



**PHILIPS**

Ultrasound

EPIQ CVx Release 5.0

Designed for cardiology.  
Built for better care.

## EPIQ CVx cardiovascular ultrasound system

### The evolution of premium echo

Upgrade your EPIQ 7C to the capabilities of the EPIQ CVx cardiovascular ultrasound system and you have access to our most advanced cardiovascular solution ever. Experience an exceptional level of clinical performance for diagnostic and interventional echo exams across a wide range of patients to meet the challenges of today's demanding practices.

Building on the powerful premium Philips EPIQ platform, EPIQ CVx delivers extraordinary image quality, as well as outstanding exam efficiencies with robust reproducible TOMTEC quantifications driven by artificial intelligence to aid diagnosis. Revolutionary *n*SIGHT Imaging architecture and accelerated graphics processing unit (GPU) capabilities of EPIQ CVx provide for advanced visualization through photorealistic 3D rendering with moveable light source, our highest frame rates with Hyper 2D, and a system that's ready for the next generation of transducers and algorithms.

**TOMTEC**



# Increasing challenges call for new tools

Gain access to more clinical information from each scan for a high level of confidence, even for technically difficult patients. EPIQ CVx offers exceptional image quality, along with increased exam efficiencies driven by artificial intelligence and advanced automation capabilities and an interface designed specifically for cardiology.

## Sharper, clearer images

**95%** of clinicians who saw the new EPIQ CVx believed it offered improved image quality.\*<sup>1</sup>

## Artificial intelligence across patients

Dynamic HeartModel<sup>A.I.\*\*</sup>, 3D Auto RV with artificial intelligence and 2D AutoStrain LV, LA and RV deliver a high level of robustness and reproducibility.

## Efficient workflow

Save **8%** of time on transthoracic echo exams when using EPIQ CVx Release 5.0 as compared to an EPIQ system.<sup>2</sup>

## Improved communication among caregivers

TrueVue photorealistic 3D rendering aids communication of complicated echo images in the interventional suite, enhancing procedural confidence.

Philips EPIQ CVx allows for confident diagnostic decisions, easy workflow and seamless collaboration in the evermore complex world of cardiovascular care.

\* Based on responses from 42 respondents.

\*\* A.I. refers to Anatomical Intelligence.



# Maximize extreme clinical capabilities

Philips **nSIGHT** Imaging goes beyond conventional ultrasound performance for new levels of definition and clarity, with superb resolution down to the pixel. This is now complemented by accelerated GPU capabilities and the latest organic light emitting diode (OLED) monitor technology to bring to life the detail delivered by **nSIGHT** Imaging. The large OLED monitor provides greater dynamic range and color with outstanding visualization of anatomy.



**89%** of clinicians who saw the new EPIQ CVx perceived it as able to drive improved confidence during procedure guidance due to improved image quality, advanced workflow\* and advanced visualization tools.\*\*1

\* MultiVue – Live 3D cropping and MPR alignment tool. Based on responses from 38 respondents.

\*\* TrueVue and the OLED monitor. Based on responses from 38 respondents.



# Confidence for even your most difficult cases

EPIQ CVx elevates premium echo, featuring an exceptional level of clinical performance for diagnostic and interventional echo exams across a wide range of patients to meet the challenges of today's demanding practices.

## Speed and enhanced clinical efficiency

**97%** of clinicians who saw the new EPIQ CVx believed quicker left-heart quantification would result in increased lab throughput.\*<sup>1</sup>



### TOMTEC 3D Auto RV

3D Auto RV is the first fully automated 3D right ventricle (RV) quantification utilizing combined innovations in artificial intelligence from Philips and TOMTEC. The automation and streamlined workflow on the ultrasound system allows fast and reproducible 3D RV volumes and EF measurements. It also provides measurements on 2D images derived from the 3D data sets.

\* Based on responses from 41 respondents.

\*\* A.I. refers to Anatomical Intelligence.

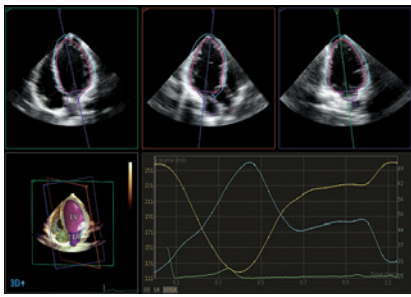
### Dynamic HeartModel<sup>A.I.\*\*</sup> full cycle cardiac quantification

One of the many advances of EPIQ CVx is artificial intelligence empowered HeartModel<sup>A.I.\*\*</sup>, a 3D tool that can provide robust, reproducible ejection fraction (EF) in just seconds. This intuitive and validated application is designed to deliver the confidence of cardiac chamber quantification that fits into everyday workflow. Dynamic HeartModel<sup>A.I.\*\*</sup> shows moving contours for left ventricle (LV) and left atrial (LA) volumes and LV mass. It also offers LV and LA cardiac indices. A multi-beat analysis allows the user to analyze different beats and average the results with one acquisition.

