PHILIPS

Ultrasound

Affiniti 70

It understands
your everyday

Philips Affiniti 70 cardiovascular ultrasound system

Affiniti 70 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 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.

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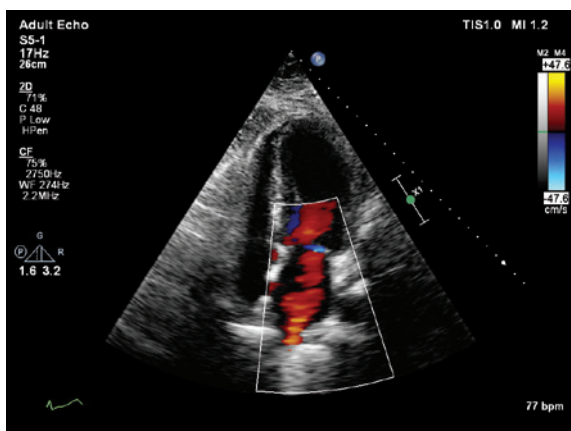
Workflow meets **wow**

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.

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

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.

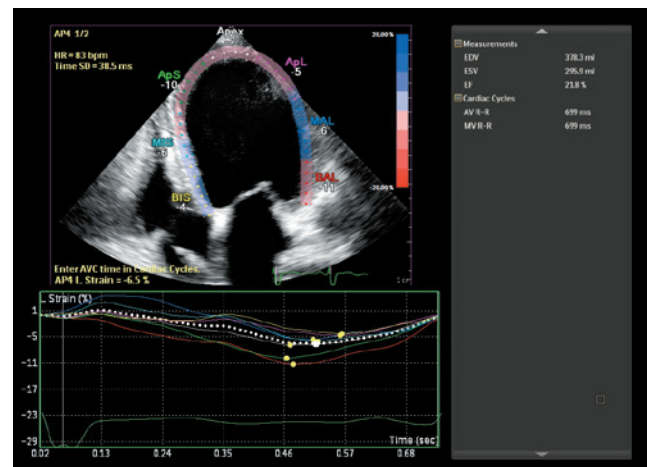# Anatomical Intelligence Ultrasound (AIUS) leads to **everyday efficiency**

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.

Ejection Fraction (EF) 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[A.I.] (a2DQ[A.I.]) 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.I.] (aCMQ[A.I.]) provides reproducible 2D Global Longitudinal Strain (GLS) speckle measurements. An accurate EF is also calculated simultaneously with no extra steps.

a2DQ[A.I.] for fast, reproducible EF on all your patients.

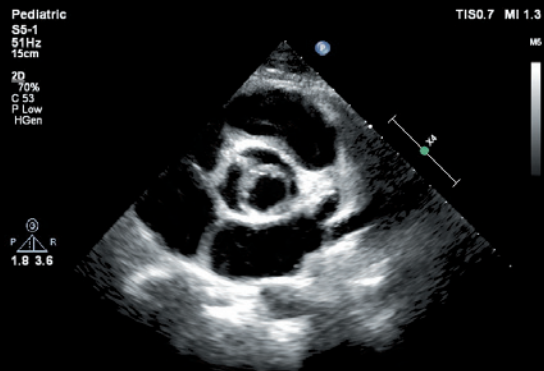**aCMQ[A.I.]** provides both EF and GLS from the same 2D images.

