It understands your everyday

Philips Affiniti 50 cardiovascular ultrasound system
Affiniti 50 is a complete echocardiography solution that addresses the needs of a busy department or office while incorporating those innovations that make Philips ultrasound the global leader in echocardiography.

Designed for balance

A complete cardiovascular solution
- Adult echocardiography including TEE
- Pediatric echocardiography including TEE
- Stress echocardiography
- Left Ventricular Opacification (LVO)
- Vascular imaging
- Quantification tools
You always go above and beyond to provide the best care to your patients. But you are expected to do so with less time, fewer resources, and higher patient volume.

To balance these many demands, you need diagnostic information quickly — but not at the expense of accuracy. You need advanced functionality — but not at the expense of ease of use. You need a system that is ergonomic — but built to last for the daily rigors of high patient volume.

Philips Affiniti 50 ultrasound system helps you achieve this balance. Engineered for efficiency and reliability and powered by Philips superb performance, it gets you the diagnostic images you need, quickly. Its intuitive design and walk-up usability help you provide elegant, efficient care — every day.

The Affiniti 50 ultrasound system was designed to work hard, without high costs. Total cost of ownership is kept low through energy-efficient technology, extensive reliability testing that enhances uptime, and a modular design that enables rapid repair, if needed.
Workflow meets **wow**

With Philips Affiniti 50, workflow meets wow. A complete echocardiography solution, it addresses the need to deliver results efficiently, while incorporating those innovations that make Philips ultrasound the leader in echocardiography.

Affiniti 50’s precision beamforming, Tissue Specific Presets (TSP), and efficiency and automation tools deliver both performance and workflow for confident throughput.

Affiniti 50’s precision beamforming with a wide dynamic range delivers superb spatial and contrast resolution, outstanding tissue uniformity, few artifacts, and reduced image clutter. Tissue Specific Presets (TSP) automatically adjust over 7500 parameters to optimize the transducer for the specific exam type, producing excellent image quality with little or no need for image adjustment.

Excellent image quality with S4-2 transducer.

Most cardiac transducers, including TEE transducers, can be shared among Philips EPIQ, CX50, Sparq, and Affiniti systems.
Anatomical Intelligence Ultrasound (AIUS) leads to **everyday efficiency**

Affiniti 50 incorporates Philips exclusive AIUS. Available on both adult and pediatric transducers, it provides automatic anatomy recognition and proven quantification, making it easy to perform exams and deliver clinical information quickly.

**Ejection Fraction (EF)** measurements are now part of nearly every exam. Yet current methodologies, such as biplane Simpson’s method of disks, are time-consuming and can interrupt workflow. The ideal tool for every echo exam, Automated 2D Cardiac Quantification\(^A\) (a2DQA\(^A\)) provides rapid access to validated 2D EF and volumes within 10 seconds.

**Speckle strain echocardiography** is a technique designed to allow clinicians to quickly and easily assess myocardial deformation (strain) in day-to-day practice, going beyond ejection fraction in the assessment of left ventricular (LV) function. Automated Cardiac Motion Quantification\(^A\) (aCMQ\(^A\)) provides reproducible 2D Global Longitudinal Strain (GLS) speckle measurements. An accurate EF is also calculated simultaneously with no extra steps.

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**Automation tools save time**

Philips Affiniti 50 system is equipped with automation features that reduce repetitive button pushes and steps, leading to enhanced workflow.

- **Real-time iSCAN (AutoSCAN):** Automatically and continuously optimizes gain and TGC.
- **Auto Doppler for vascular imaging:** Color-box positioning and sample volume placement in just three steps, with an average of 67.9% fewer button pushes.
- **SmartExam guided workflow:** Increases consistency, reduces keystrokes, and decreases exam time by 30%-50% by automatically planning and processing application protocols.
Performance

Mitral regurgitation

TDI PW

Carotid bulb

Mitral valve prolapse

Contrast LVO focusing on the apex

PFO
**Q-App quantification applications**

Affiniti 50 offers a wide variety of sophisticated Q-Apps to quantify echocardiography information.

