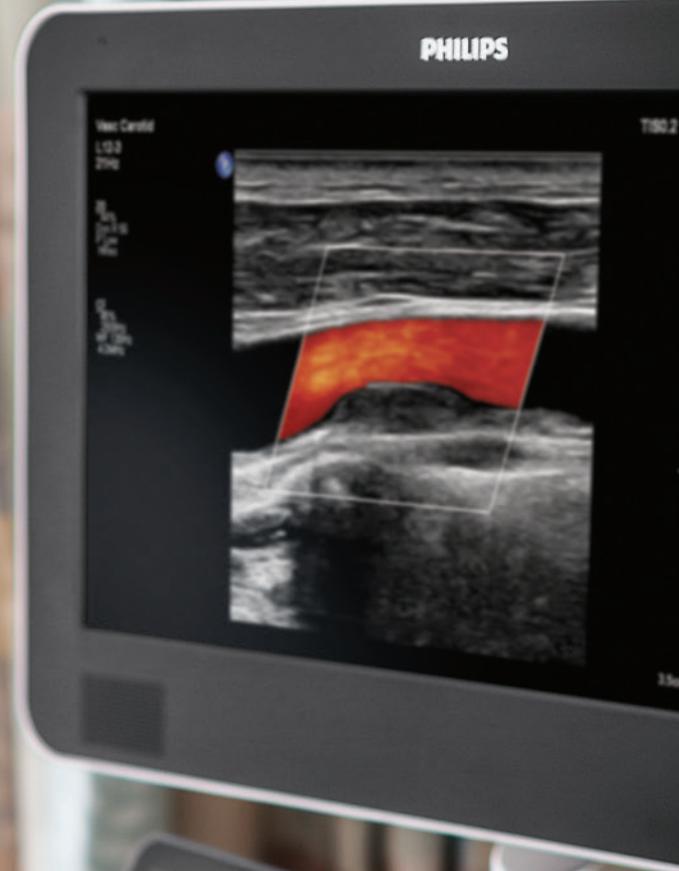


**PHILIPS**

Ultrasound

Affiniti



It understands  
your everyday

Philips Affiniti ultrasound system for vascular



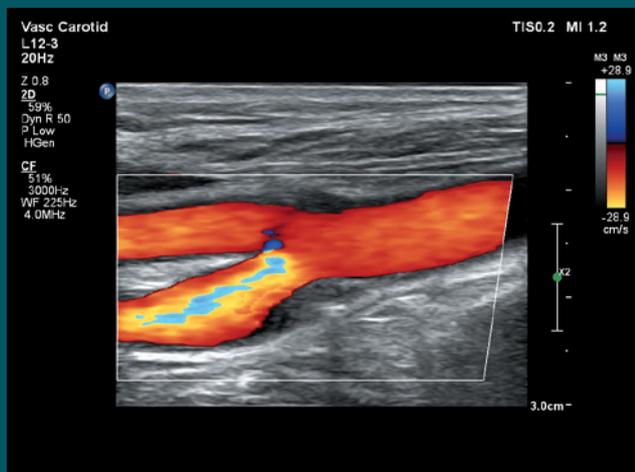
# Excellence in vascular performance

With its full range of vascular applications, you'll find that Philips Affiniti ultrasound quickly becomes an essential part of your day. Affiniti provides excellence in the full range of vascular imaging across patient types, including the technically difficult patient.

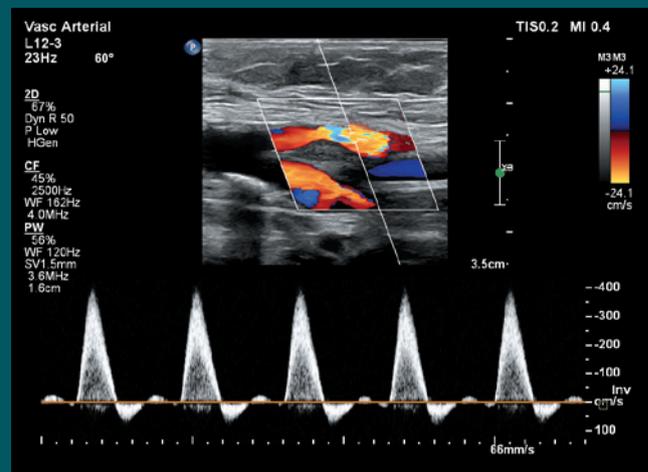
Designed to set you ahead and help you stay ahead, Affiniti addresses the everyday need to scan quickly and deliver results efficiently, while delivering innovations that respond to the needs of a busy vascular ultrasound department.