Automation tools save time

Philips Affiniti 70 system is equipped with automation features that reduce repetitive button pushes and steps, leading to enhanced workflow.
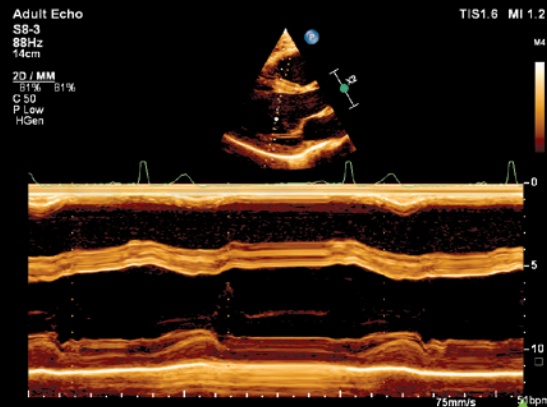- **Real-time iSCAN (AutoSCAN):** Automatically and continuously optimizes gain and TGC
- **Auto Doppler for vascular imaging:** Color-box positioning and sample volume placement in just three steps, with an average of 67.9% fewer button pushes
- **SmartExam guided workflow:** Increases consistency, reduces keystrokes, and decreases exam time by 30%-50% by automatically planning and processing application protocols
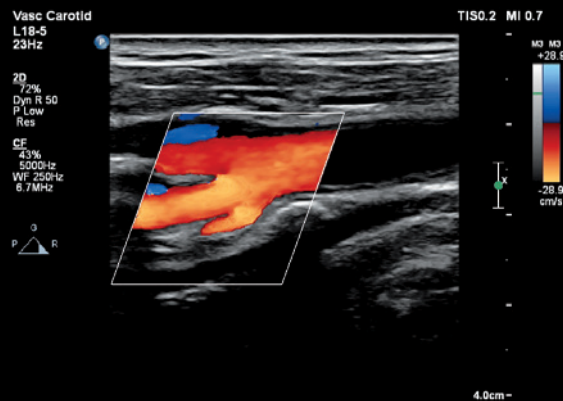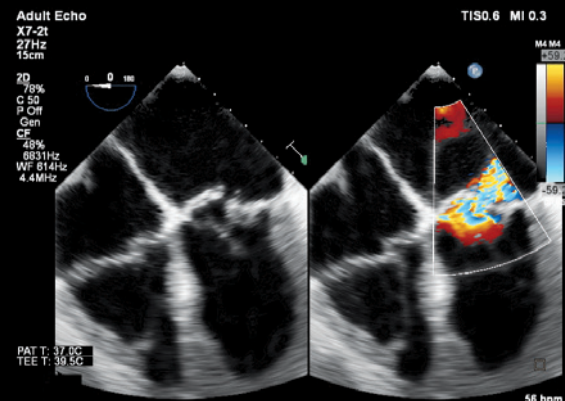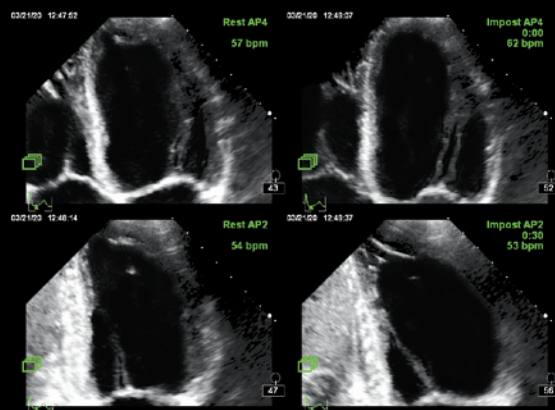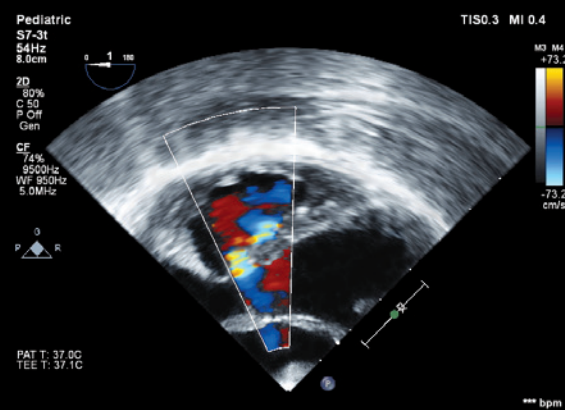
Performance

