

**PHILIPS**

Ultrasound

Affiniti

It **understands**  
your everyday

Philips Affiniti ultrasound system for women's health care



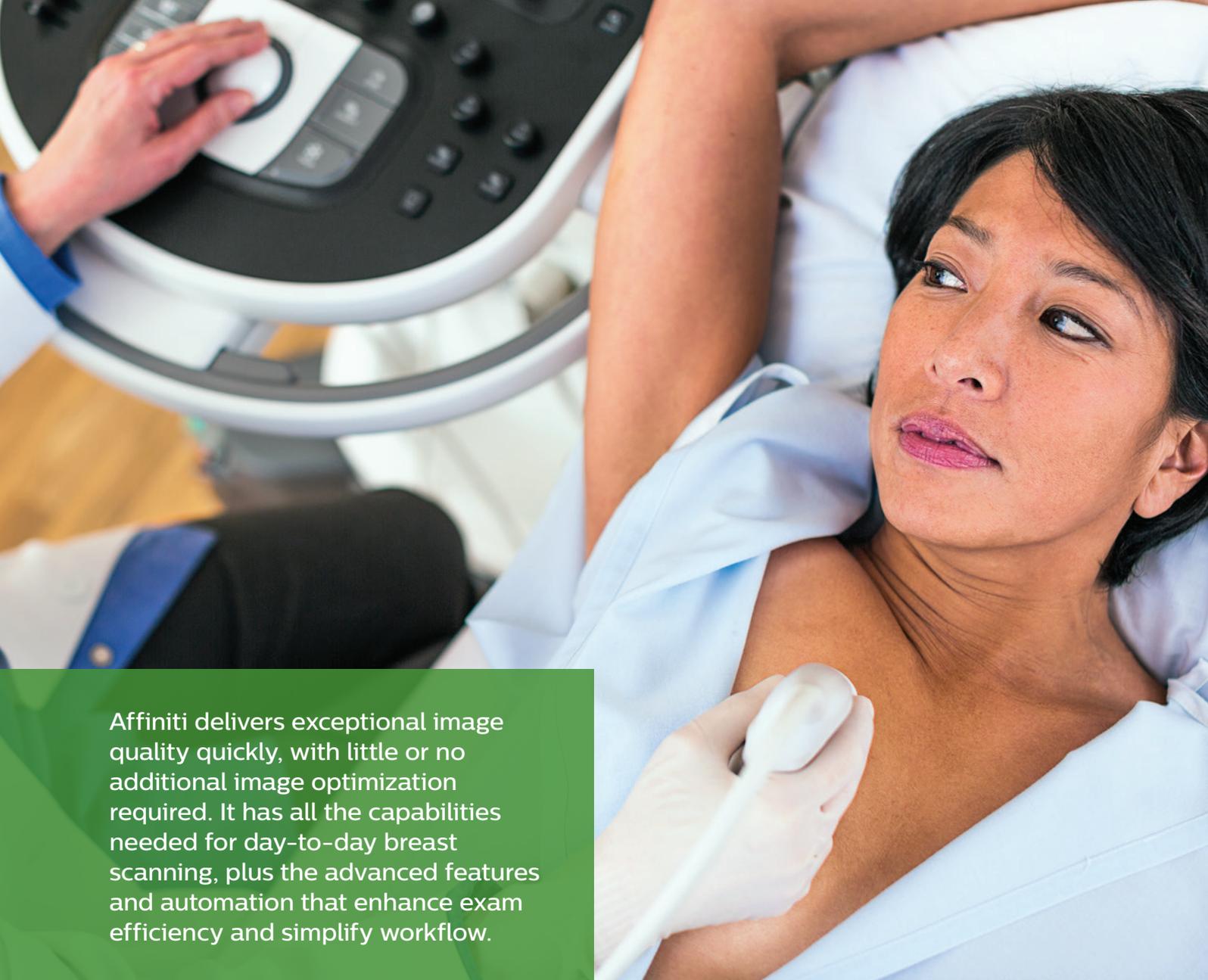
# Affiniti ultrasound for women's health care

Designed to set you ahead and help you stay ahead, Philips Affiniti ultrasound system delivers innovation that responds to the needs of a busy breast clinic or ultrasound department.



