

TELEMED ultrasound

SmartUs EXT

The future in ultrasound.

A new concept

PC-Based software driven open architecture ultrasound platform

www.telemedultrasound.com

The power to look inside



SmartUs EXT-1M

is the ultimate beamformer which includes all the last technological innovations developed by TELEMED R&D.

Scanning Methods

- Linear
- Convex
- Microconvex
- Phased Array

Scanning Modes

- B, 2B, 4B, BM, M,
- iTHI, B-Steer, Compound, Trapezoid,
- Color Doppler: CFM, PDI, DPDI
- CW - PW Spectral Doppler, HPRF,
- Duplex, Triplex
- 3DView, Panoramic View (option)



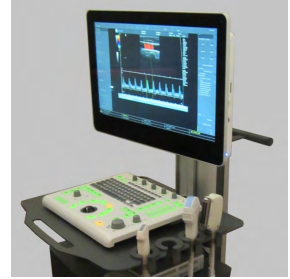
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Experience the Next

PC-based open-architecture platform

Founded in 1992, TELEMED is leader in research, design, development and manufacture of high-performance PC-Based ultrasound systems.

The commitment of Telemed R&D is aimed at using the latest innovations to make ultrasound technology accessible on small devices managed by common personal computers, providing excellent image quality, high performance, telemedicine applications, low cost technical service and free continuous upgrades.



Advanced imaging technologies have been developed by TELEMED on a innovative Pc-based open architecture platform, to provide exceptional detail, clearer border definition and the ability to assess subtle changes in tissue.

The innovative design reflects a commitment to enhance your ultrasound experience. TELEMED is imaging performance, efficiency, user comfort, design innovations, attention to detail and clinically relevant technologies.

Open architecture

Reliable, expandable, flexible.

Since 1992, TELEMED has been pioneering ultrasound to discover leading solutions that help customer to offer high professional standards.

The Telemed Ultrasound Beamforming Technology aims to the state of the art in B-mode and Color Doppler imaging.



Delivering TELEMED quality and reliability, you can always expect more with the SmartUs EXT system. The platform is compatible with a variety of options and future free updates for long-term investment protection.

Service that Fits Your Practice.

TELEMED offers a variety of service plans that suit the needs of many different healthcare environments – delivering both superior support and valuable cost savings for any size clinic or medical setting. TELEMED coverage options provide protection from unexpected costs as well as fast and attentive service.

new Ultrasound Experience

PC-based software driven

The SmartUs EXT is the expression of TELEMED Ultrasound Beamforming Technology and redefines the ultrasound experience providing exceptional performance and value.



The SmartUs system processes more information for the best diagnostic performance.

With its extensive feature set, the SmartUs system delivers new levels of imaging performance across a wide range of clinical applications and patient body types.

SmartUs EXT-1M Ultrasound System

The SmartUs EXT ultrasound system delivers a whole new imaging experience, built around the latest TELEMED imaging technologies, equipped with rich standard features and designed for the flexibility, comfort and usability.



Image quality without compromise. Innovative design. Future functionality.

SmartUs EXT is the last generation of TELEMED high performance PC-based Echo Color Doppler system with open architecture.

It employs latest technologies developed by Telemed: Spatial Compound Imaging, B-Steer Imaging, Virtual Convex, iTHI Tissue Harmonic Imaging with Pulse Inversion technology, Cross-Beamforming, NeatView Advanced Speckle Reduction Imaging, one-touch Image Optimization.

The system drives Linear, Convex, Intracavitary and Sector Phased Array transducers with high density of crystals and frequencies up to 18 MHz.

Telemedicine applications with remote control of the system for consultation, training, service and technical application.

Freeware software upgrades.



