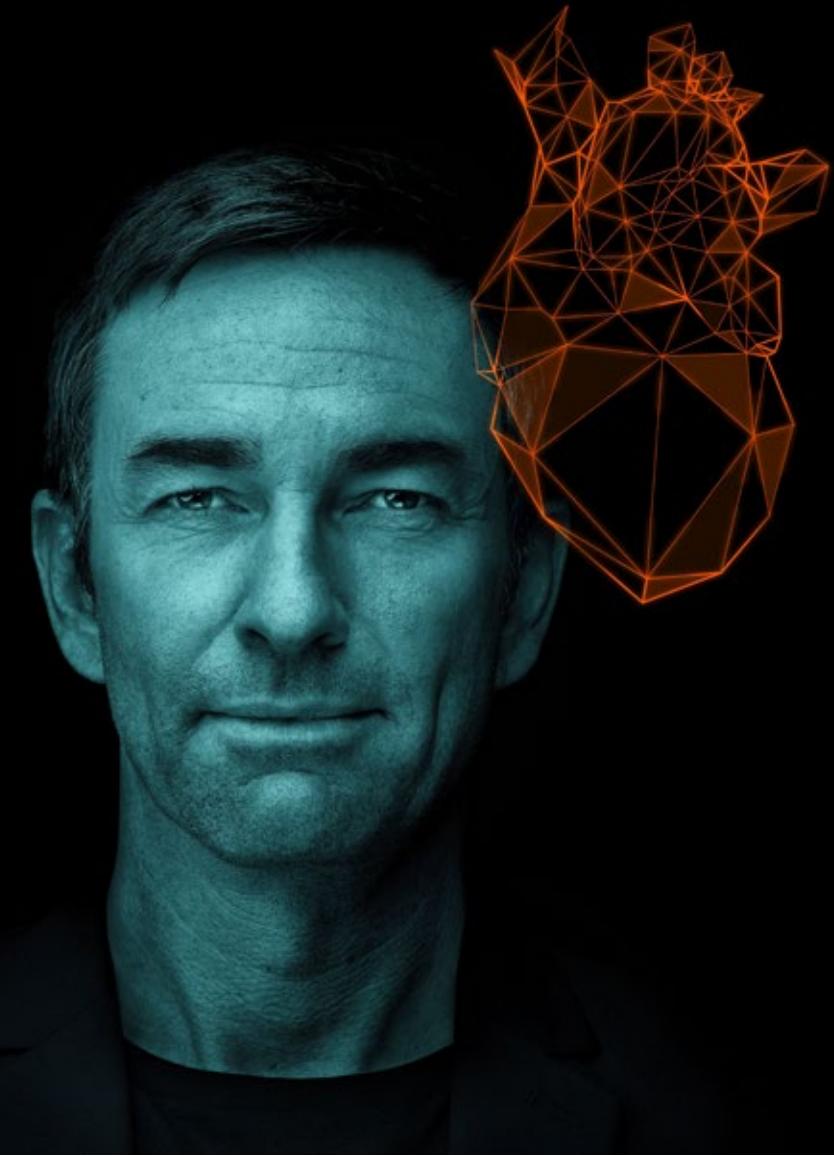
**ACUSON Origin ultrasound system**

# Redefining diagnostic echo exams

Smart | Clear | Easy

3.0 software release

[siemens-healthineers.com/acuson-origin](http://siemens-healthineers.com/acuson-origin)



**SIEMENS**  
Healthineers

# AI-powered genius

Experience the future of cardiac ultrasound

**Smart | Clear | Easy**

## Smart solutions redefined

Step into the realm of AI-powered diagnostics with the ACUSON Origin by Siemens Healthineers. Backed by one of the largest databases globally, our AI integration offers groundbreaking advancements in diagnostic capabilities:

- Harness the power of 5600+ AI-powered measurements, including AI Assist and AI Measure<sup>1</sup>, fueled by a database of over 2 billion images across multiple modalities
- **AI Assist** – Real-time AI view recognition for streamlined imaging and semi-automated Doppler placement
  - New in the 3.0 software release: AI Assist now works seamlessly with AI Measure to auto-launch spectral Doppler quantification with just the push of the AI button, reducing keystrokes boosting exam efficiency. Compatible with 5V1, 5Z1, and 8V3.
  - Achieve 99% accuracy of 42 automated view classifications across 12 echocardiographic views encompassing 23 anatomical locations<sup>2</sup>

- **AI Measure** – Automates quantification process for M-mode, 2D imaging, spectral and tissue Doppler, streamlining the assessment of cardiac function
  - AI Measure (B-mode, Doppler, and M-mode) was judged 89%<sup>3</sup> accurate by users<sup>4</sup>
- **2D Heart<sup>AI</sup>** – Swift and precise detection, with remarkable accuracy rates for diverse cardiac assessments
  - 98%<sup>5</sup> correlation for the mean GLS for each supported cardiac view (A4C, A3C, A2C, with and without contrast agent)
- Dive into **4D Heart<sup>AI</sup>** for instant insights and real-time results, allowing comprehensive analysis and editing capabilities
  - Attain 96% accuracy in detecting LV ED and ES volumes through 4D Heart<sup>AI</sup><sup>6</sup>, supporting precise clinical data acquisition
- **Trace<sup>AI</sup>** – An impressive overall accuracy of more than 95%<sup>7</sup> measuring circumference and max/min diameters, providing precise contours of orifice-type structures on MPRs



<sup>1</sup> Data on file

<sup>2</sup> Overall accuracy 1732/1745 → 99.26% Accuracy (pg. 3)

<sup>3</sup> ESiMeasure Accuracy and Verification Report page 5

<sup>4</sup> Average

<sup>5</sup> Average for all views

<sup>6</sup> Algorithm Study Report Unified Heart pg. 23 & 24. Comparison for chamber volumes between manual and auto+edits for LVEDV and LVESV.