Throughout our worldwide research into women's health care, you've told us about the challenges you face

- I have issues with the quality and consistency of ultrasound diagnostic output – ultrasound needs to evolve to a more definitive modality.
- I need new levels of image quality and clarity for increased clinical certainty especially on difficult to image patients.
- I experience high variability in exam quality and need better reproducibility and consistency across a wide variety of skill sets.
- I need to improve departmental workflow efficiency to overcome economic pressures of increasing exam demand using existing staffing levels.



Affiniti delivers exceptional image quality quickly, with little or no additional image optimization required. It has all the capabilities needed for day-to-day breast scanning, plus the advanced features and automation that enhance exam efficiency and simplify workflow.

## Workflow meets **WOW**

Affiniti combines outstanding performance and efficient workflow and features innovative Philips technologies.

- The system's precision beamforming delivers superb spatial and contrast resolution, outstanding tissue uniformity, few artifacts, and reduced image clutter.
- Tissue Specific Presets (TSPs) 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.

Affiniti is also equipped with automation features, such as AutoSCAN which decreases repetitive tasks and makes getting a great image easy.

Philips SmartExam-guided workflow delivers exam efficiency.

# Redefining clinical expectations

## Variable XRES

Using expertise gained from MR, Philips brought XRES adaptive image processing to ultrasound. XRES imaging algorithms and spatial compounding reduce speckle noise and add a new level of refinement by improving conspicuity of existing tissue patterns and bringing margins and borders into even greater definition. Variable XRES allows the user to select progressive amounts of noise reduction, edge enhancement, and textural smoothing.

## Tissue aberration correction

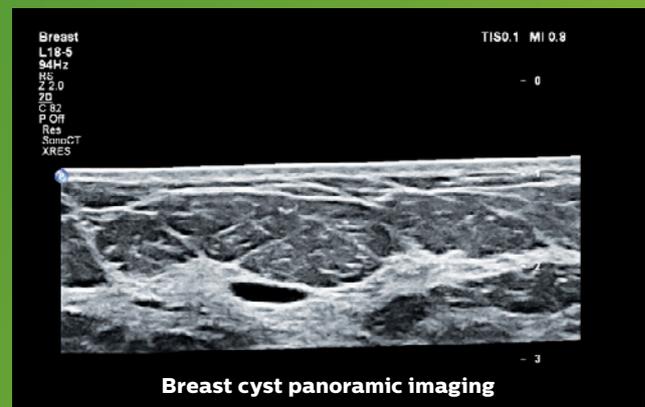
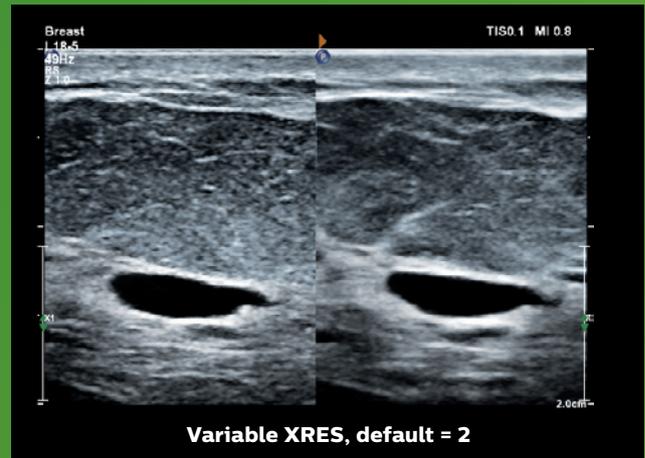
For your patients with fatty breast tissue, our innovative tissue aberration correction technology on the Affiniti compensates for changes in speed of sound to display detailed images of breast anatomy. Our linear transducers are now optimized with tissue aberration correction to provide superb imaging performance for all breast patient types.

## SonoCT and XRES

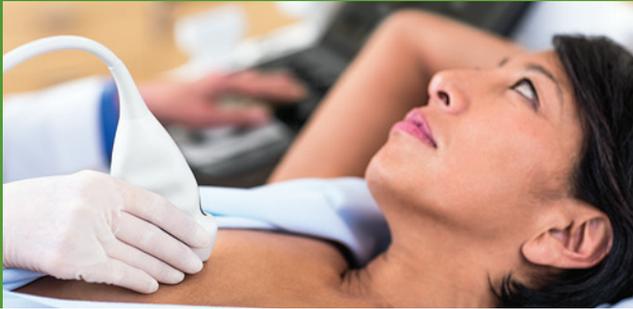
SonoCT and XRES work in tandem to display superb images. Borders are well defined, tissue structure is differentiated, and irregularities seen in solid masses are well defined, allowing quick and confident diagnosis.