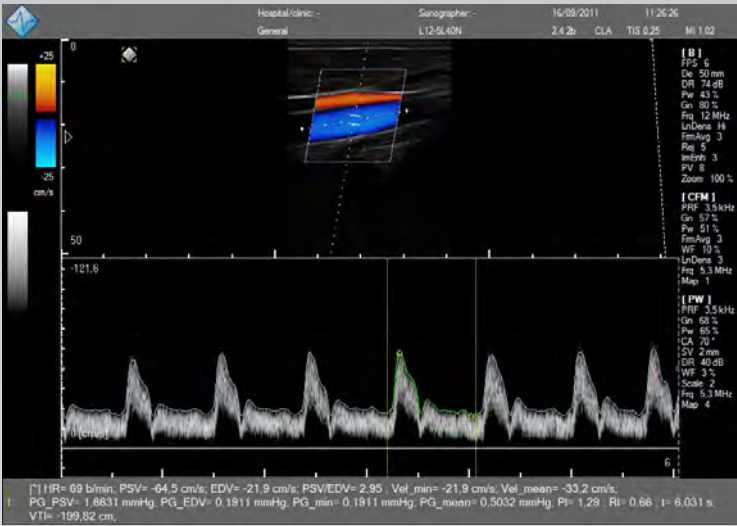
NeatView tissue enhancement technology provides superb detail and contrast resolution.

High detail resolution of liver, (with iTHI Tissue Harmonic Imaging with Pulse Inversion Technology.



High Sensitivity Color doppler

Superb visualization of flow dynamics in carotid artery.

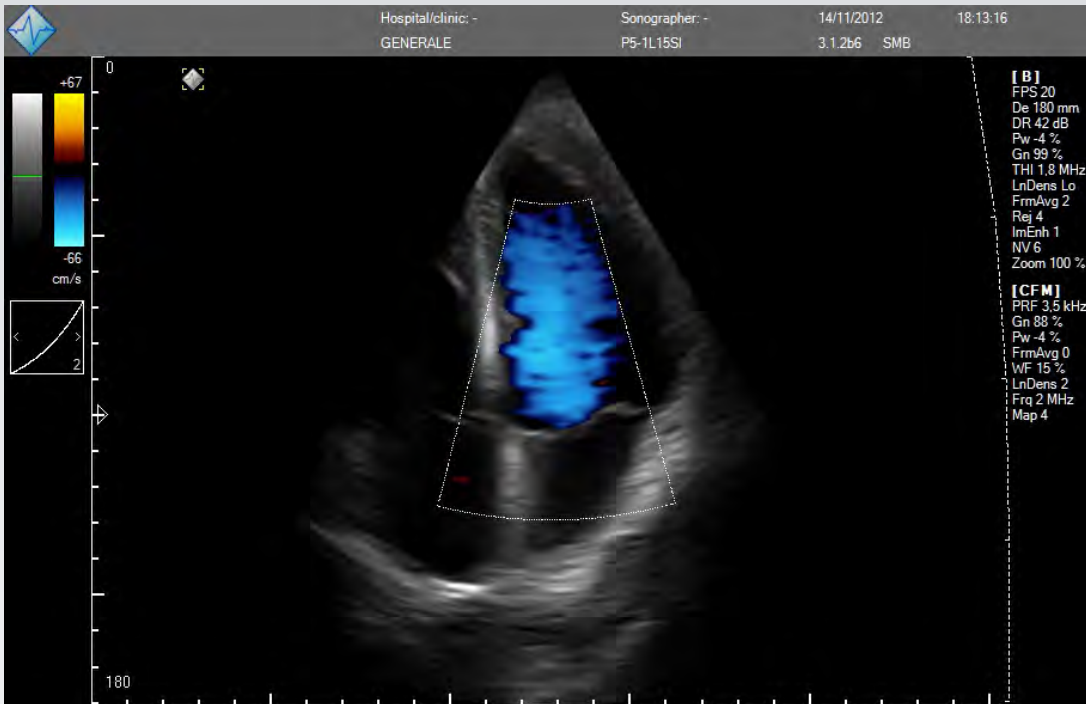


Superior color Doppler sensitivity.

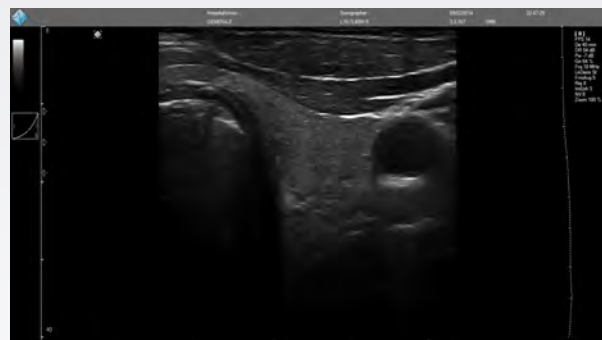
NeatView advanced speckle reduction technology enhances detail and contrast resolution.

