Cardiovascular

High CV Standard without Compromise

MyLab50 XVision
Cardiovascular

esaote

Sonomedica

Complete Diagnostic Solutions

MyLab50 XVision
Cardiovascular

The Ideal Partner for:

> Adult and Pediatric Cardiology
> Main and Peripheral Vascular
> Transcranial Imaging

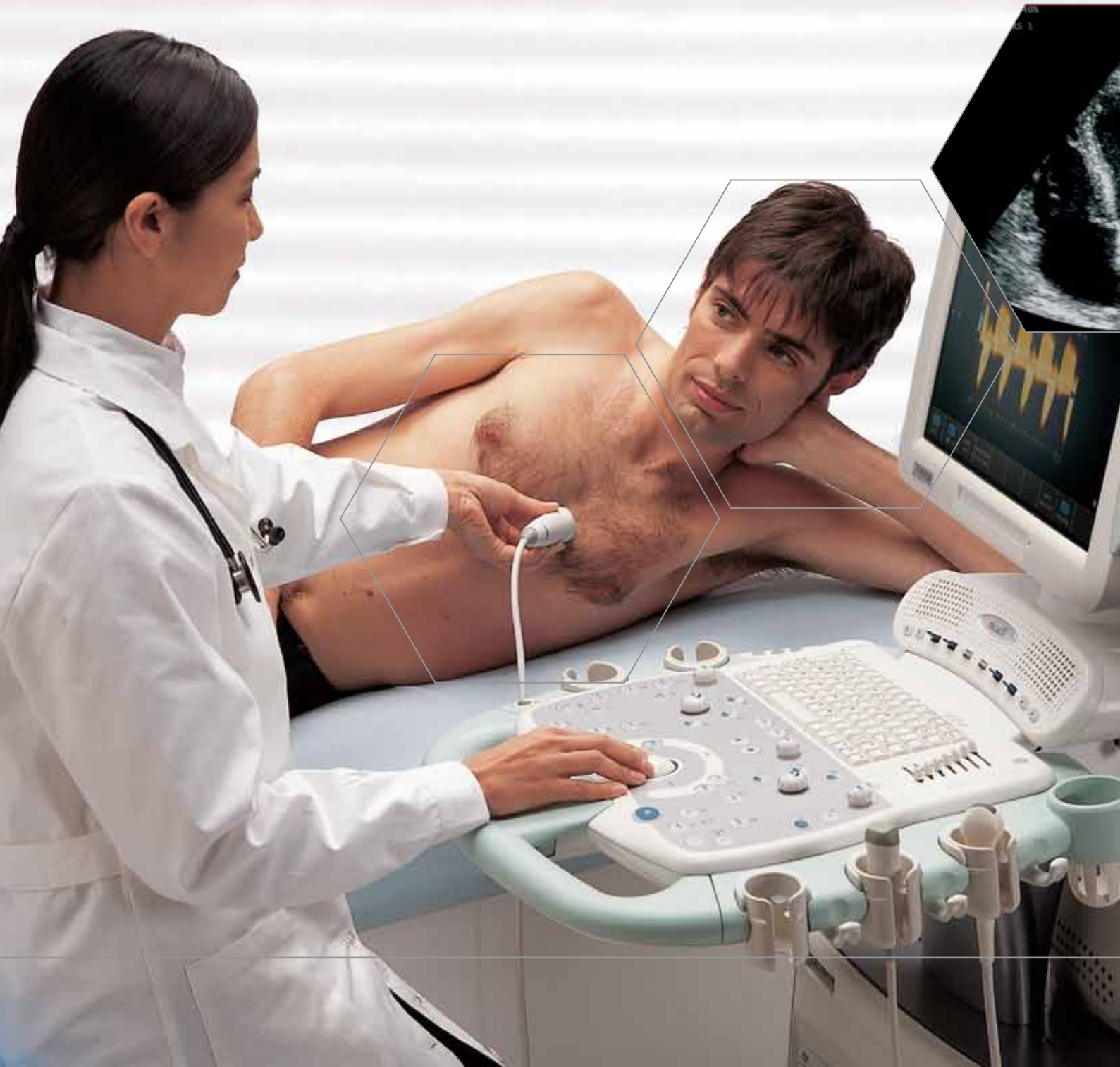
The MyLab50 has been designed to be the reference system for every cardiovascular ultrasound laboratory, whether a private practice, specialized clinic or bustling hospital department. High-level performance, advanced data management and dedicated cardiovascular specific transducers and application packages satisfy even the most demanding needs.