<sup>7</sup> Trace AI Algorithm Study Report (11669274-EPI-001-01), pg. 25



## Clear imaging redefined

Elevate your clinical data acquisition with exceptional image clarity:

- **InFocus** uses synthesized, retrospectively focused transmit beams throughout the field of view that focuses at all depths eliminating reliance on traditional focal zones, ensuring consistently sharp images across depth ranges.
- **AutoFlash artifact suppression technology** reduces color flash artifacts due to motion without user interaction for improved color sensitivity and performance, even with respiratory variations.
- **UltraArt** real-time quad-display allows users to select their image preference with one touch from a real-time touch screen display. UltraArt reduces speckle and enhances contrast resolution to provide a realistic tissue presentation and patient-specific processing that adapts to differences in tissue.

## Easy workflow redefined

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>1</sup>, smaller<sup>1</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>1</sup> Compared to ACUSON SC2000

# Unlock the potential of ACUSON Origin

Embrace the smart, clear, and easy advantages of the ACUSON Origin by Siemens Healthineers. Transform your diagnostic echo procedures with cutting-edge AI, superior image clarity, and intuitive usability. Join the revolution in cardiac ultrasound and witness a new era in diagnostic excellence.

Contact us today to learn more about how ACUSON Origin can redefine your cardiac diagnostic capabilities.



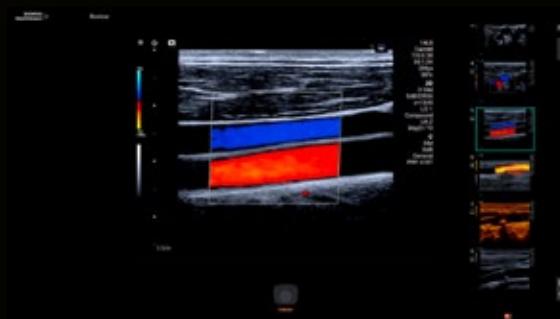
## Spotlight: Transthoracic echocardiogram

Siemens Healthineers has the second most patents in AI in the world, second only to Google.

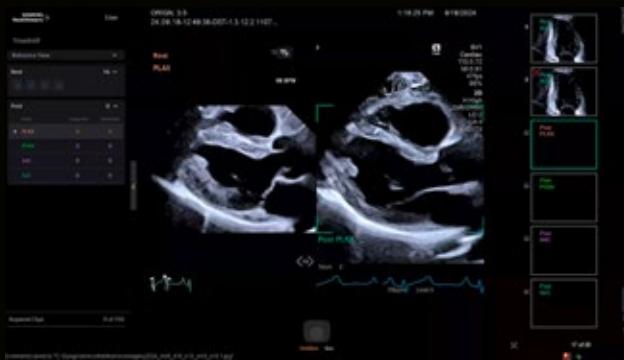




Utilizing single Crystal transducer technology to its fullest potential, the system ensures consistently sharp images throughout varying depth ranges via its optimized InFocus imaging capability.



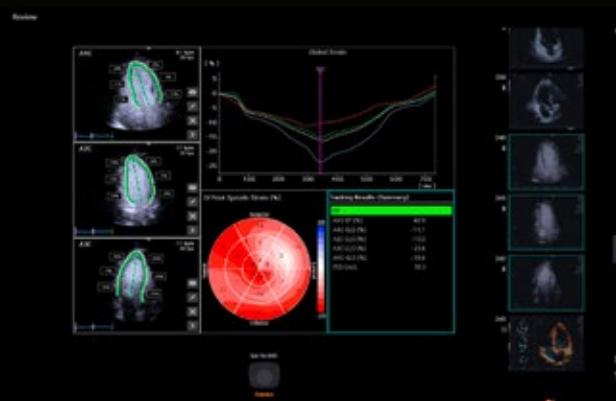
Experience superior vascular imaging with unparalleled clarity using InFocus imaging technology, coupled with Auto Color Doppler for precise placement and angle correction in pulsed wave Doppler, and Auto IMT Measurement for accurate assessments.



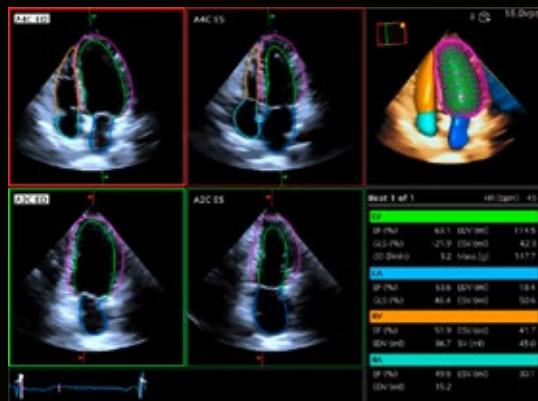
Customizable stress echo protocols: Wall motion scoring, staged measurements, and post-stage reference clip for enhanced comparison and analysis.



4D and 2D TEE offering comprehensive visualization, aiding in precise assessments of cardiac structures and functions from multiple angles, enhancing diagnostic accuracy and treatment planning.



2D Heart<sup>AI</sup> revolutionizes cardiac ultrasound by offering automatic multiple beat analysis, eliminating the need for an ECG and allowing seamless functionality with or without contrast for enhanced diagnostic efficiency.



4D Heart<sup>AI</sup> streamlines diagnostics through automatic multiple beat analysis, obviating the necessity for an ECG significantly boosting diagnostic efficiency.

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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