Panoramic imaging of a superficial vein



Carotid bulb stenosis



Ulnar artery stenosis



# Workflow meets wow

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

## Automation tools save time

Affiniti reduces repetitive button pushes and steps so you can focus on what really matters.

### Real-time iSCAN (AutoSCAN)

Automatically and continuously optimizes gain and TGC to provide excellent images in 2D, 3D, and 4D modes.

### Auto Doppler for vascular imaging

Auto Doppler features automated color region of interest positioning and sample volume placement. Takes ten steps from a conventional exam to three steps, providing few button pushes and reduced exam time.

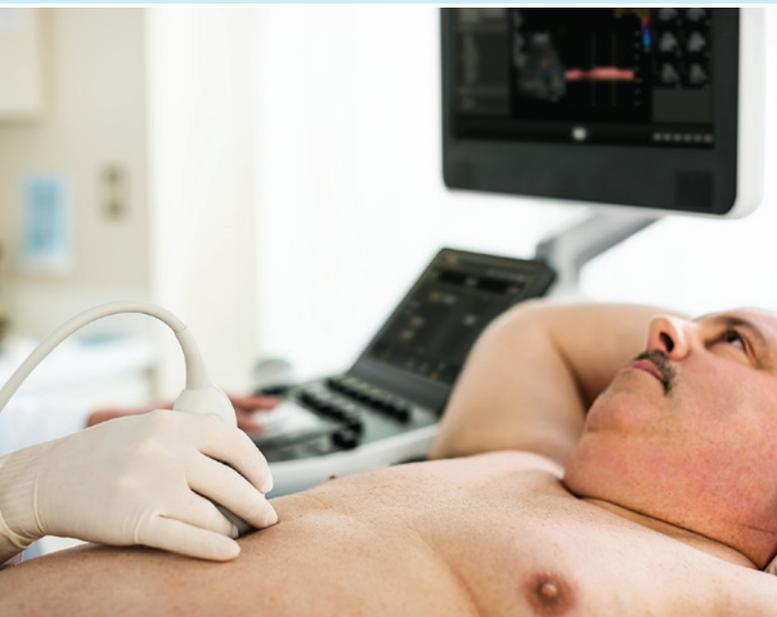
### SmartExam protocols

System-guided SmartExam protocols facilitate exams with an onscreen menu guiding you through required views and modes while automatically entering annotations and prompting for measurements. SmartExam protocols help you build a report quickly, alert to missed views and reduce overall keystrokes and exam time.



# A full range of transducers supports virtually any vascular application

Transducer	Applications
L12-3ERGO	Carotid, lower extremity and upper extremity
C5-1	Abdominal vascular
eL18-4	Carotid and superficial vascular
S5-1	Cardiology and transcranial Doppler
L15-7io	Surgical and superficial vascular
C8-5	Cerebrovascular
D2tcd	Transcranial Doppler



## PureWave imaging increases penetration

PureWave transducers are designed to increase penetration in technically difficult patients so that one transducer can facilitate diagnostic confidence for difficult-to-image patients as well as those who are easy.

## Precision beamforming

The power of PureWave is strengthened by the precision beamforming of Affiniti, which features a wide dynamic range to deliver superb spatial and contrast resolution, outstanding tissue uniformity, fewer artifacts, and reduced image clutter.

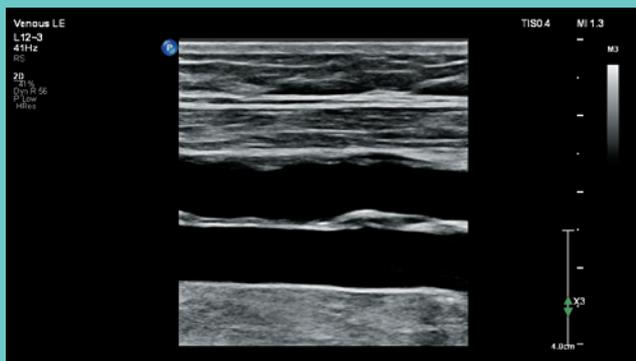
## Tissue Specific Presets

Tissue Specific Presets (TSP) automatically adjust over 7,500 parameters to optimize the transducer for the specific exam type, producing excellent image quality with little or no need for image adjustment.