Based on the revolutionary MyLab™ architecture, the **MyLab50 XVision** incorporates Esaote's revolutionary **XView** technology which elaborates the pattern of every single frame at the pixel level, eliminating speckle and noise artifacts, dynamically enhancing tissue margins, improving tissue conspicuity and increasing diagnostic confidence. The MyLab50 XVision produces unmatched image quality both in terms of contrast and spatial resolution and increases user comfort while reducing eyestrain.

The MyLab50 improves efficiency, increases flexibility and optimizes workflow.

Cardiology

Cardiology



MyLab50 XVision
Cardiovascular

> TEI™ - Tissue Enhancement Imaging
> Compass M-Mode
> TVM - Real-time Tissue Velocity Mapping
> Automatic Doppler Tracing

> Cardiology

The full-digital technology of the MyLab50 delivers optimal images for various cardiology examinations while its PW and steerable CW Doppler features detect defects in flow with very high accuracy. Combined with the MyLab50's **TEI** (Tissue Enhancement Imaging) mode, the operator can make clear and detailed diagnoses, even in difficult-to-image patients. The innovative **Compass M-Mode** tool allows the M-Mode line to be adjusted and multiple measurements to be made on one image without moving the patient, an ideal approach to increasing patient throughput while maintaining diagnostic precision.

