PHILIPS

Ultrasound

Affiniti 50

It **understands**
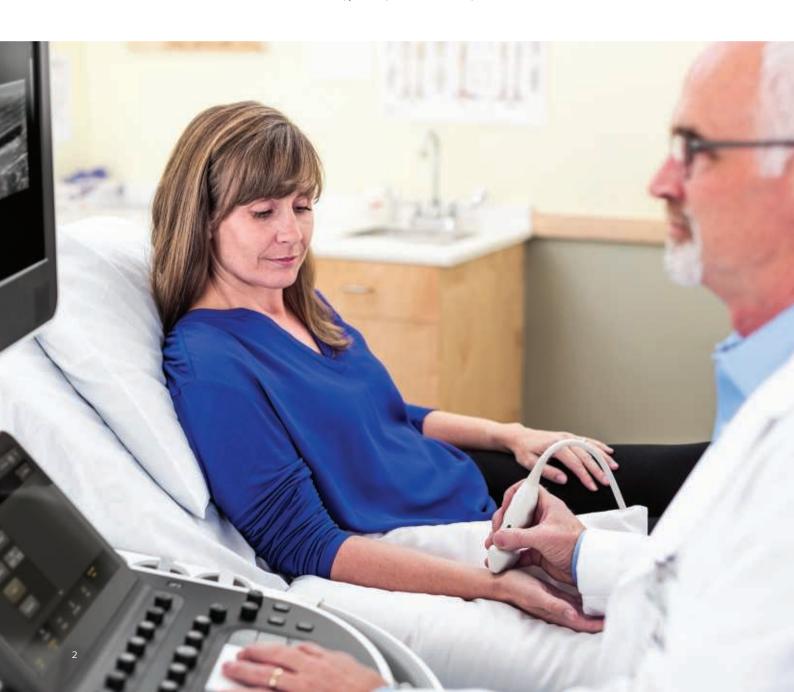## your everyday

Philips Affiniti 50 ultrasound system

Provide the **best possible** care

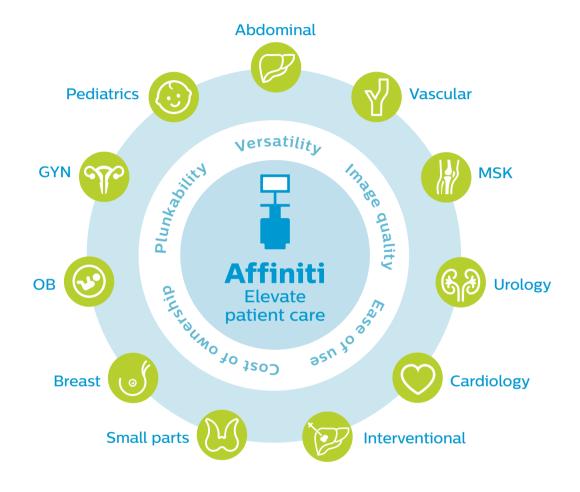Every day, you strive to provide the highest level of care to patients. But there are challenges:

- A wide range of diagnostic needs
- Growing number of difficult-to-scan patients
- The learning curve of new technology
- Unreliable equipment that can break down
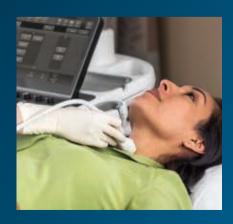- Limited budget means compromising system quality

Philips Affiniti 50 provides you with the tools to overcome your daily challenges so you can provide the best possible patient care. Versatile, affordable, easy to use, precise, and built to last, the Affiniti 50 is the choice of clinicians worldwide.
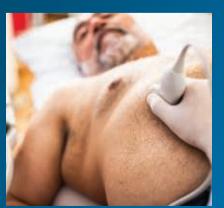
A universal ultrasound platform

Advanced capabilities and a flexible configuration mean that the Affiniti 50 can be customized for a wide range of exam types, providing exceptional image quality across all clinical segments.