# Elevated vascular imaging with the L12-3ERGO transducer



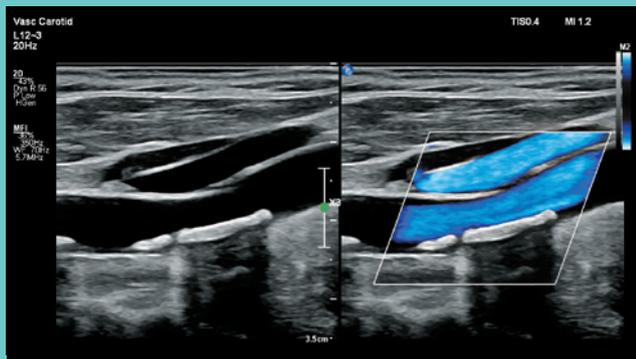
- Ergonomic and lightweight
- Superb vascular imaging for carotid and upper and lower arterial and venous exams
- Supports advanced MicroFlow Imaging for vascular applications
- XRES Pro next-generation image processing for enhanced border definition and exceptional plaque conspicuity



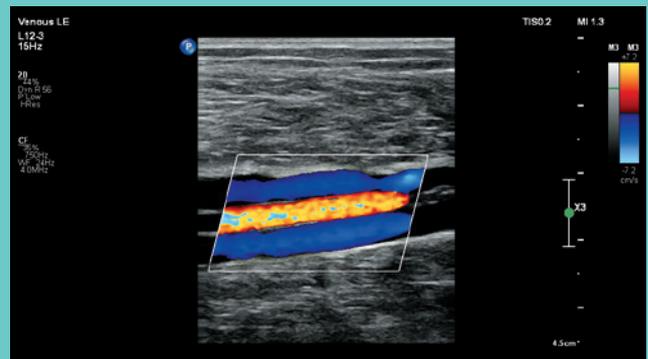
Venous lower extremity femoral artery calcification



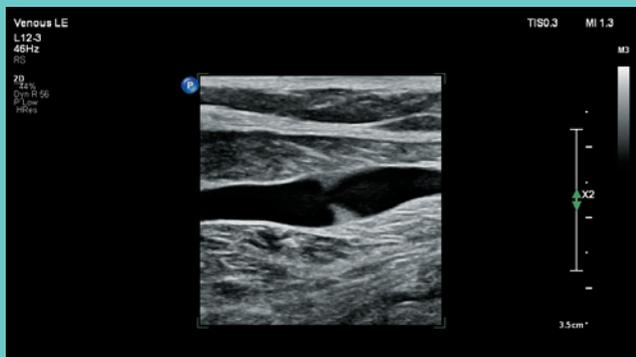
Upper extremity CPA compare of brachial artery



MFI compare of carotid plaque



Lower extremity posterior tibial artery and vein



Gastrocnemius vein valve with rouleaux



Carotid plaque



### Contrast-enhanced ultrasound (CEUS)

CEUS provides for immediate optimization of contrast-enhanced studies and exceptional performance across multiple agents and applications.

### Transcranial image fusion

Transcranial image fusion supports more confident answers in applications such as stroke therapy while reducing dependence on repeat CT or MR scans in routine follow-up cases.

## Quantify image information

Q-Apps quantify ultrasound image information to help you turn images into answers.

