



# Vivid E90

Patient Care. Elevated.



[gehealthcare.com](http://gehealthcare.com)

# The Vivid™ E90 is a premium 2D cardiovascular ultrasound system designed to help you reach new heights of care efficiency and effectiveness.

## Patient Care. Elevated.

### Empowered. Expanded...Artificial Intelligence.

At GE Healthcare, we're committed to support the vital work you do with patients every day. Using the extraordinary processing power of our breakthrough software beamformer platform – cSound™ 3.0 – as a catalyst, we've developed an array of innovative algorithms and applications to help you keep elevating patient care.

As a result, now you can empower your care team with the expanded advantages and artificial intelligence of the Vivid™ E90 cardiovascular ultrasound system. Diagnose more confidently with the help of enhanced 2D and color image quality. Accelerate exams via extended automatic Doppler measurements for TEE and TTE. Gain reproducible

results with advanced capabilities for quantifying heart function and ejection fraction. All so you can make every moment count with patients – seeing problems clearly and quickly, performing procedures with great precision ... and providing Patient Care. Elevated.

## Adult Echo

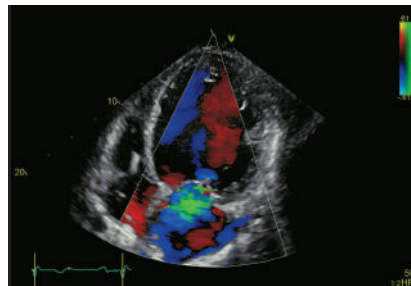
### Visualization

#### Crisp imaging. Deep views.

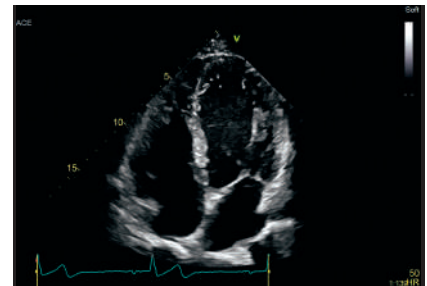
The Vivid E90 quickly brings you information with high contrast and spatial resolution – even for patients with body types or conditions that make them difficult to scan. GE's XDclear™ probe technology pairs with our new imaging platform to capture data from every channel in the probe. Navigate smooth, continuous and detailed images with ease via new enhancements in both color and clarity.

#### Image a wide range of patients

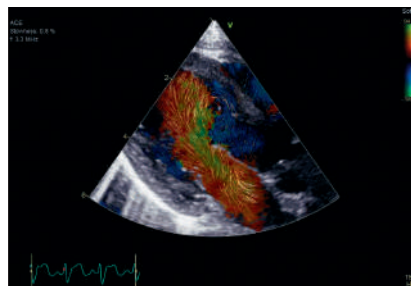
Vivid E90 delivers superb performance in your shared services operation, including cardiac, stress echo, vascular, abdominal, OB/GYN and small-parts applications. With a growing obese population, XDclear™ probes combined with cSound beamformer technology can make a difference in many of your exams, helping you quickly and easily acquire images on many different patient types.



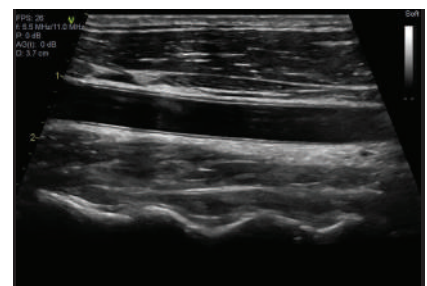
**Color Flow** – Gain insight with excellent color sensitivity, contrast resolution and spectral crispness.



**True Confocal Imaging** – TCI provides an ultra-narrow-focused two-way beam profile throughout the field of view, maintaining frame rate and enhancing dynamic contrast resolution – without zone stitching or multi-line acquisition artifacts.



**Blood Speckle Imaging**\* – Available for pediatrics as well as transesophageal echo (6VT-D only), BSI, which reduces the angle dependency and aliasing issues of conventional color flow, provides a graphical representation of the trajectories of the blood cells.



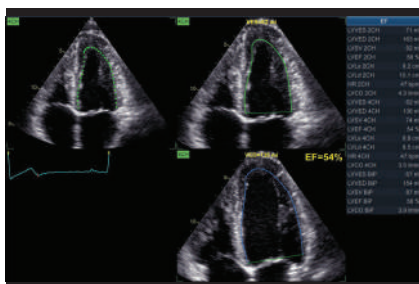
**Vascular** – The two linear probes, 9L-D and 11L-D, highlight True Confocal Imaging (TCI) – providing automatic focusing throughout the field of view, with superb signal-to-noise ratio and excellent spatial resolution both near and far. Together with Virtual Convex™ provides a wider far field visualization and aims to enhance image quality.



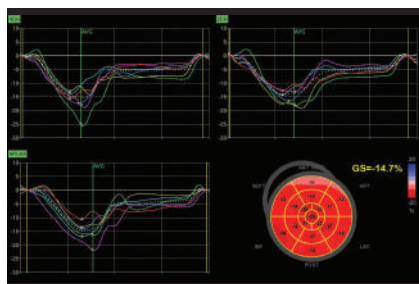
## Quantification

### Define the care path

Quantification with Vivid E90 is all about helping providers evaluate problems and pursue the path forward. Count on a full suite of intuitive tools to make your work easy and efficient. Quickly, accurately and thoroughly quantify left ventricular wall motion and other key functions.