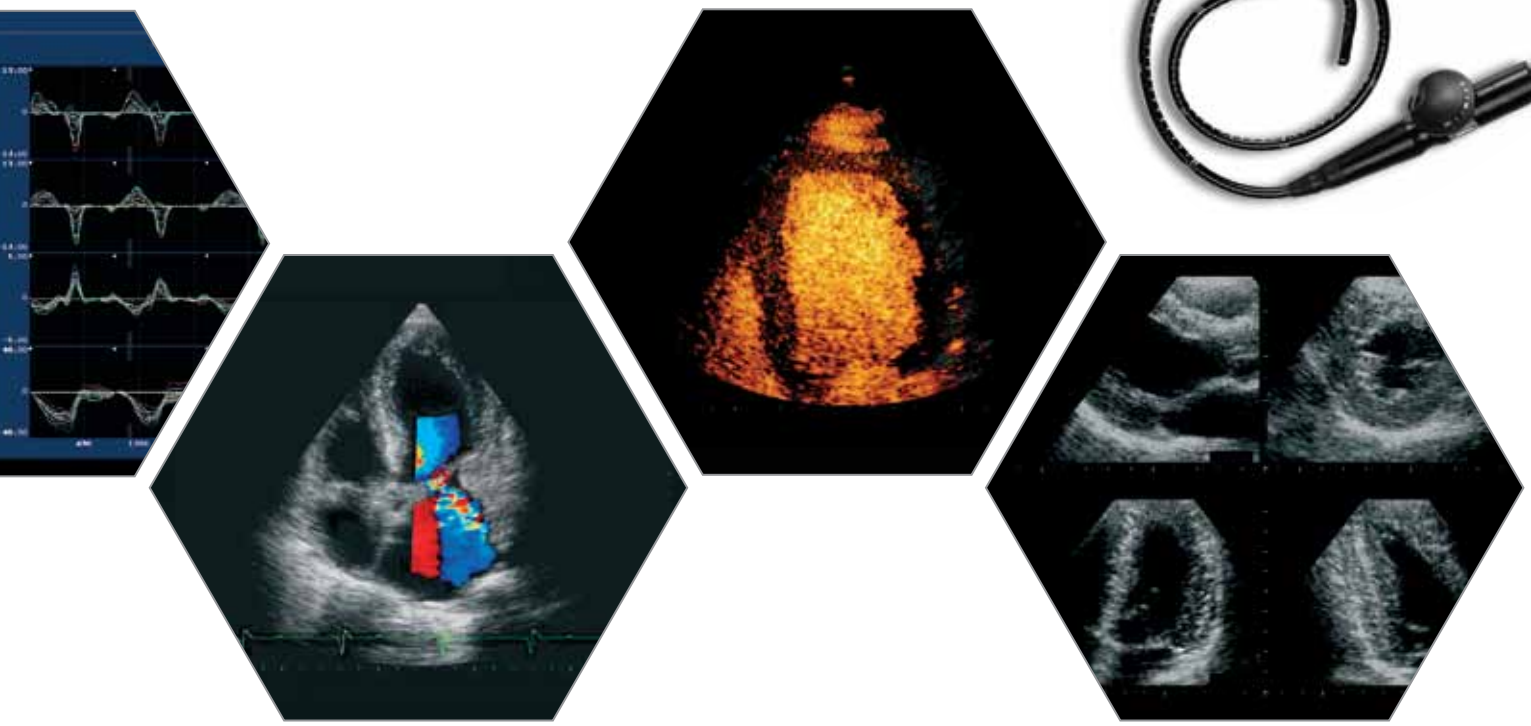
The kinetic activity of the heart can be easily evaluated by using the real-time **TVM** (Tissue Velocity Mapping) feature, which, by assigning a different color to the tissue based on its instantaneous velocity, provides a complete wall motion analysis for both systolic and diastolic myocardial function evaluation. This PW Doppler-associated technology obtains high-quality Doppler signals, measures velocity, mean and instantaneous local acceleration and generates rapid quantification (i.e., velocity, acceleration and displacement of the walls). Furthermore, in TVM mode the user can trace and quantify the real-time data to provide more detailed information for precise and reliable diagnoses. Additionally, **Automatic Doppler Tracing** is an easy-to-use tool for Doppler spectrum analysis and can help to improve efficiency and increase workflow.

Advanced Cardiology

Advanced Cardiology

MyLab50 XVision
Cardiovascular

> XStrain
> Integrated Stress-Echo Module
> CnTI™ - Contrast Tuned Imaging
> Adaptable Measurements and Reports Packages



> Advanced Cardiology

The MyLab50 is able to meet all the advanced requirements typical of the most sophisticated diagnostic centers. The new **XStrain** software option provides an advanced, angle-independent, 2D imaging based tool for analyzing myocardial velocities, strain and strain rate detection. The quantification of these parameters is the most promising clinical technique for the early detection of myocardial contractility and distensibility impairment.

The integrated **Stress-Echo** module, when digitally synchronized with the ECG trace, includes programmable protocols and multi-format reviewing capabilities for accurate monitoring of cardiovascular pathologies. Impressive images derived from the combination of ultrasound and contrast agents are clearly enhanced by Esaote's proprietary **CnTI**™ technology. Intermittent and real-time low-MI examinations provide optimal results in left ventricle opacification (LVO) and myocardial perfusion analysis, both in rest and stress examinations.

All the clinical data collected during real-time scanning are automatically imported into a comprehensive and **adaptable measurements and reports package**. The measurements menu is divided into anatomical areas, can be configured according to user preference and printed in organized layouts.