## Panoramic view

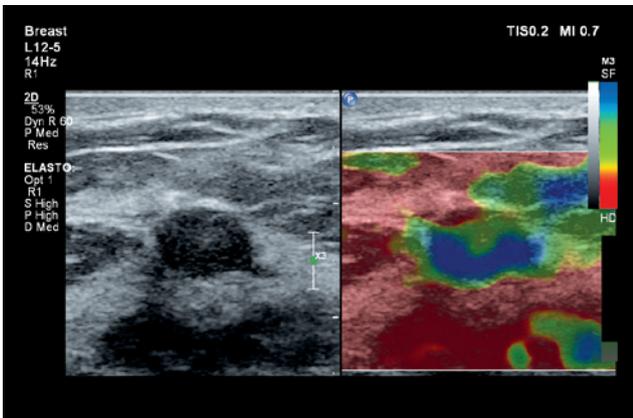
Using panoramic imaging, you can capture the entire landscape in a single view. It's easy to perform, and the extended view allows a global representation of breast architecture, large masses, and multiple cysts.



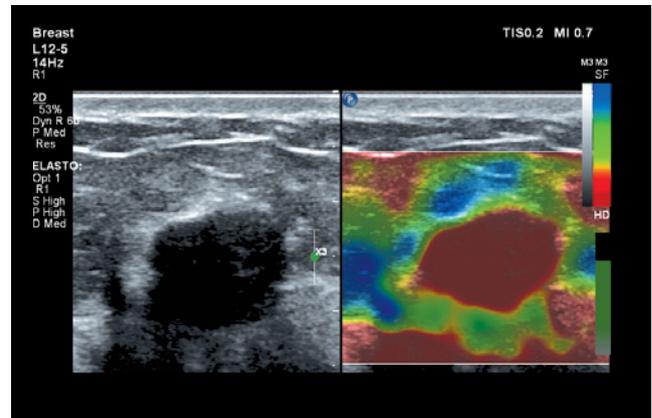
# Extend your boundaries with strain elastography



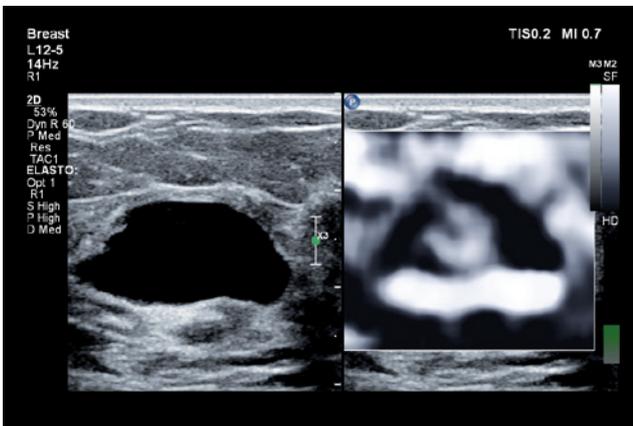
Studies have shown that a combination of sonography and ultrasound elastography, a technique that enables evaluation of relative tissue stiffness, could potentially reduce unnecessary biopsies.<sup>1</sup> Affiniti offers a highly sensitive strain elastography solution for breast ultrasound exams. No additional compression required means increased exam consistency and reproducibility.



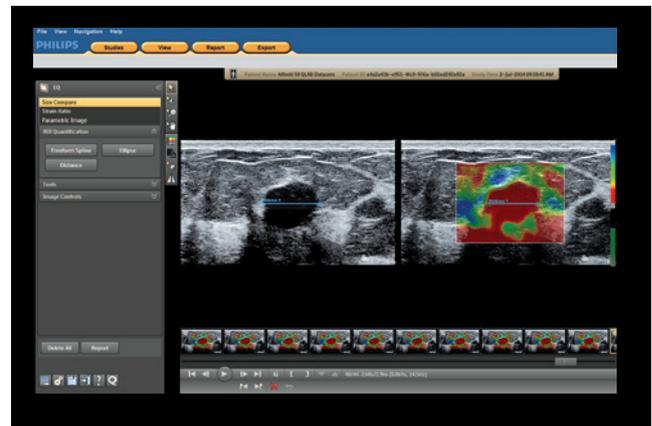
Elastogram shows relative tissue stiffness.