**AutoEF 2.0\*** – Based on a 2D speckle-tracking algorithm and Simpson's rule, this second-generation tool now offers View Recognition enabled by artificial intelligence. It automatically selects the most appropriate images to speed quantification and workflow.



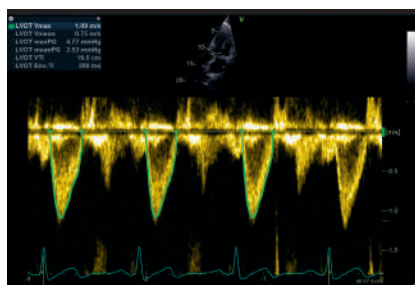
**Automated Function Imaging (AFI)\* 2.0** – AFI 2.0 with the help of the artificial intelligence-based View Recognition feature will provide automated quantification of left ventricular segmental and global longitudinal strain as well as several other related parameters, including ejection fraction.

## Workflow

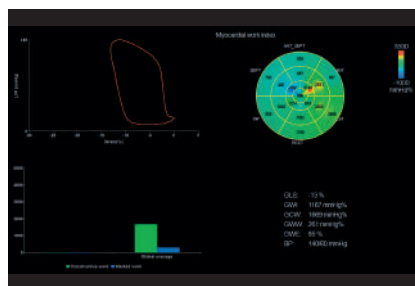
### Streamline your exams

Vivid E90 with cSound performance brings new advantages in efficiency. The high-quality raw data format as well as the DICOM® format adapts to your preferences in terms of resolution and gray scale. You can move smoothly through your work, thanks to automated tools that minimize user interaction and provide quick access to stored settings.

The **QuickApps** tool provides flexibility and easy workflow by providing instant access to settings that were stored earlier to match your color flow or contrast parameters, keeping the geometry of the current live image.



**Cardiac Auto Doppler** – This artificial intelligence-based tool provides Doppler measurements over all heart cycles for the most common parameters, supporting consistent results and potentially saving time in both adult and pediatric TTE and TEE studies.



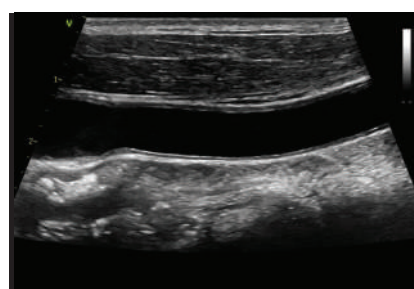
**Myocardial Work\*** – Using new and reduced load dependent parameters, Myocardial Work may provide more accurate and reproducible results, important especially for follow-up of patients over time. The new parameters are based upon the results obtained with AFI (longitudinal strain) by accounting for the systolic blood pressure measured at rest immediately prior to the echo exam, as well as the MV and AV opening and closure times.

## Shared Services

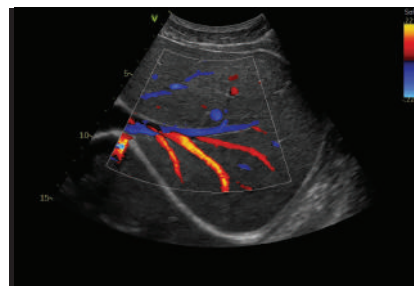
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**Vascular** – The two linear probes, 9L-D and 11L-D, highlight True Confocal Imaging (TCI) – providing automatic focusing throughout the field of view, with superb signal-to-noise ratio and excellent spatial resolution both near and far. Together with Virtual Convex™ provides a wider far field visualization and aims to enhance image quality.



**General Abdominal** – The two curved array probes, C1-6-D and C2-9-D, support general imaging as well as abdominal, renal, urology and OB/GYN applications. Both probes have XDclear™ transducer architecture, which delivers the high spatial resolution and deep penetration required for uniform presentation of anatomic structures throughout the field of view. The endocavity transducer, iC5-9-D, is also available.



## Security

**Vivid E90 is built and configured for reliability and security.**

**LDAP** – Help ensure patient data safety with Lightweight Directory Access Protocol, which allows your IT team to maintain greater control of who's in the system, reducing the risk of breaches.

**Configurable system password** – There are fully configurable user log-on passwords and internal passwords that can meet your IT department's requirements regarding security strength.

**Disk encryption** of the drive, which contains patient archive and images, helps ensure safety and privacy of the data, even in case of theft.

**Windows® 10 Operating System** with application whitelisting to prevent unauthorized programs from running and potentially harming the scanner.

## Connectivity

**Pediatric DICOM® SR support\*** – Pediatric measurements sent by SR automatically populate the pediatric report on the receiving side for fast, accurate review elsewhere.

**Enhanced support for cardiac and vascular DICOM SR;** including user defined measurements.

**Tricefy® Uplink\*** – Expedite uploading of images and patient data to Tricefy Cloud – a long-term archive that enables image sharing with colleagues or patients.

**Automated raw data transfer** – The AI-based View Recognition feature simplifies use of raw data in a PACS environment.

\*Optional

\*\*Compared to scanning without Virtual Convex.

\*\*\*Compared to v201

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