Abdominal

Vascular

MSK

Urology

Cardiology

Interventional

Small parts

Breast

OB

GYN

Pediatrics

Versatility

Image quality

Ease of use

Cost of ownership

Plunkability
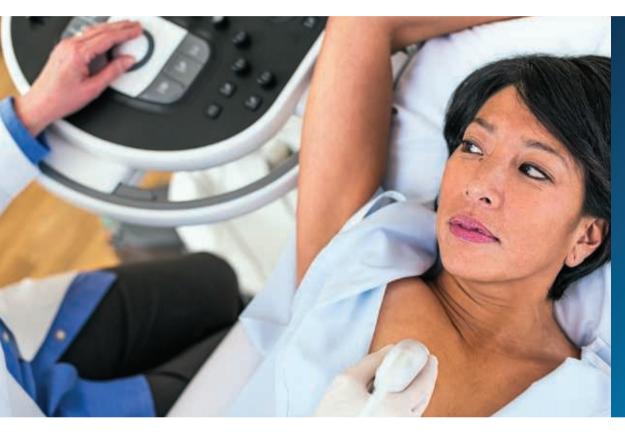
Affiniti
Elevate patient care

Workflow meets **WOW**

With Philips Affiniti 50, workflow meets wow. The system addresses the everyday need to scan quickly and deliver results efficiently, while incorporating those innovations that make Philips ultrasound the choice of those who demand quality images and proven clinical applications.
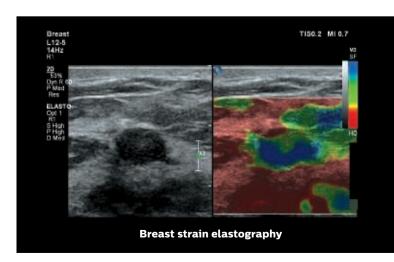
Affiniti 50's precision beamforming, Tissue Specific Presets (TSP), and efficiency and automation tools deliver both performance and workflow for confident throughput.

Affiniti 50 precision beamforming features a wide dynamic range to deliver superb spatial and contrast resolution, outstanding tissue uniformity, fewer 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.

This outstanding image quality combines with advanced clinical functionality, including elastography, contrast-enhanced ultrasound (CEUS), and Anatomical Intelligence Ultrasound (AIUS).

Breast strain elastography

ICA stenosis

The L12-3 transducer provides excellent vascular imaging for carotid, arterial, and venous exams.

A full array of transducers offers you excellent image quality on a variety of exam types.

More definitive clinical information about tissue stiffness
Affiniti 50 supports highly sensitive strain elastography, which requires no external compression and can be used to assess relative tissue stiffness across a variety of applications, including small parts, breast, and gynecology.

Dynamic organ and tumor assessment in real time
With Affiniti 50, you can easily add contrast-enhanced ultrasound (CEUS) to nearly any exam. Affiniti 50 provides immediate optimization of CEUS studies and exceptional performance across multiple agents and applications, which allows for dynamic assessment of organ and tumor perfusion in real time.

Automation that leads to everyday efficiency
Affiniti 50 incorporates Philips-exclusive Anatomical Intelligence Ultrasound. It provides advanced functionality, including global longitudinal strain (GLS) and validated 2D ejection fraction (EF) in 10 seconds.

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%[1] by automatically planning and processing application protocols

[1] Drose J. Saving time while increasing revenue. University of Colorado Hospital. April 2007.

Q-App quantification applications

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

General Imaging Q-Apps

- Intima Media Thickness (IMT)
- General Imaging 3D Quantification (GI 3DQ)
- Region of Interest (ROI)
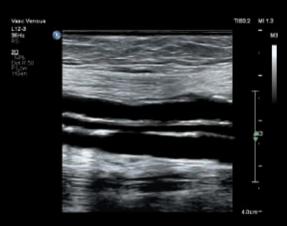- MicroVascular Imaging (MVI)
- Vascular Plaque Quantification (VPQ)

Cardiology Q-Apps

- Intima Media Thickness (IMT)
- Region of Interest (ROI)
- Strain Quantification (SQ)
- Automated Cardiac 2D Quantification[A.I.] (a2DQ[A.I.])
- Automated Cardiac Motion Quantification[A.I.] (aCMQ[A.I.])

Performance
you can see

Calf veins

Liver

Achilles tendon

Femoral artery stenosis

Breast volume imaging

Thyroid

CCA intima media thickening

Hip with arthritic changes

Uterus MPR

Pediatric bowel

Breast cyst panoramic imaging

Testicle

Advances
in Ob/Gyn imaging

TrueVue with TouchVue interface

Photorealistic 3D fetal imaging at your fingertips
TrueVue offers a powerful 3D visualization tool that produces highly realistic imaging of fetal and gynecological anatomy. TrueVue features an innovative internal light source that provides illumination at any location within the 3D volume for exceptional visualization of anatomy. The internal light source allows the freedom to adjust the amount of light and shadow displayed on anatomical structures to reveal subtle detail not obtainable with conventional 3D rendering.