Elastography provides highly sensitive and specific information that allows you to visualize, record, and report on tissue stiffness parameters.

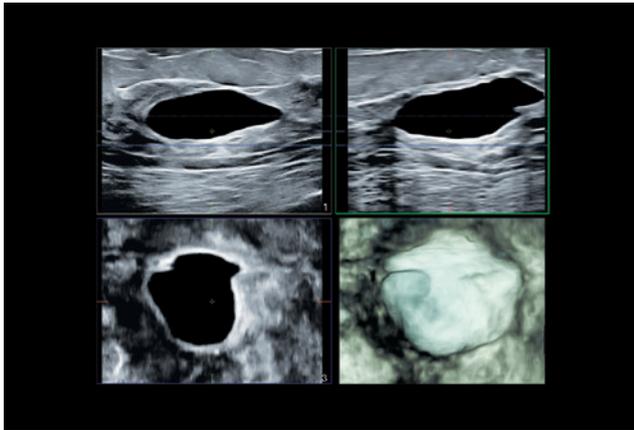


Elastography adds more information about the extent and margins of suspicious lesions.

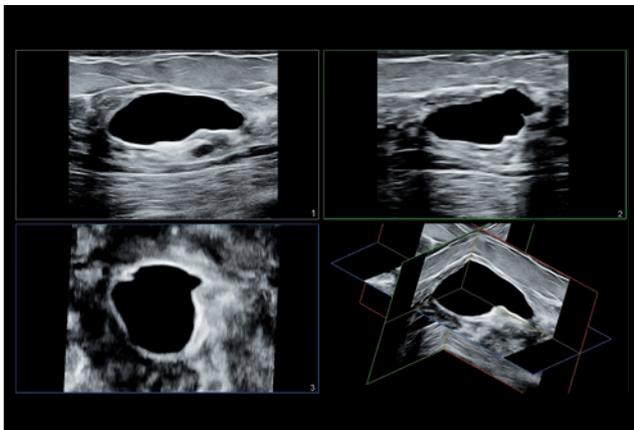


QLAB copy features allows for instantaneous reproduction of lesion circumference on elastogram to reference image and manual adjustments available for increased precision.

# Volume meets **vision**

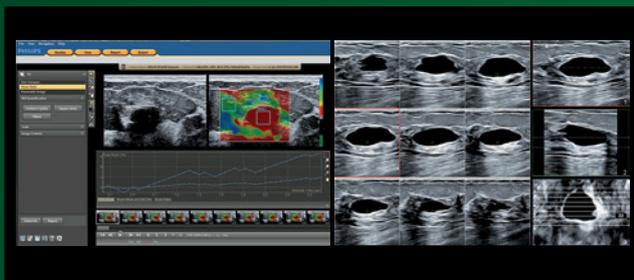


The MPR view provides the ability to see this mass in three orthogonal planes. The third plane and thick slice view provide additional diagnostic information and are obtainable only with volume imaging



The Affiniti VL13-5 linear array transducer provides high performance 2D, 3D, and 4D imaging for breast studies.