<table>
<thead>
<tr>
<th>Q-App</th>
<th>Clinical application</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intima Media Thickness (IMT) for vascular</td>
<td>Automatic carotid intima media thickness measurement</td>
<td>Fast and easy access to IMT data</td>
</tr>
<tr>
<td>Region of Interest (ROI)</td>
<td>Echo contrast and color images</td>
<td>Extract acoustic measurements from images</td>
</tr>
<tr>
<td>Strain Quantification (SQ)</td>
<td>Measures the myocardial velocity from color tissue Doppler</td>
<td>Derive displacement strain and strain rate</td>
</tr>
<tr>
<td>Automated 2D Cardiac QuantificationA.I. (a2DQA.A.I.)</td>
<td>Provides rapid access to proven 2D EF and volumes</td>
<td>Easy access to EF and volumes as part of everyday echo protocols</td>
</tr>
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<td>Automated Cardiac Motion QuantificationA.I. (aCMQA.A.I.)</td>
<td>Reproducible 2D GLS speckle measurements</td>
<td>Fast GLS measurements</td>
</tr>
</tbody>
</table>

![IMT](image1.png) ![ROI](image2.png) ![SQ](image3.png)
Designed around your everyday workflow, Affiniti 50 offers walk-up usability, ergonomics, and mobility.

Comfort meets competence

Philips leverages the experiences of its customers to design Affiniti 50 to address the challenges of daily scanning. We understand the reality of tight spaces, high patient volume, technically difficult patients, and time constraints, and we’ve designed the system with thoughtful details that lighten your workload.

You won’t notice it’s there unless it’s gone, but users have reported that easy clip, our innovative cable management solution, keeps cables tangle-free and reduces damage while decreasing cable strain to enhance comfort while scanning.
**Walk-up usability**

The intuitive, intelligently designed user interface and system architecture have been validated by studies that show that users with ultrasound experience require minimal training on system use to be able to complete an exam.¹

**Reduced reach and button pushes**

To enhance exam efficiency, Affiniti 50 places relevant, easy-to-learn controls right at your fingertips, streamlining workflow. Affiniti 50 is designed to make a full day of scanning comfortable. Because 80% of ultrasound clinicians experience work-related pain, and more than 20% suffer a career-ending injury,² we’ve designed our intuitive, tablet-like touchscreen interface to reduce reach and button pushes.

**Scanning comfort**

Affiniti 50 is designed to make a full day of scanning comfortable. The control panel and generously sized, 54.6 cm (21.5 in) monitor add to the system’s ergonomics, enhancing scanning comfort whether standing or sitting. The touchscreen is one of the largest in its class, so you can easily make selections and control scanning while focusing on your patients.

**Ready when you need it**

At just 83.5 kg (184 lb), Affiniti 50 is one of the lightest in its class and is 16% lighter than its predecessor.† With a small footprint and a fold-down monitor, pushing the system down hallways and in tight spaces is easy.

When an exam is finished, a full suite of DICOM and PC format capabilities make information-sharing simple. Structured reporting facilitates patient workflow by giving you the ability to transfer measurements, images, and reports over network share, and wireless capability plus easy connection to printers helps you document exams.

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¹ 2014 internal workflow study comparing Affiniti to HD15.
† HD15
A smart investment

Enhance uptime
- A modular design for enhanced reliability and rapid repair
- Philips remote services* monitoring, which corrects issues using a standard Internet connection, reducing the need for service calls
- Access to our award-winning service organization

Responsive relationships
The value of a Philips ultrasound system extends far beyond technology. With every Affiniti 50 system, you get access to our award-winning service organization, our competitive financing, and educational programs that help you get the most out of your system.

Exceptional serviceability
The system features a superb modular design for rapid repair.

*Not all services available in all geographies; contact your Philips representative for more information. May require service contract.
Proactive monitoring allows for the detection and repair of anomalies before they become problems, and helps us to better predict potential failures and proactively act on them. Increase system availability, optimize workflow, and promote patient satisfaction by scheduling downtime as opposed to reacting to an unexpected problem.

Intelligent software architecture
Software is easily optimized, maintained, and restored by the service user without risk to patient data, giving you peace of mind and confidence that your data is secure. Patient data is stored on a separate partition and physical location to provide protection and ease of removal, providing you total control of your data.

Clinical education solutions
Our comprehensive, clinically relevant courses, programs, and learning paths are designed to help you improve operational efficiency and enhance patient care.