### Vascular Q-Apps

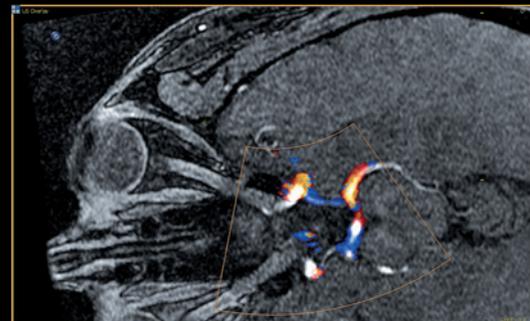
- Intima Media Thickness (IMT)
- Region of Interest (ROI)
- MicroVascular Imaging (MVI)
- Vascular Plaque Quantification (VPQ)

### Cardiology Q-Apps

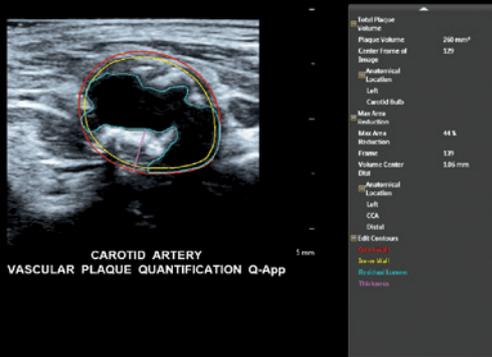
- Intima Media Thickness (IMT)
- Region of Interest (ROI)
- Strain Quantification (SQ)
- Automated 2D Cardiac Quantification<sup>A.I.</sup> (a2DQ<sup>A.I.</sup>)
- Automated Cardiac Motion Quantification<sup>A.I.</sup> (aCMQ<sup>A.I.</sup>)



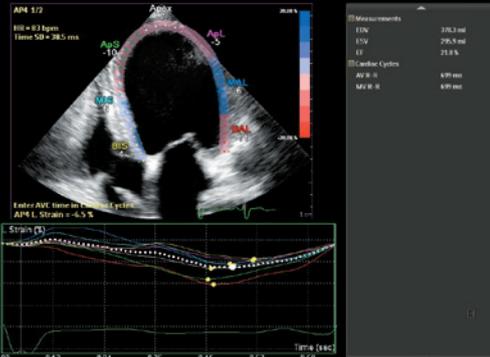
Automatic carotid intima media thickness measurement for fast and easy access to IMT data



Transcranial image fusion combines multimodality images with live ultrasound



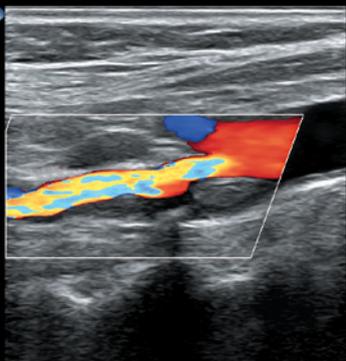
VPQ allows advanced analysis of plaque volume and morphology



aCMQ<sup>A.I.</sup> provides both EF and GLS from the same 2D images

# Performance you can see

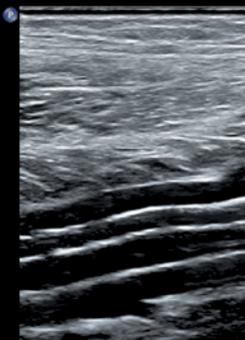
Vasc Carotid  
L12-3  
17Hz  
  
2D  
60%  
Dyn R 50  
P Low  
HGen  
  
CF  
51%  
3000Hz  
WF 225Hz  
4.0MHz



TIS0.1 MI 1.2  
M3 M3  
+28.9  
-28.9  
cm/s  
4.0cm

ICA stenosis

Vasc Venous  
L12-3  
27Hz  
RS  
  
2D  
84%  
Dyn R 45  
P Low  
HGen



TIS0.3 MI 1.3  
M3

Deep calf veins

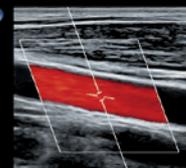
Vasc Venous  
L18-5  
28Hz  
RS  
  
2D  
70%  
Dyn R 50  
P Low  
HRes



TIS0.1 MI 0.7  
M3

Valvular sinus of femoral vein

Vasc Carotid  
L12-3  
18Hz 50°  
  
2D  
51%  
Dyn R 50  
P Low  
Gen  
  
CF  
51%  
3750Hz  
WF 393Hz  
5.0MHz  
PW  
50%  
WF 60Hz  
SV1 5mm  
3.8MHz  
1.9cm