## Turning images into answers with QLAB quantification software



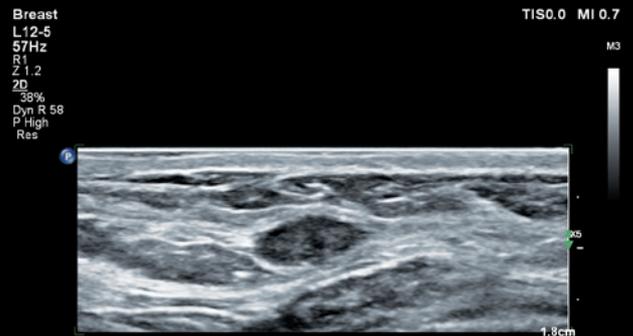
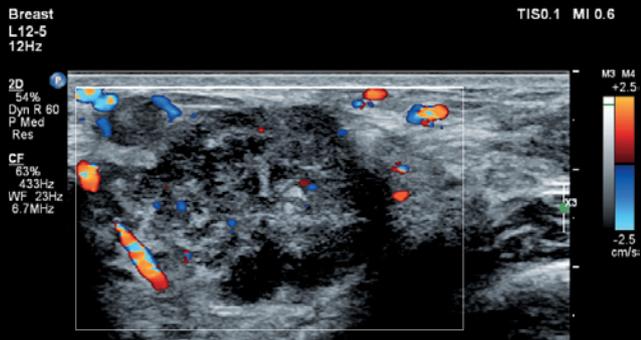
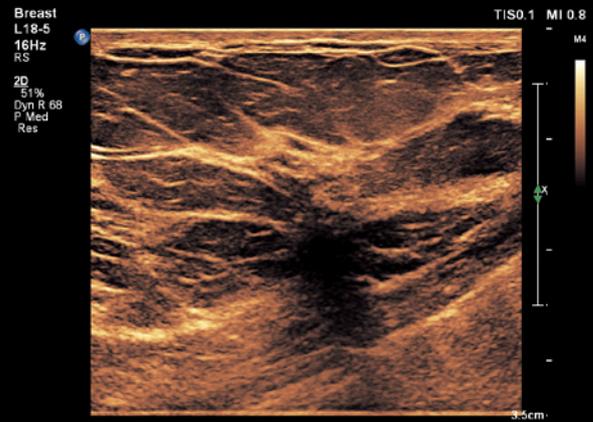
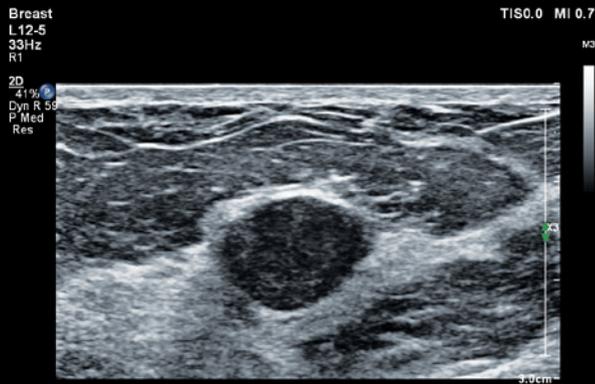
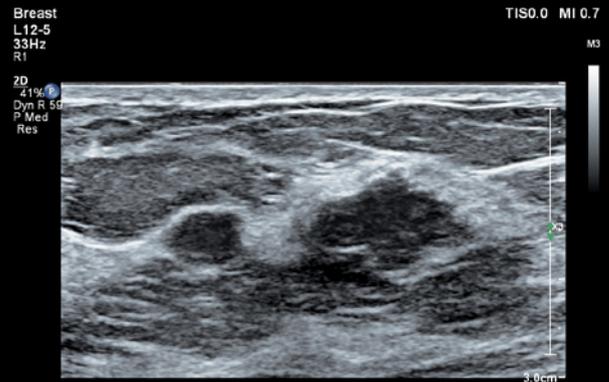
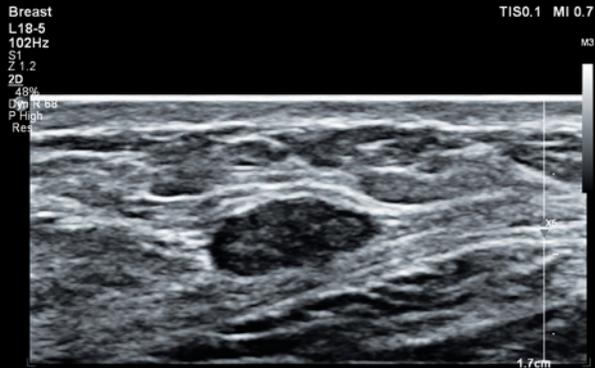
As advanced techniques have evolved in the complementary imaging methods of mammography and ultrasound, so have techniques to quantify breast imaging results. QLAB Elastography Analysis/QLAB Elastography Quantification provides decision support for tissue stiffness and allows you to offer this exciting new technique to your patients.\*

QLAB provides 3D interrogation, providing volume measurements and visualization of 2D information derived from the volume.

\* EQ is not available in the U.S., and EA is only available in the U.S.

