

SIEMENS

SONOLINE Antares
A New Dimension in Ultrasound

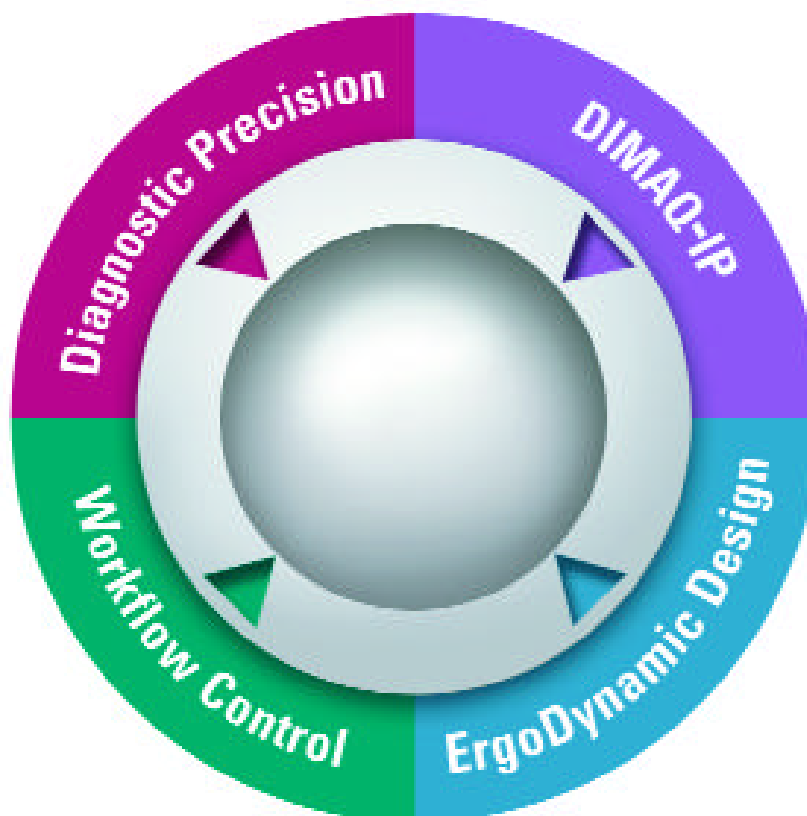


syn^{go}
speaking



SONOLINE Antares

Premium Performance with a New Look



Rapidly developing technology, dramatically increased ultrasound performance, and new medical discoveries have driven the need for a better solution. Siemens has envisioned the future – and our response is the SONOLINE® Antares ultrasound platform.

With SONOLINE Antares, we have brought a new dimension to premium performance ultrasound. Need increased diagnostic quality, functionality and reliability? We deliver a system that performs on a higher plane. Looking for a platform that is smaller and faster, affordable and upgradeable? We offer smarter, sleeker ultrasound.

The SONOLINE Antares platform embodies a new dimension in performance and experience – in ways you can see.

- Innovation in the areas of digital electronics and acoustics provides a new level of ultrasound *Diagnostic Precision* that translates directly into higher diagnostic confidence.
- *The DIMAQ-IP Integrated Workstation* combines the DIMAQ™ integrated ultrasound workstation with the power of the Crescendo™ Multi-Dimensional Image Processor, creating an advanced ultrasound workstation.

- An evolution in *Workflow Control* is defined with the unique, user-centric architecture of SONOLINE Antares and *syngo*®, the revolutionary software for medical imaging.
- *ErgoDynamic Design* offers optimum access and operator comfort.

SONOLINE Antares revolutionizes ultrasound by delivering tremendous power, packaged in a unique ergonomic design. Welcome to a new dimension in ultrasound.



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SONOVINE

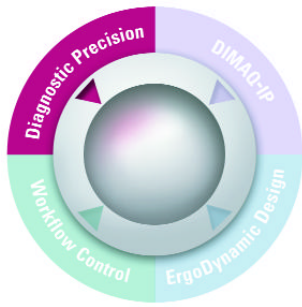
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Diagnostic Precision The Power of Confidence

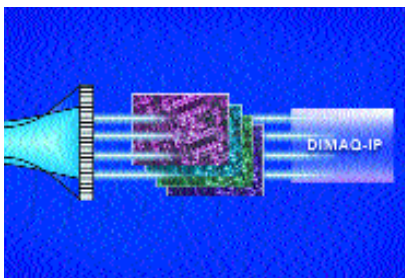
When we set out to design Diagnostic Precision, each step in the signal processing chain was developed to provide superior performance – from transducer to display. We have equipped the platform with high-speed digital electronics – resulting in image quality that enhances your diagnostic confidence and provides unprecedented signal-processing capacity.