TIS0.2 MI 0.6  
M3 M3  
+67.4  
-67.4  
cm/s  
-120  
-80  
-40  
-40  
cm/s

Common carotid artery

Vasc Carotid  
L12-3  
30Hz  
RS  
  
2D  
48%  
Dyn R 50  
P Low  
HGen



TIS0.2 MI 1.3  
M3

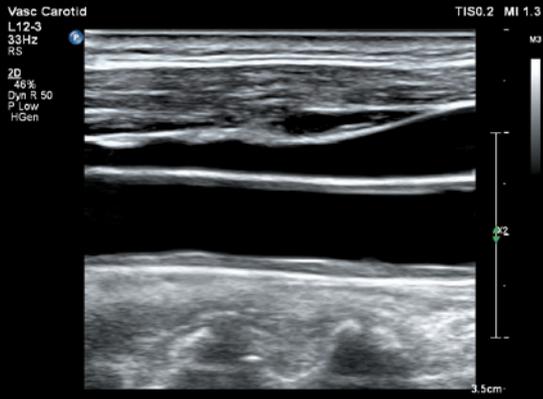
ICA stenosis

Abd Vasc  
C5-1  
15Hz  
  
2D  
56%  
Dyn R 62  
P Med  
HRes  
  
CF  
48%  
3077Hz  
WF 338Hz  
3.1MHz

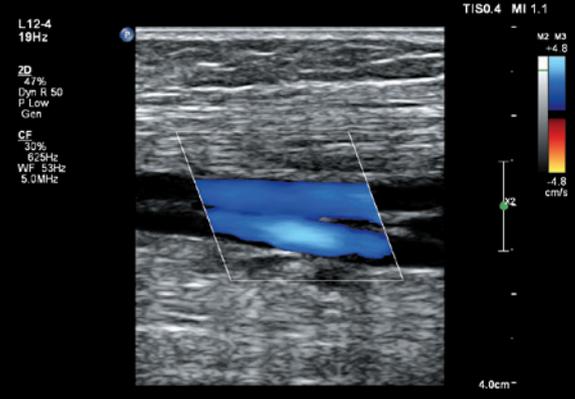


TIS0.6 MI 1.0  
M3 M4  
+38 E  
-38.5  
cm/s  
7.0cm

Aorta with celiac and SMA origins



**CCA intimal-media thickening**



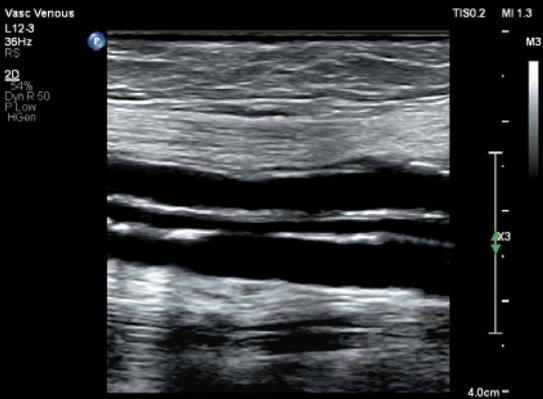
**Calf vein color flow**



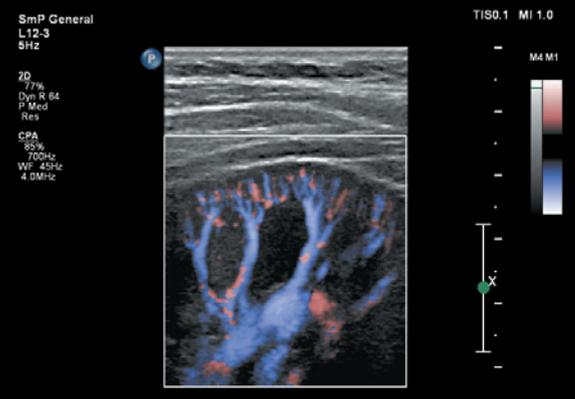