# Performance

you can see



# Comfort meets **competence**



Philips leverages the experiences of its customers to design Affiniti 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.

## **Advanced workflow**

Affiniti was designed for walk-up usability and is so intuitive that it requires minimal training on system use to be able to complete an exam.<sup>2</sup> The system offers the automation to drive efficiency throughout exams with features such as Real Time iSCAN (AutoSCAN), which automatically optimizes gain and TGC continuously to provide excellent images in 2D, 3D, or 4D.

## **Ready when you need it**

At just 83.5 kg (184 lb), Affiniti 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. Affiniti can be placed in sleep mode within two seconds and boot up to full functionality in just seconds. Wireless DICOM further aids workflow.



# Automation supports the way you work

Affiniti also supports automation designed to aid your workflow and increase your confidence in the most challenging exams.

### SmartExam

SmartExam decreases exam time by 30–50% and keystrokes by as many as 300 per exam, and results in a high level of consistency among users.<sup>3</sup> It is fast and easy to customize, providing consistent and accurate annotation, automatic mode switching, and missed view alerts to streamline exams. The result is more time to focus on your patients, increased confidence in complete studies, less focus on requirements, less repetitive motion, less stress, and enhanced schedule maintenance and department efficiencies.

### Query retrieve

Use multimodality query retrieve to view DICOM images such as MR, mammography, and ultrasound. Easily compare past and current studies without the use of an external reading station and even review these multimodality images while live imaging.



Affiniti features integrated efficiency tools and multiple degrees of articulation for scanning comfort.

### Library quiet

Silent as a library, with a smaller footprint than conventional ultrasound models, Affiniti will not distract you from the care you want to provide.

### Scanning comfort

The control panel with 180° of movement and generously sized 54.6 cm (21.5 in) articulating monitor enhance scanning comfort, whether standing or sitting.

### Set-up Wizard

Set-up Wizard allows users to step up to the system, easily establish user configurations, and get running quickly.

### Active native data

Active native data allows for post-processing of many exam parameters.

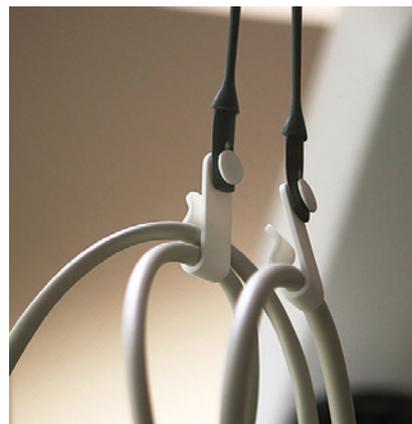
Affiniti consumes nearly

**40%**  
less power

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



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



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.

\* HD15

# A **smart** investment

We understand your challenges: uncertain economic times, changing healthcare landscapes, and the impact of healthcare reform. We know that efficient workflows and system uptime are critical success factors in running an effective healthcare business.

Affiniti boasts a low total cost of ownership, making it a smart investment. Built to last, it is designed to withstand the rigors of high patient volume. Smart service options\* help reduce disruption to your everyday workflow.



## Remote services mean we're closer than ever\*

### **Remote desktop**

Spend less time on the phone with a Philips "Virtual Visit" with remote system interaction for fast technical and clinical troubleshooting and guided scanning options.

### **iSSL technology**

This industry-standard protocol meets global privacy standards and provides a safe and secure connection to the Philips remote services network using your existing Internet access point.

### **Online support request**

Enter a support request directly from your Affiniti system for a fast, convenient communication mechanism that reduces workflow interruption and keeps you at the system and focused on your patient.

### **Utilization reports**

Data intelligence tools that can help you make informed decisions to improve workflow, deliver quality patient care, and decrease the total cost of ownership. This ultrasound utilization tool provides individual transducer usage and the ability to sort by exam type.

### **Proactive monitoring**

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.

\* Not all services available in all geographies; contact your Philips representative for more information. May require service contract.



1. Zhi H, et al. Comparison of Ultrasound Elastography, Mammography, and Sonography in the Diagnosis of Solid Breast Lesions. J Ultrasound Med 2007;26:807–815.
2. 2014 internal workflow study comparing Affiniti to HD15.
3. University of Colorado, protocols study, April 2007.

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Printed in the USA.  
4522 991 16011 \* FEB 2016