Diagnostic Precision is enabled by:

- Maximum Information Signal Acquisition (MISA) Beamformation
- GigaProcessing Technology
- Patented Precision Up-Sampling Technology
- Core Acoustic Performance

MISA Beamformation

With Maximum Information Signal Acquisition (MISA) Beamformation and its Channel-per-Signal Architecture, each transducer element has its own dedicated processing channel, which is dynamically and uniquely configured. Providing superior detail and contrast resolution, MISA Beamformation utilizes High-Density Active Aperture delivering more simultaneous aperture than conventional systems – an industry first.



MISA Beamformation with Channel-per-Signal Architecture and High-Density Active Aperture.

GigaProcessing Technology

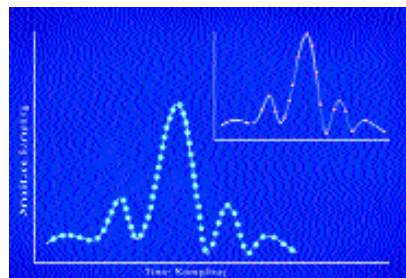
SONOLINE Antares uses proprietary GigaProcessing Technology to improve imaging performance with intelligent, adaptive digital signal processing algorithms implemented through cutting edge hardware and software architecture. Data is analyzed “on the fly,” enhancing ultrasound echo components of diagnostic significance, while rejecting clutter and noise. GigaProcessing Technology performs a multidimensional analysis of each signal that will ultimately compose the ultrasound image.

Patented Precision Up-Sampling

Precision Up-Sampling is one of 90 patented technologies within SONOLINE Antares. With Precision Up-Sampling each raw signal is simultaneously sampled in the time and amplitude domains, creating an ultra-fine digitization of the RF signal data.

The unsurpassed signal acquisition capacity of MISA Beamformation combined with the speed and power of GigaProcessing Technology and Precision Up-Sampling, result in:

- Superb contrast and spatial resolution
- Higher frame rates
- A purer signal
- Improved signal-to-noise ratio



Patented Precision Up-Sampling Technology.

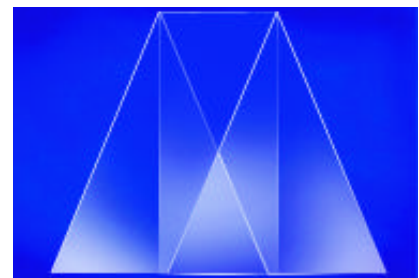
Core Acoustic Performance

The SONOLINE Antares platform incorporates innovative core acoustic advancements including wideband MultiHertz® Multiple frequency imaging, Virtual Format Imaging, and the new generation Multi-D™ Array Transducer technology.