**Celiac axis arterial flow**



**Arterial stent stenosis**



**Posterior tibial vasculature**



**Renal parenchyma**



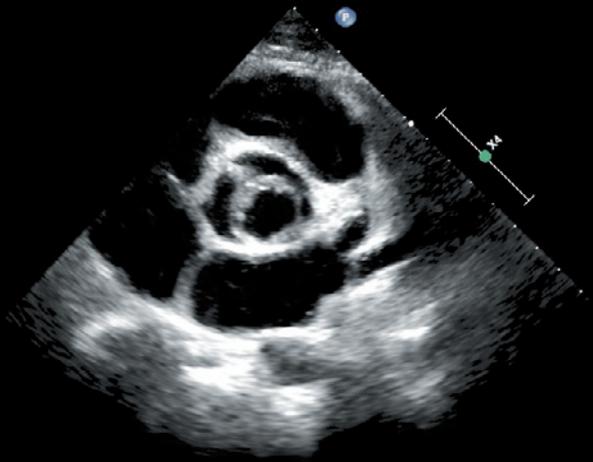
# Cardiology capabilities

Affiniti 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.

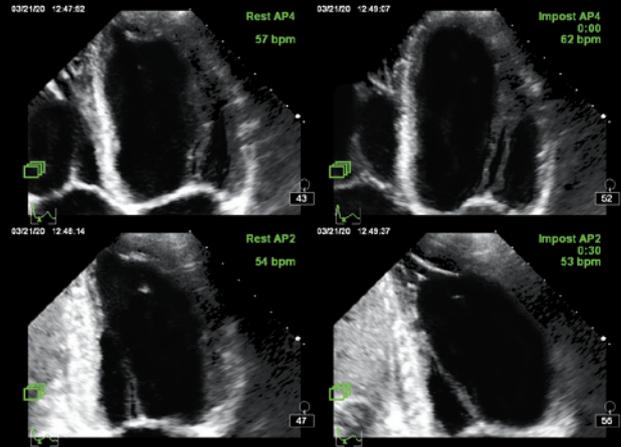


## **A comprehensive cardiovascular solution**

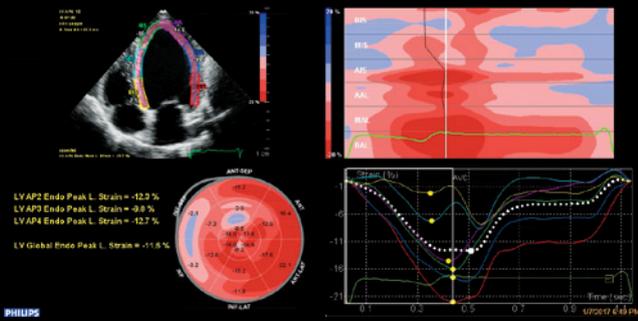
- Adult echocardiography including Live 3D TEE
- Pediatric echocardiography including MicroTEE
- Stress echocardiography
- Left Ventricular Opacification (LVO)
- Vascular imaging
- Quantification tools