Vascular

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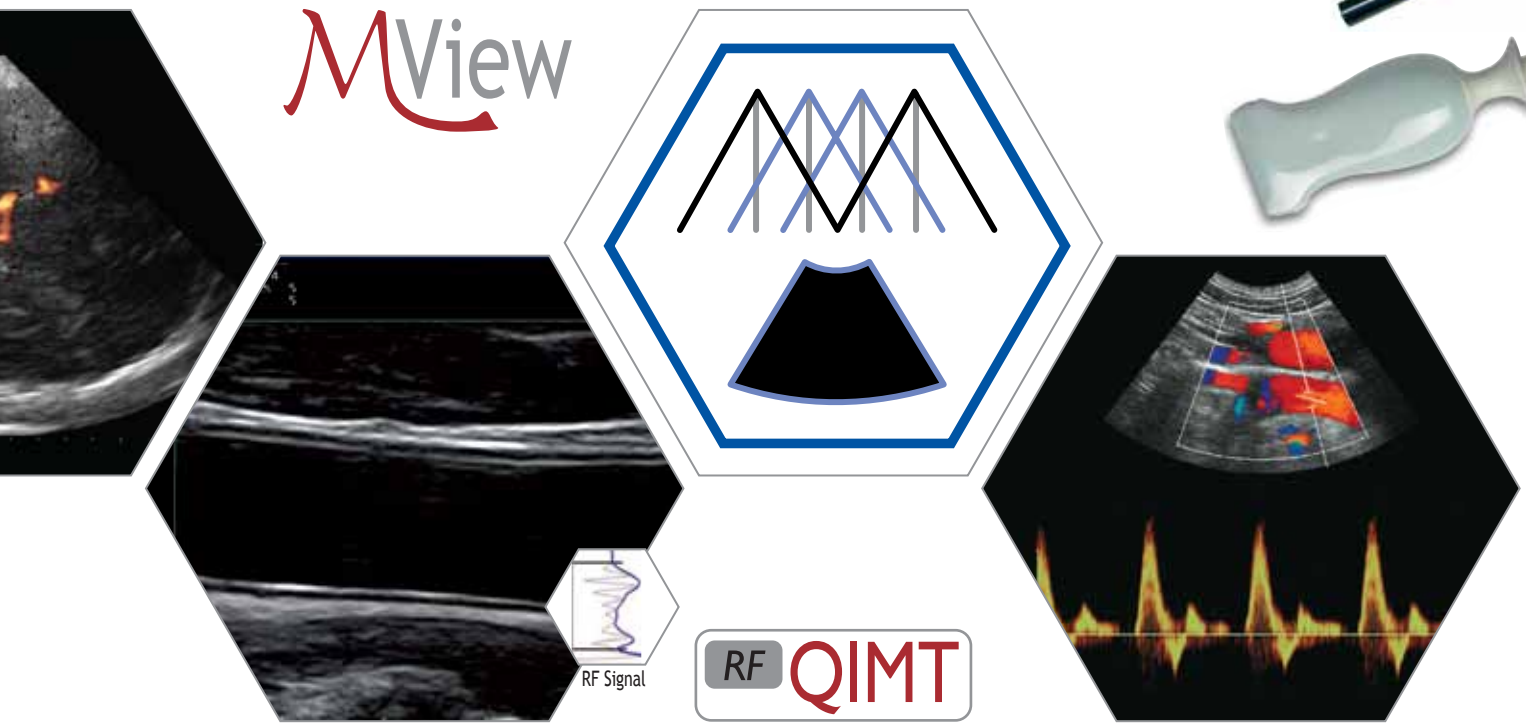
> Dedicated Multi-Frequency Transducers
> TEI - Tissue Enhancement Imaging
> Automatic Doppler Tracing
> High Performance Triplex Mode



> Vascular

A complete selection of dedicated multi-frequency transducers allows the MyLab50 to produce optimal images in all facets of vascular imaging. Standard vascular examinations can be easily performed with the ergonomic and lightweight **linear** transducers. Specific probes designed for superficial and peripheral vascularization imaging are also available, as well as non-imaging Doppler pencil probes for transcranial examinations. The ergonomically compact high-frequency bandwidth **microconvex** probe with selectable transmission frequencies produces impressive results.