In addition, the GlassVue feature provides an early, more transparent view of the fetal anatomy than traditional ultrasound. The advanced 3D imaging tool goes beyond the surface to reveal bone, organs, and other internal structures. Users have control over the amount of transparency in the 3D volume.

TrueVue features an interactive interface called TouchVue. The TouchVue interface utilizes the Affiniti 50 touchscreen to allow fingertip control of both volume rotation and internal light source position directly on the TrueVue 3D image.

aReveal[A.I.] automatic 3D segmentation

aReveal[A.I.] uses an anatomical intelligent algorithm (AIUS)* that enhances 3D workflow and reduces the time and complexity of obtaining fetal face images. With a simple button push, aReveal[A.I.] automatically sculpts away 3D data proximal to the fetal face by recognizing the geometry of the fetal skull, revealing the fetal face surface.

aBiometry Assist[A.I.]

Streamlines fetal measurement and reporting workflow
Virtually every obstetrical ultrasound examination includes standardized measurements of fetal structures to assess age and growth trends. aBiometry Assist[A.I.] uses anatomical intelligence of fetal anatomy to automatically preplace measurement cursors on selected structures, which users can quickly accept or edit. This helps reduce conventional measurement steps and streamlines obstetrical report generation. aBiometry Assist[A.I.] allows selection of auto measure function for BPD, HC, AC, and FL fetal structures.

With **TrueVue**, a moveable light source illuminates 3D volumes internally or externally.
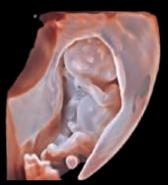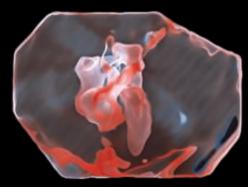

Different examples of light source position and depth

The **GlassVue** feature provides an early, more transparent view of the fetal anatomy than traditional ultrasound.

11 weeks of gestation

Fetal heart at 29 weeks of gestation

aRevealA.I. is an advanced feature of Philips AIUS that removes extraneous information to quickly and easily reveal the fetal face.

Before aRevealA.I.

After aRevealA.I. **applied**

* AIUS turns data into information
Anatomical Intelligence Ultrasound (AIUS) looks at a patient's ultrasound data and applies adaptive system intelligence using 3D anatomical models to create easier and more reproducible results.

Cardiology capabilities

Affiniti 50 is a comprehensive 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.
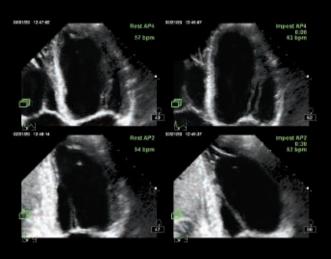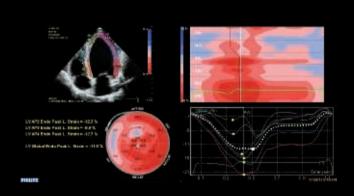
A comprehensive cardiovascular solution

- Adult echocardiography including TEE
- Pediatric echocardiography including TEE
- Stress echocardiography
- Left Ventricular Opacification (LVO)
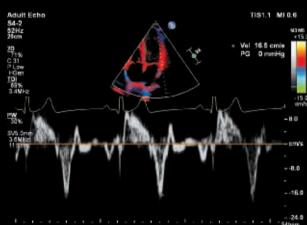- Vascular imaging
- Quantification tools

Bicuspid aortic valve

Stress echo

aCMQ^{A.I.} provides both EF and GLS from the same 2D images

TDI PW

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 to help 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.

MaxVue high-definition display

With a touch of a button, MaxVue brings full high-definition display quality to ultrasound imaging. Now you can experience extraordinary visualization of anatomy with 1,179,648 more image pixels when compared to the standard 4:3 display format mode. MaxVue enhances ultrasound viewing during interventional procedures and provides 38% more viewing area to optimize the display of dual, side/side, biplane, and scrolling imaging modes.

Over one million more pixels per image

38% larger viewing area

Standard format 4:3
1024 X 768 pixels

MaxVue
Full high-definition format 16:9
1920 X 1080 pixels

With image replication and TGCs on its tablet touchscreen, Affiniti 50 was designed to reduce reach and button pushes.