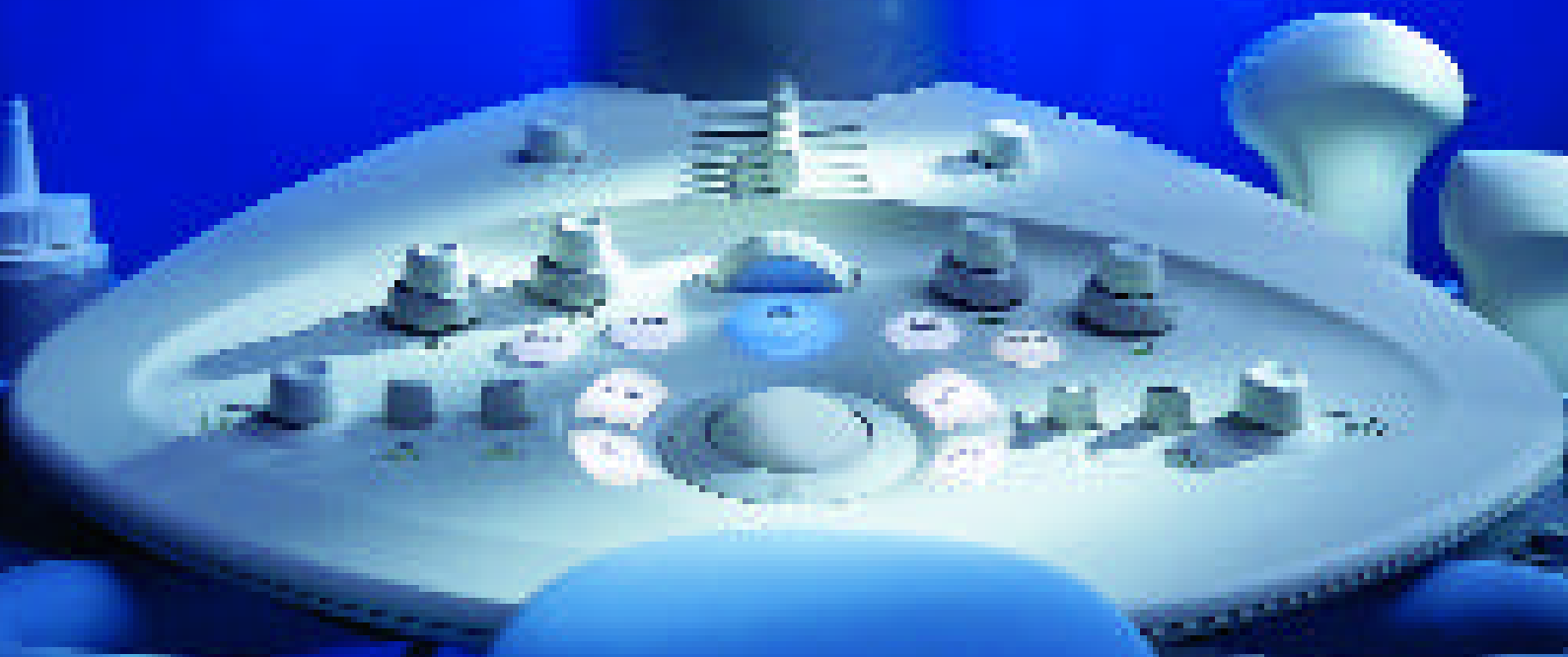
Wideband MultiHertz technology provides improved clinical utility and increased versatility with up to five B-mode and tissue harmonic (THI) frequencies, and three color and spectral Doppler frequencies. MultiHertz capabilities expand versatility by covering a broader application range with each transducer.

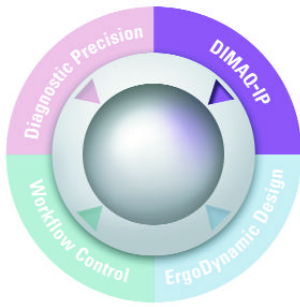
Virtual Format Imaging is the ideal way to expand anatomic information with the touch of a button. Maximized clinical performance from a single transducer is achieved by the ability to steer the 2D image or expand the image into a trapezoid format, depending on the clinical needs.

The new generation Multi-D transducers, with advanced materials, offer improved elevation focusing, superior near-field resolution, and for the first time, Dynamic Elevation Focusing (DEF) technology.



Virtual Format Imaging.





DIMAQ-IP Integrated Workstation Expanding Horizons

The new DIMAQ-IP architecture of the SONOLINE Antares platform marks a fusion of two industry firsts – the DIMAQ integrated ultrasound workstation and the Crescendo Multi-Dimensional Image Processor. The result is a revolutionary new ultrasound workstation called DIMAQ-IP.

DIMAQ-IP functions as an integrated workstation environment that enables seamless communication between the SONOLINE Antares internal architecture, external archiving and review stations. By meeting the standards that DICOM develops, DIMAQ-IP provides a basis for comprehensive interconnectivity and communication within PACS or other clinical networking systems.

Integrated Workstation

Within the system architecture, DIMAQ-IP offers advanced image processing as well as display and image management functionality. This puts advanced capabilities such as instant image storage and recall, dynamic clip storage and advanced quantification tools at your fingertips.

All exam data generated in the system can be quickly and directly accessed. Static and dynamic images are easily managed, as are measurements and calculations, reports, on-board patient files, and high-speed storage and retrieval.

DIMAQ-IP Architecture

DIMAQ-IP keeps pace with the latest developments in the IT world to accept new technologies and applications as they emerge. The new DIMAQ-IP architecture uses multiple high-speed Intel® processors. Open standards – Windows®, DICOM, and *syngo* – provide the tools that are required to keep pace with the rapidly expanding capabilities offered by computer technology.