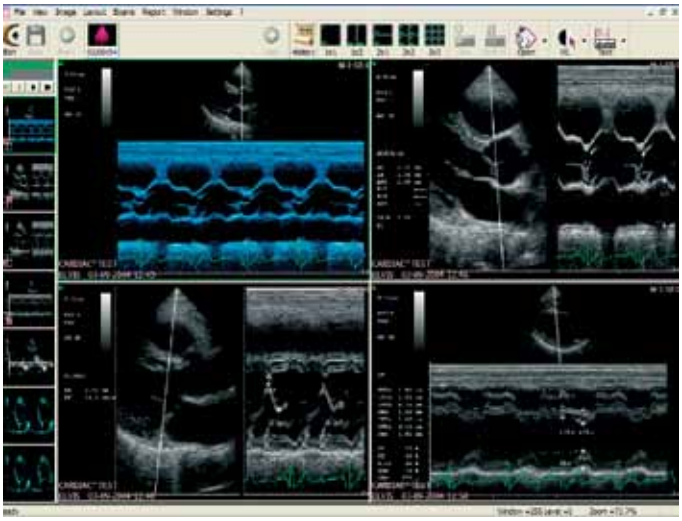
The **TEI** (Tissue Enhancement Imaging) feature has been recently implemented on Esaote's linear transducers and generates exceptional images in terms of contrast resolution and signal-to-noise ratio. Furthermore, the MyLab50's **Automatic Doppler Tracing** is a time-saving feature that can help to improve efficiency and patient throughput.

Another powerful technique, which is called **MView**, gives the possibility to obtain dramatically enhanced contrast and detailed resolution and provides an increased visualization of borders and interfaces, as well as strong reduction of false diagnosis due to non-perpendicular pulsing.

The **^{RF}QIMT** technology provides accurate real-time IMT measurements, which in addition to traditional parameters is very helpful to understand arteriosclerosis, its severity and progression.

Think Flexible

Think Flexible



> Extreme Connectivity

The MyLab50 has been designed to be limitless in terms of connectivity. During real-time scanning, images and video clips are temporarily stored and can be displayed as thumbnails by pressing just one button. When selecting the final image storage destination, the operator can easily chose from the integrated hard disk, DVD/CD burner, personal USB memory drive and/or network storage. Additionally, several types of printers can be attached to the system and controlled by dedicated buttons, including cost-effective inkjet and USB printers.

The MyLab50 is **IHE** (Integrating the Healthcare Enterprise) compliant. IHE is a initiative of the Radiology Society of North America and the Healthcare Information and Management Systems Society and brings together medical equipment and information products from different manufacturers for defining, testing and demonstrating an efficient workflow in the hospital-wide connectivity.

> Post-processing Workstation, Quantification Tools

Esaote designs its ultrasound systems to be an integral part of a digital ultrasound department and not only a stand-alone piece of equipment. Therefore, the MyLab50 offers a direct connection to external workstations both in Windows® and DICOM environments.

The modular configuration of the external workstation allows the user to choose his or her level of integration and offers the highest upgrade capability. The latest image management solution from Esaote, **MyLab Desk**, is an ideal solution for private offices, increasing their workflow and productivity. MyLab Desk installs the MyLab systems' user interface on a standard PC, allowing comfortable reviewing and processing with all the features of the PC. Additionally, the **BioPACS** package is a complete digital archive system for reviewing, exporting, reporting and printing clinical data. In a more sophisticated PACS environment, **Org@nizer** is the best cost-effective solution to improve daily clinical workflow.

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> Limitless Connectivity
> IHE Certification
> Windows ® and DICOM compatibility
> MyLab Desk, BioPACS™ and Org@nizer™ image management

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ISO 13485:2003 ISO 9001:2000

CE 0051

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