



**PHILIPS**

Ultrasound

Affiniti 70

**It understands  
your everyday**

Philips Affiniti 70 cardiovascular ultrasound system



# Designed for **balance**

Affiniti 70 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





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 70 ultrasound system helps you achieve this balance. Engineered for efficiency and reliability and powered by Philips superb performance, it brings you outstanding image quality, walk-up usability, and automated quantification. Its precision performance and intuitive design help you provide elegant, efficient care – every day.





# Workflow meets **WOW**

PureWave crystal technology represents the biggest breakthrough in piezoelectric transducer material in 40 years. The pure, uniform crystals of PureWave are 85% more efficient than conventional piezoelectric material, resulting in exceptional performance.



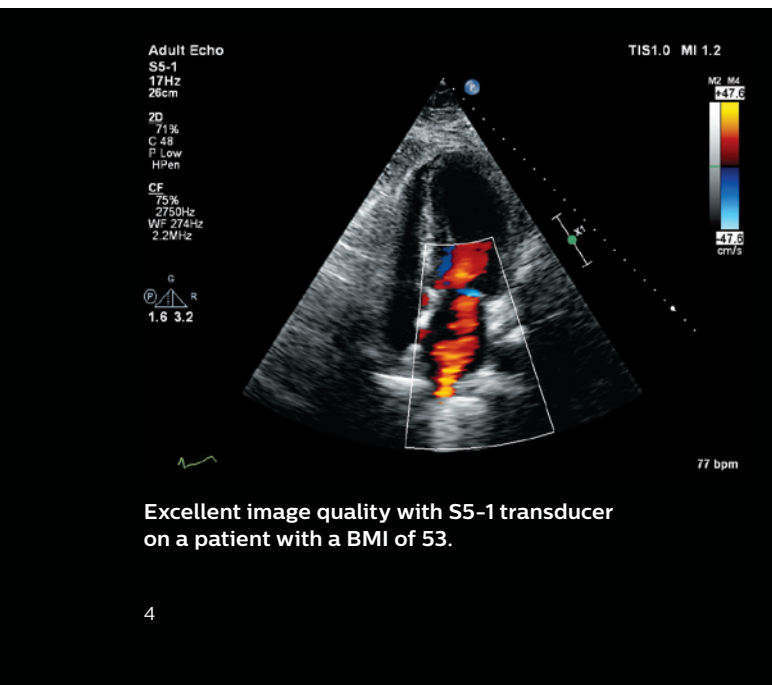
Affiniti 70's precision beamforming, PureWave technology, Tissue Specific Presets (TSP), and efficiency tools deliver both performance and workflow for confident throughput.

PureWave's power is strengthened by Affiniti 70's precision beamforming, 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 (TSP) automatically adjust more than 7500 parameters to optimize the transducer for the specific exam type, producing excellent image quality with little or no need for image adjustment.

## Scan technically difficult patients with ease

The PureWave S5-1 transducer is designed to increase penetration in technically difficult patients so that one transducer can provide detailed resolution and diagnostic confidence on easy patients as well as technically difficult patients.



Excellent image quality with S5-1 transducer on a patient with a BMI of 53.

Most cardiac transducers, including TEE transducers, can be shared among Philips EPIQ, CX50, Sparq, and Affiniti systems.

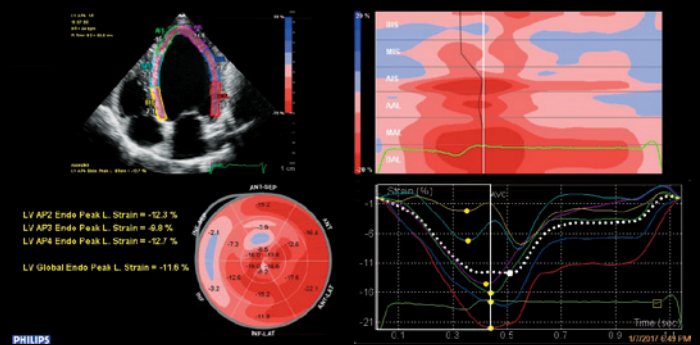


# Anatomical Intelligence Ultrasound (AIUS) leads to **everyday efficiency**

Affiniti 70 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.



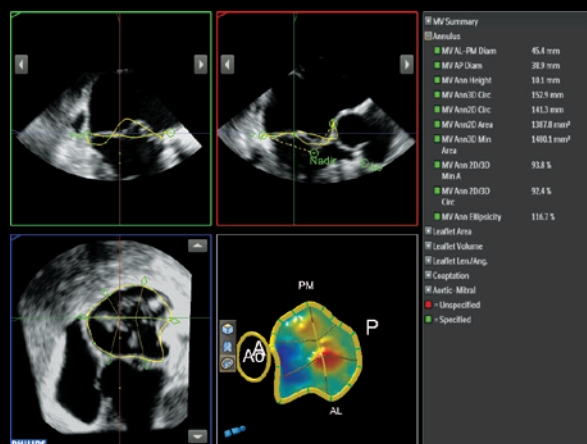
**a2DQ<sup>AI</sup>** for fast, reproducible EF on all your patients.