Affiniti 50's friendly design and library-quiet operation enhance patient comfort.

To reduce the time required for mobile scans, the system can be put to sleep in two seconds, and then moved to a new location, where it starts up in just seconds.

With multimodality query retrieve, you can review DICOM CT, NM, MR, mammography, and ultrasound images without using an external reading station.

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.[2]

Reduced reach and button pushes

To enhance exam efficiency, Affiniti 50 places relevant, easy-to-learn controls right at your fingertips, streamlining workflow. Because 80% of ultrasound clinicians experience work-related pain, and more than 20% suffer a career-ending injury,[3] 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 with 180° of movement and generously sized 54.6 cm (21.5 in) articulating monitor enhances 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 its small footprint and 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 makes 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.

Analysis, reporting, connectivity, and post-processing capabilities

Measurements and calculations packages elevate clinical throughput and efficiency, while advanced connectivity tools enable efficient data transfer to wherever it is needed. Customizable report templates provide consistent layouts and enhance report readability. Active native data allows post-processing of many exam parameters so that you can finalize images before transfer to PACS.

[2] 2014 internal workflow study comparing Affiniti to HD15.
[3] Society of Diagnostic Medical Sonography, Industry Standards for the Prevention of Musculoskeletal Disorders in Sonography, May 2003.
* HD15

Built to withstand the rigors of daily use, Affiniti 50 offers low operating costs and is backed by Philips support and value-added services. The Affiniti 50 system boasts a low total cost of ownership, making it a smart investment.

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.

Affiniti 50 consumes nearly

40%
less power

than its predecessor.** It consumes less energy than a toaster and generates less heat, which can help you save on energy and cooling costs.

Support request button for immediate access to Philips support.

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

Count on us
as your patients count on you

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,* competitive financing, and educational tools that help you get the most out of your system.**

Always there, always on
We work as one with your team to keep your Affiniti 50 system running smoothly.

Remote service capabilities maximize efficiency
Easy, rapid technical and clinical support through remote desktop enables a virtual visit with a Philips expert.

If you prefer to keep your know-how in-house, the OmniSphere Remote Technical Connect application† allows your BioMed team remote access to Philips systems on your network so that you can have remote service capabilities your way.

Remote software distribution boosts performance over the entire system lifecycle
Remote software distribution provides a simple, convenient, and safe process to seamlessly receive updates at a time that suits you, keeping your system at peak performance now and in the future.

Proactive monitoring solutions maximize uptime
Philips proactive monitoring increases system availability by predicting potential system disruptions and proactively acting on them, letting you focus on what is most important – your patients.

Immediate support request at your fingertips
The support request button allows you to enter a request directly from the control panel, for a fast and convenient communication mechanism with Philips experts without leaving your patient, minimizing workflow interruption.

On-cart transducer test provides confidence in your transducer quality
On-cart transducer test provides a non-phantom method to test Affiniti 50 transducers at any time, giving you confidence in your diagnostic information.

Affiniti offers a defense-in-depth strategy, implementing a suite of security features designed to help clinical IT professionals and healthcare facilities provide additional patient data privacy and virus protection, as well as protection from unauthorized access via the ultrasound systems on hospital networks.

Sharing risk, increasing the return on your investment
Partner with us to maximize utilization and uptime of your Affiniti 50 system.

Utilization reports for confident decision-making
Data intelligence tools can help you make informed decisions to improve workflow, deliver quality patient care, and decrease the total cost of ownership. The on-board utilization tool provides individual transducer usage data and the ability to sort by exam type. The OmniSphere Utilization Optimizer takes this a step further by providing easy-to-use charts and graphs for all of your applicable† networked Philips systems.

Understanding your needs, designed for you
Our flexible RightFit service agreements, education offerings, and innovative financing solutions can be adapted to meet your needs and strategic priorities.
- **Technology Maximizer Program:** helps keep your system performing at its peak by continuously providing the latest software from Philips at a fraction of the cost of the same upgrades purchased individually over time.
- **Xtend Coverage:** lets you choose additional service coverage for your ultrasound equipment at the time of purchase to more easily calculate your total cost of ownership.
- **Clinical education solutions:** comprehensive, clinically relevant courses, programs, and learning paths designed to help you improve operational efficiency and enhance patient care.

www.philips.com/Affiniti