Bicuspid aortic valve

M-mode

Common carotid artery bifurcation

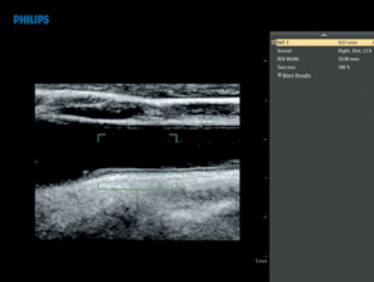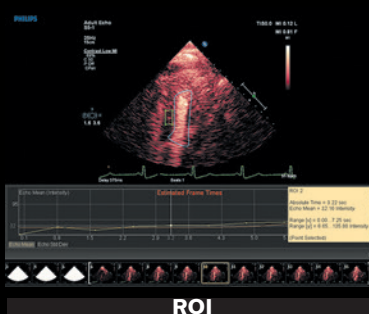Mitral valve prolapse

Stress echo

PFO

you can see

Q-App quantification applications

Affiniti 70 offers a wide variety of sophisticated Q-Apps to quantify echocardiography information.
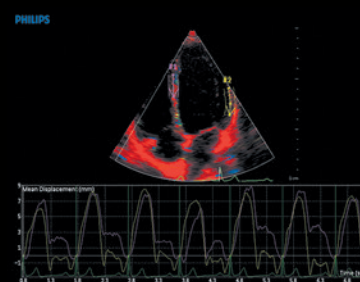
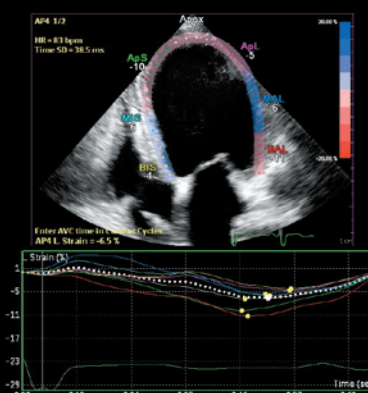| Q-App	Clinical application	Benefit
Intima Media Thickness (IMT) for vascular	Automatic carotid intima media thickness measurement	Fast and easy access to IMT data
Region of Interest (ROI)	Echo contrast and color images	Extract acoustic measurements from images
Strain Quantification (SQ)	Measures the myocardial velocity from color tissue Doppler	Derive displacement strain and strain rate
Automated 2D Cardiac Quantification[A.I.] (a2DQ[A.I.])	Provides rapid access to proven 2D EF and volumes	Easy access to EF and volumes as part of everyday echo protocols
Automated Cardiac Motion Quantification[A.I.] (aCMQ[A.I.])	Reproducible 2D GLS speckle measurements	Fast GLS measurements

IMT

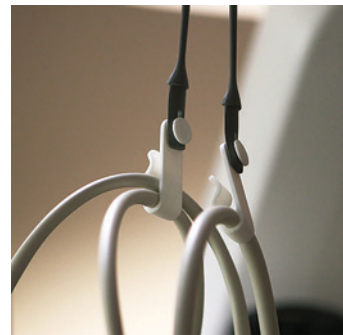ROI

SQ

a2DQ[A.I.]

aCMQ[A.I.]

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.[1]

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,[2] we've designed our intuitive, tablet-like touchscreen interface to reduce reach and button pushes.

Affiniti 70's friendly design and library-quiet operation enhance patient comfort.

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.[†] 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.

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.

[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.
[†] 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.

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.

Smart service options* help reduce disruption to your everyday workflow. We also offer technology to keep your data secure, and education and utilization reports that help you get the most out of your system.

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 70 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 can help you make informed decisions to improve workflow, deliver quality patient care, and decrease the total cost of ownership. This is the only ultrasound utilization tool that 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.

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.

Affiniti 70 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.

* Not all services available in all geographies; contact your Philips representative for more information. May require service contract.
† HD15

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