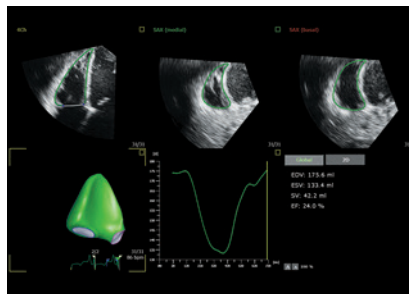
### TOMTEC AutoStrain LV, LA and RV

AutoStrain LV, LA and RV, developed by using advanced automation technologies, deliver one-button-push, fast and reproducible longitudinal strain measurements for LV, LA and RV. AutoStrain LV, LA and RV provide more parameters to assist physicians in better evaluating overall heart function without adding more exam time to everyday clinical practice. Introduce the latest ASE recommended techniques (2D GLS and 3D EF) to your everyday echo without extending your exam time. In fact, our study shows you may see an 8% saving in exam time by doing so.<sup>2</sup>

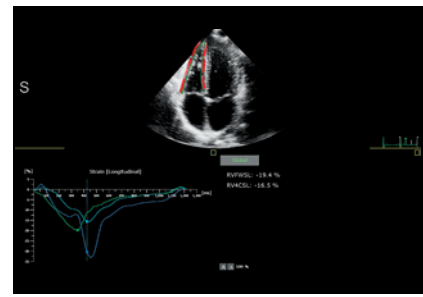




Dynamic HeartModel<sup>A.I.\*</sup>



3D Auto RV



AutoStrain RV

# Customizable interface designed for cardiology

- Your most-used controls are right where you want them
- Available as a user-defined preset to enable a user interface designed for you and your needs: adult echo or pediatric echo, transesophageal or transthoracic
- Aimed to drive efficiency, in any exam
- Saves the equivalent of 408 transthoracic echo exams worth of movement over a year by using the EPIQ CVx Release 5.0 as compared to the EPIQ 7.\*\*<sup>2</sup>

## Fingertip control with TouchVue

The touchscreen user interface has been designed to improve 3D workflow, and allows users to pinch, zoom and rotate the 3D data set via fingertip control.

Our latest enhancements to the EPIQ CVx in Release 5.0 show a significant **21% reduction** in the amount of times you touch the system controls as compared to an EPIQ 7.<sup>2</sup>



\* A.I. refers to Anatomical Intelligence.

\*\* Based upon eight scans per day over 48 weeks.

# Keeping you at the forefront

## Better visualization of interventional devices aids collaboration

Philips cardiac TrueVue, with its virtual light source, is a proprietary advanced 3D ultrasound display method that delivers amazing lifelike 3D ultrasound images and gives you the ability to move the light source anywhere in the 3D volume. TrueVue photorealistic 3D rendering is designed for better visualization of anatomy and interventional devices. By illuminating tissue detail and creating depth perception like never before, TrueVue can help with the communication of complicated echo images among caregivers in the interventional suite, providing viewing context for the echo image to enhance procedural confidence.

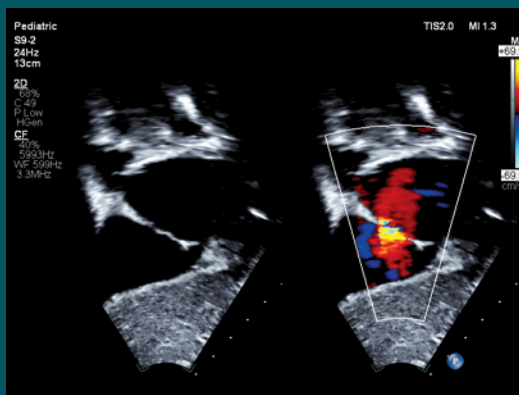
## Our most leading-edge, versatile transducer technology

Philips offers the widest range of 2D and 3D transthoracic and transesophageal diagnostic transducers to meet your echo needs across your patient population, from fetal to adult congenital. Depth of imaging capability combined with streamlined cardiac workflow reduces the steps and time needed for these especially challenging exams. Wider bandwidth minimizes the need to swap transducers during an exam.