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

LV and LA function measurements are now part of nearly every exam. Yet current methodologies, such as Simpson's method of disks, are time-consuming and can interrupt workflow. The ideal tool for every echo exam, Automated 2D Cardiac Quantification<sup>AI</sup> (a2DQ<sup>AI</sup>) provides rapid access to 2D LV and LA Ejection Fraction (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<sup>AI</sup> (aCMQ<sup>AI</sup>) provides reproducible 2D Global Longitudinal Strain (GLS) speckle measurements with 17- or 18-segment bullseye selection. An accurate EF is also calculated simultaneously with no extra steps.



**Mitral Valve Navigator<sup>AI</sup>** takes a Live 3D volume of the MV and provides qualitative and quantitative data of the valve and its surrounding structures providing easy to understand data.

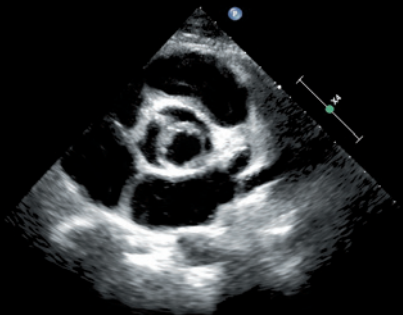
## Automation tools save time

Philips Affiniti 70 system is equipped with automation features that reduce repetitive button pushes and steps, leading to enhanced workflow.

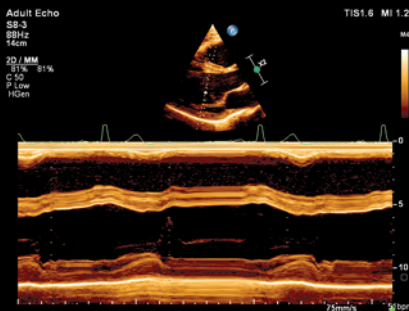
- **Real-time iSCAN (AutoSCAN):** Automatically and continuously optimizes gain and TGC
- **Auto Doppler for vascular imaging:** Color-box positioning and sample volume placement in just three steps, with an average of 67.9% fewer button pushes
- **SmartExam guided workflow:** Increases consistency,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