Image Processing Technology

The Crescendo Multi-Dimensional Image Processor is the innovation that gives the SONOLINE Antares platform the capability to process voluminous data in real time. Highly flexible, this technology provides super-computer processing power, supporting an expandable array of real-time analysis, quantification and reconstruction techniques.

Welcome to eUltrasound

eUltrasound is the electronic integration of standardized digital imaging and services specialized for ultrasound, delivering a new level of productivity through the benefits of an electronic patient file – from the time the patient enters the lab to the final report.

For the first time in the ultrasound industry, the SONOLINE Antares platform incorporates *syngo*, the universal language for medical imaging. *syngo* creates open standards for Windows, DICOM and standard software tools with access to the system and to PACS for an integrated hospital environment. New applications can be easily integrated into *syngo* for the best possible diagnosis and patient care.

eManual

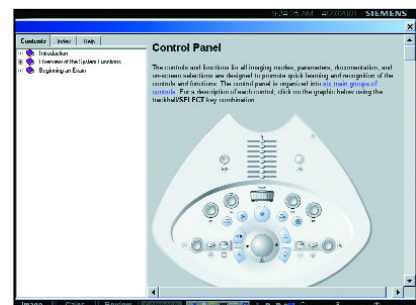
An electronic user manual, eManual, is integrated directly within the DIMAQ-IP workstation, providing answers just a keystroke away.



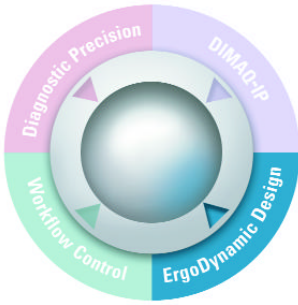
DIMAQ-IP Integrated Workstation – the fusion of two industry firsts.



Examination Review within the Patient Browser.



Fully integrated eManual.



ErgoDynamic Design

Form Follows Function

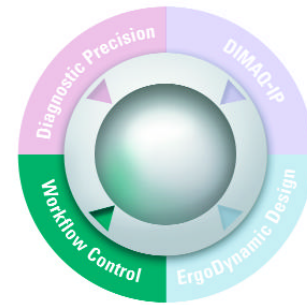
Siemens' reputation for design innovation expands yet again. The revolutionary approach to the SONOLINE Antares design changes the perception of what is necessary for best-practice ultrasound.

Innovative Design

SONOLINE Antares responds to the slightest movement or command. The sleek, modular architecture is accessible from all sides, maximizing ergonomic comfort. Whether standing, sitting, or in transition, SONOLINE Antares reduces user fatigue and prevents long-term strain by adapting to any environment. Everything needed to complete a thorough exam is easily accessible and simultaneously visible from all sides.

The unique ErgoDynamic outer architecture optimizes accessibility and operator comfort in the work environment. Movement flows in the two primary work zones – the Natural Reach Zone and the Extended Reach Zone – enabling multiple access areas to create a truly user-centric work environment.





Workflow Control Simply Smarter Operation

Until now, ultrasound has required a control key for every function. With the SONOLINE Antares platform, Siemens has created streamlined interactivity between operator, system controls and the image. The user interface and keyboard are designed to anticipate ultrasound workflow.

syngo

The comprehensive software solution for medical imaging, *syngo* sets a new standard for Siemens and for the industry.

Based on common operating system structures, the *syngo* screen is easy to use and follow, anticipating and executing user instructions. All *syngo*-speaking systems offer similar functionality and user interface design, reducing operator training time.

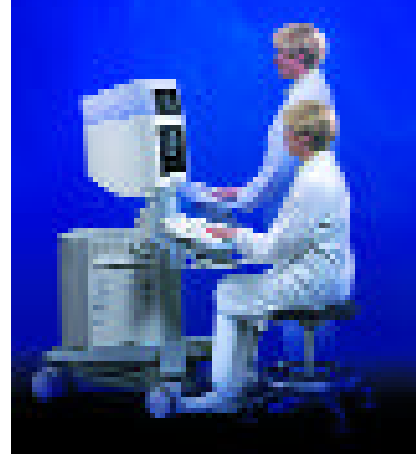
With *syngo*, on-screen graphics are organized for speed and efficiency. These include: Tool Tips, which provide a function description of the task at hand; the Task Card System, which keeps workflow organized; and eManual, which is an operator's manual fully integrated into the system for ease of use.



User-Centric Design



Lightweight and flexible SuppleFlex™ Transducer Cables.



The Natural Reach Zone includes the areas immediately accessible to the operator necessary to perform an exam, such as the control panel, keyboard, transducer, and gel.