**Bicuspid aortic valve**



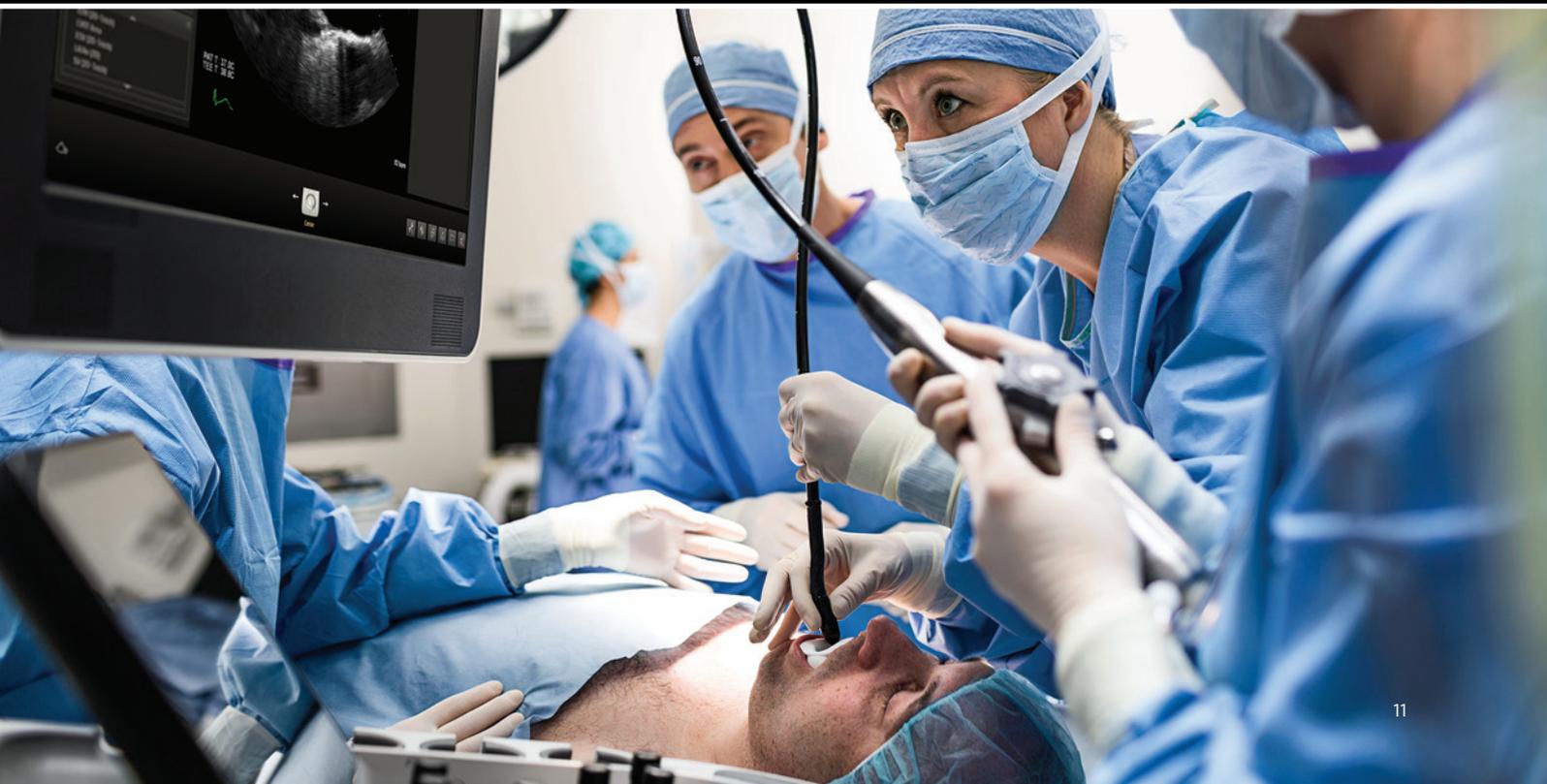
**Stress echo**



**aCMQ<sup>AI</sup> provides both EF and GLS from the same 2D images**



**Mechanical mitral valve**



# Comfort meets competence

Designed around your everyday workflow, Affiniti offers walk-up usability, ergonomics, and mobility.

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.



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 is designed to reduce reach and button pushes.



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



One of the lightest in its class, the system can be pushed down hallways and through tight spaces easily.



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.

### 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.<sup>1</sup>

### Reduced reach and button pushes

To enhance exam efficiency, Affiniti 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,<sup>2</sup> we've designed our intuitive, tablet-like touchscreen interface to reduce reach and button pushes.

### Scanning comfort

Affiniti 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 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.

\* HD15

# A smart investment

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

## Enhance uptime

- 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 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 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.



### Exceptional serviceability

The system features a superb modular design for rapid repair.

Affiniti consumes nearly

**40%**  
less energy

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



Support request button for immediate access to Philips support.

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

\*\* HD15

# Count on us as your patients count on you

The value of a Philips ultrasound system extends far beyond technology. With every Affiniti 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 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.

### 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 transducers at any time, giving you confidence in your diagnostic information.

## Sharing risk, increasing the return on your investment

Partner with us to maximize utilization and uptime of your Affiniti 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.

## 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.

## 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.



\* Philips is rated number one in overall service performance for ultrasound for 26 consecutive years in the annual IMV ServiceTrak survey in the USA.  
\*\* Optional. Not all services available in all geographies; contact your Philips representative for more information. May require service contract.



1. 2014 internal workflow study comparing Affiniti to HD15.
2. Society of Diagnostic Medical Sonography, Industry Standards for the Prevention of Musculoskeletal Disorders in Sonography, May 2003.

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