# Performance

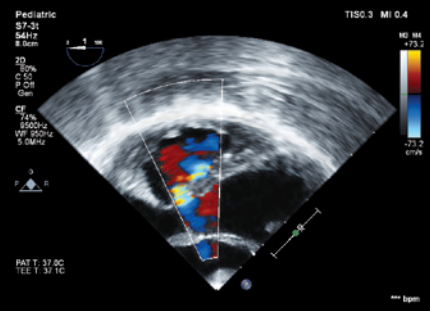
you can see



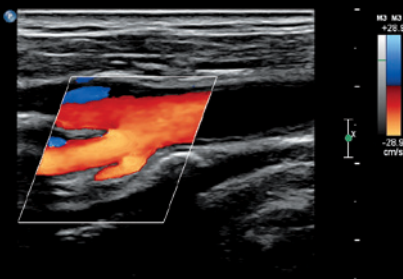
### Bicuspid aortic valve



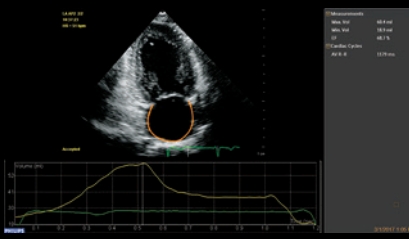
## M-mode



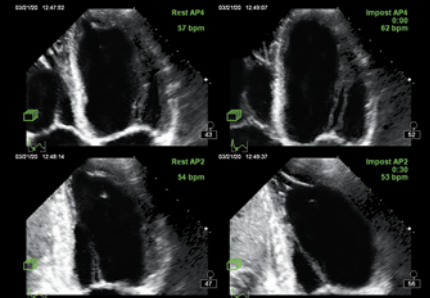
**PFO**



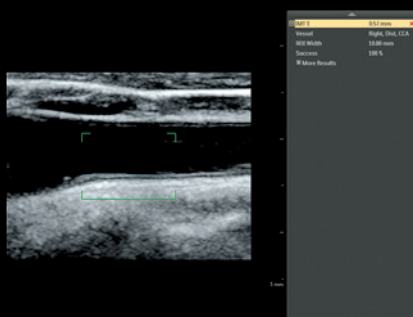
### Common carotid artery bifurcation



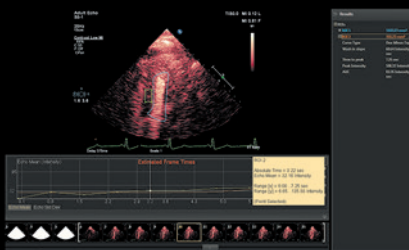
**a2DQ<sup>A.I.</sup> LA**



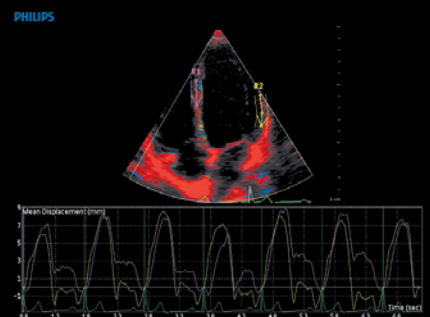
## Stress echo



IMT



ROI

**SQ**

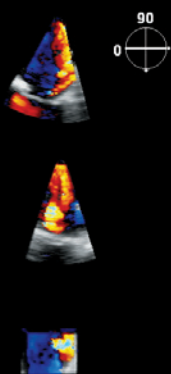
# Live 3D TEE

## Assess patients with a new level of confidence

Live 3D TEE imaging is supported on the X7-2t TEE transducer. The 3D power of xMATRIX combined with the exceptional image quality of PureWave crystals enable you to capture and display stunning views of the heart that are not available with 2D echo. Intuitive 3D workflow tools like AutoView, QuickVue and FaceCrop allow you to simplify and reduce the number of steps to derive the structural information needed for your diagnosis, planning, and follow-up.

With Live 3D TEE imaging, you can diagnose, plan, assist, and assess patients with new levels of confidence. The 3D views and data provide more information than traditional echo, and may change how you manage some patients. Rely on Live 3D TEE's exceptional image quality for increased visibility during guided catheter procedures, such as placement of closure devices for multifenestrated ASDs, and left atrial appendage (LAA), mitral edge-to-edge repair, TAVR, and paravalvular leak (PVL) repair – and more.

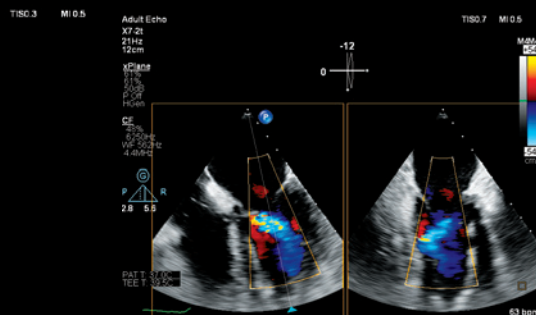
| 3D Q-App | Clinical application                                                                 | Benefit                                                                                                                                                                                                                                                                                                |
|----------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3DQ      | View, slice, and display 3D volumes and measure distance and areas from 2D MPR views | Bi-plane LV volume, ejection fraction (EF) and LV mass calculations                                                                                                                                                                                                                                    |
| 3DQA     | Global LV volumes and timing                                                         | Measure true LV endocardial volumes, stroke volume (SV) and true 3D ejection fraction (EF) with no geometric assumptions. Offers timing assessment for each of 17 minimal regional volumes and determines a synchronicity index for all volume segments or a user-selectable group of volume segments. |



Mitral valve prolapse



Mechanical mitral valve



Regurgitant jet in color xPlane



Designed around your everyday workflow, Affiniti 70 offers walk-up usability, ergonomics, and mobility.

# Comfort meets **competence**

Philips leverages the experiences of its customers to design Affiniti 70 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.





With image replication and TGCs on its tablet touchscreen, Affiniti 70 was designed to reduce reach and button pushes.

### 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 70 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 70 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 enhance 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 70 is one of the lightest in its class and is 16% lighter than its predecessor.<sup>†</sup> 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 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.



Affiniti 70'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.

<sup>1</sup> 2014 internal workflow study comparing Affiniti to HD15.

<sup>2</sup> Society of Diagnostic Medical Sonography, Industry Standards for the Prevention of Musculoskeletal Disorders in Sonography, May 2003.

<sup>†</sup> HD15

Built to withstand the rigors of daily use, Affiniti 70 offers low operating costs and is backed by Philips support and value-added services. The Affiniti 70 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 70 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.

Affiniti 70 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.



Service 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 70 system, you get access to our award-winning service organization,<sup>\*</sup> competitive financing, and educational tools that help you get the most out of your system.<sup>\*\*</sup>

## Always there, always on

We work as one with your team to keep your Affiniti 70 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<sup>†</sup> 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 70 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 70 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<sup>†</sup> 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.

<sup>\*</sup> Philips is rated number one in overall service performance for ultrasound for 23 consecutive years in the annual IMV ServiceTrak survey in the USA.

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

<sup>†</sup> Check with your Philips representative for system compatibility.