The Extended Reach Zone gives the user easy access from any angle to the areas just beyond the Natural Reach Zone, including the patient, transducer connectors and OEMs.



Mobility

Uniquely balanced and maneuverable, SONOLINE Antares is easy to see over during transport. Incredibly sleek, the system fits into the smallest of areas. The ErgoDynamic design focuses on the system operator with micropositioning capabilities.

SONOLINE Antares has the lightest weight and the smallest footprint of any premium ultrasound system in its class. Highly portable, the system offers many ErgoDynamic design advantages including a four-caster design with central braking system.

Easy-Access Environment

The easy-access environment helps minimize the problem of repetitive stress disorder from operator-machine interaction, including tendon and joint problems and operator fatigue.

SONOLINE Antares offers a proper control position including

a homebase layout, operator height adjustment, standing and sitting heights, tilt-and-swivel monitor, flexible wrist support, and footrest.

The control panel is intuitively located, hand movement is minimized, and workflow improved. To further reduce weight and strain for wrists,

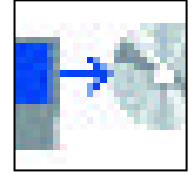
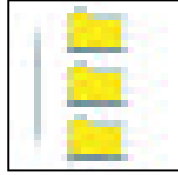
microCase™ Transducer miniaturization technology uses lightweight materials. Together with SuppleFlex cables, user comfort is increased while muscle stress and strain can be reduced.



The homebase layout of the control panel includes logical and intuitive placement of the main user controls, which allows for easy access to any function within hands' reach. From

the control panel to the contextual, syngo-based screen layout on the monitor, each step flows easily to the next – improving patient care, workflow and throughput.

syngo
speaking



Easy to use:

The *syngo* user interface is extremely intuitive and common to all applications. *syngo* provides a uniform working environment throughout clinic networks and beyond. Result: Accomplish your daily routine easier and quicker.

Straightforward to connect:

syngo integrates medical imaging seamlessly into the clinical workflow from registration to billing. *syngo* puts a universe of information at your fingertips. Result: Your efficiency reaches beyond a single workplace.

Prepared for the future:

syngo-speaking systems will always be state-of-the-art because new *syngo* applications can easily be integrated into the flexible and unique *syngo* architecture. Result: Your workplace grows with your clinical needs.



UPTIME Services

Committed to Your Performance



Advanced medical technology depends upon a key factor – service support. To Siemens, this is an integral part of the product solution. We focus on lifetime care, managing the system not only during installation and maintenance, but throughout its entire lifecycle.

Designed for Maximum UPTIME

The growing reliance on medical systems places high demands on service. The SONOLINE Antares platform is designed and manufactured for high reliability with modularity for accurate first-time fault identification and quick resolution. Siemens Remote Services®

provides on-line system monitoring and predictive maintenance to keep the system running optimally and continuously.

Protecting Your Investment

The SONOLINE Antares platform design and remote connectivity, combined with our worldwide network of ultrasound specialists and trained engineers, enable you to enjoy the full value of the ultrasound system. At Siemens, we realize that you count on us to provide the uptime needed to maximize the efficiency of processes, patient service and ultimately the return on your investment.



Service by Siemens – Your Formula for Success:

To improve efficiency and help provide excellent patient care throughout the system's lifetime, Siemens UPTIME Services offer a wide range of service solutions. You determine the level of support needed – we deliver the personal and customized care to meet your specific clinical needs.

Performance Plans

Our customer Performance Plans offer a full range of coverage including safety monitoring, preventive maintenance, quality assurance, repair, product updates and much more. Additional options may include transducer insurance, partnership programs and applications training to optimize the plan to your own needs.

Siemens Remote Services

Streamline workflow and protect your investment with Siemens Remote Services. No matter where in the world you are located, an expert is available 24 hours a day, 7 days a week, to provide service solutions. Intelligent service tools and online software updates enable us to proactively monitor connected systems and keep them running at optimal performance.

syngo EVOLVE Package

Innovation inside – the syngo EVOLVE Package® provides operating updates and upgrades to purchased software as well as required hardware to evolve the system with new developments in technology. syngo EVOLVE keeps the SONOLINE Antares at the leading edge of performance throughout its lifetime.

SONOLINE Antares

- + Performance Plans
 - + Siemens Remote Services
 - + syngo EVOLVE Package
-
- = LIFETIME CARE

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