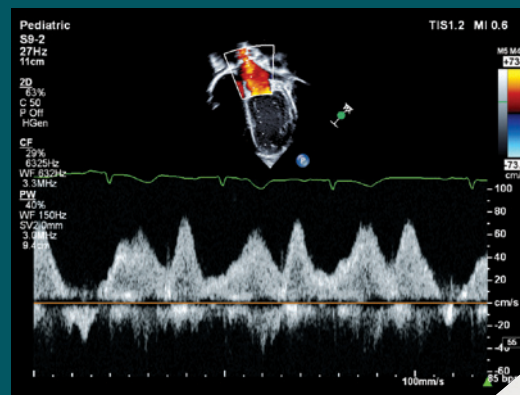
For Live 3D imaging in any mode, use our true one-beat volume acquisitions with high volume rates to visualize either wall function or flow dynamics more effectively.

## Introducing the XL14-3 xMATRIX transducer

Stay ahead of the curve with Live xPlane to save valuable exam time, xPlane pulsed Doppler to enhance sample volume placement for greater reproducibility, and new insights with 3D/4D to facilitate clinical decision-making.

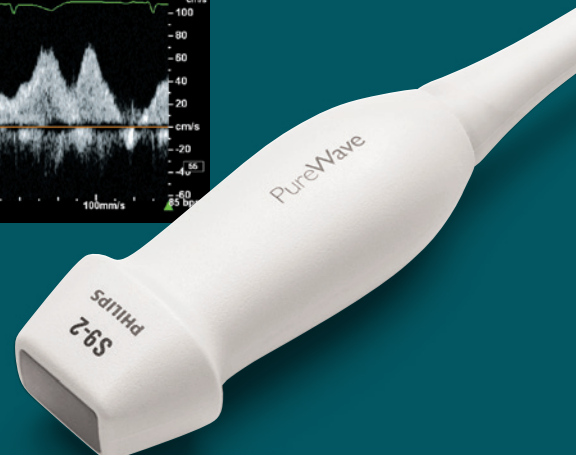


Color compare showing ASD with S9-2 transducer



PW of pulmonary vein with S9-2 transducer

PureWave comes to pediatrics with the S9-2 TTE 2D PureWave transducer, featuring a single-button coronary sub-mode for fast, easy coronary artery visualization.





# Because every patient matters, every image counts



## **OLED monitor and accelerated GPU**

Advanced visualization for advanced capabilities

## **Dynamic HeartModel<sup>A.I.\*</sup>**

Dynamic HeartModel<sup>A.I.\*</sup> shows moving contours for LV and LA volumes and LV mass

## **TOMTEC 3D Auto RV**

Combination of Philips and TOMTEC innovations on artificial intelligence for measuring RV 3D volumes and EF

## **TOMTEC AutoStrain LV, LA and RV**

Fast and reproducible longitudinal strain measurements for LV, LA and RV developed by TOMTEC using advanced automation technologies

## **TOMTEC 4D Mitral Valve Assessment (MVA)**

MVA provides an easy-to-interpret dynamic model of the mitral valve in just a few simple steps, providing access to a comprehensive list of measurements and calculations

## **Enhanced 2D image quality for pediatrics**

Advances such as the next-generation S9-2 TTE 2D PureWave transducer with increased bandwidth and coronary sub-mode

## **Customizable interface designed for cardiology**

Fewer screen swipes for every exam and able to be preset

## **Illuminated tissue detail like never before**

TrueVue photorealistic 3D rendering aids communication of complicated echo images in the interventional suite, enhancing procedural confidence

## **3D cropping and real-time alignment**

Provides maximum flexibility during interventional echo procedures



## Count on us as your patients count on you

The value of a Philips ultrasound system extends far beyond technology. With every EPIQ CVx 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.\*\*

\* A.I. refers to Anatomical Intelligence.

\*\* Philips is rated number one in overall service performance for ultrasound for more than 20 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.

## References

1. Results obtained during user demonstrations performed in December 2017 with the EPIQ CVx and the iE33 systems. The research was designed and supervised by Use-Lab GmbH, an independent and objective engineering consultancy and user interface design company. The tests involved 42 clinicians from 17 countries. The various types of cardiac customer segments represented were adult diagnostics and interventional, adult diagnostics, and pediatric diagnostics and interventional.
2. Based upon nine external sonographers using their standard echo protocol, including GLS and EF. Based upon difference in exam time and touch points between two EPIQ systems, EPIQ 7 at 2.0.2 and EPIQ CVx at Release 5.0.