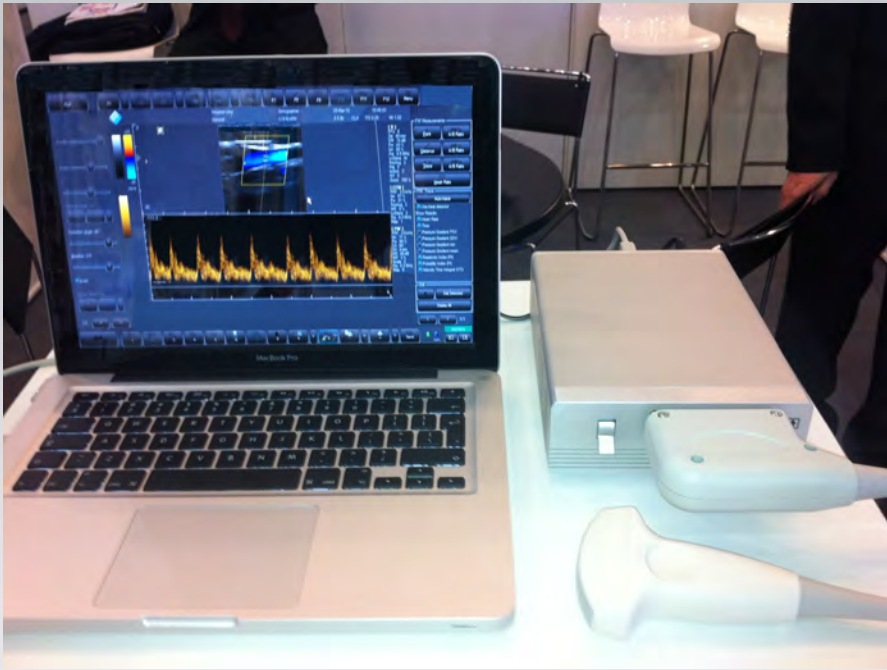


Ventricle in an apical 4-Chamber view of the heart with high frame rates.



Advanced spatial compounding enhances visualization of Thyroid





Installing drivers and software on your PC the system offers high performance and image quality.

SmartUs EXT can be configured as traditional trolley system, with cart, ultrasound console, and touch-screen monitor.



SmartUs

General Specifications

Applications

- Abdomen, OB/Gyn, Vascular, Cardiology, MSK, Urology/Andrology, Small Parts, Anesthesia

Imaging Modes

- B, 2B, 4B, BM, M, ITHI, B-Steer, Compound, Trapezoid, Zoom
- Color Doppler: CFM, PDI, DPDI
- CW - PW Spectral Doppler, HPRF, Duplex, Triplex
- 3DView, Panoramic View (option)

Transducers

- Linear, Convex, Phased Array, Endocavitary
- Frequency Range 1.5 > 18.0 MHz
- Wide bandwidth, multifrequency
- Automatic transducer recognition

Cine Loop, images and video storing

- Recording and storing thousands of images and video files to a disk
- Save formats: AVI, JPEG, BMP, PNG, TIFF, XLSX, DICOM, DICOM JPEG, Raw Data (TPD and TVD)
- Review, processing and measurements available on previously stored images and cine loops

Functions

- Mouse / trackball / keyboard / ultrasound console, touch-screen display
- Unlimited programmable presets; presets can be uploaded also from saved raw data images/video
- Customizable User Interface
- Multi-language support
- Patients reporting and archive

System Architecture

- PC-based software driven architecture, USB 2.0 - USB 3.0 connection to PC
- High-speed software image processing
- NeatView advanced Speckle Reduction Imaging

General measurements

- B-mode: distance, length, circumference, area, volume, angle, stenosis %
- M-mode: distance, time, velocity, heart rate, stenosis %
- PW-CW Spectral Doppler: velocity, PG, PI, RI, ect.
- PW Doppler automatic tracing and calculations

Calculation packages

- General, abdominal, obstetrics, gynecology, cardiology urology, endocrinology, vascular

Computer Configuration

- Desktop, notebook or tablet
- CPU i3 - i5 - i7 1,8GHz 1Gb RAM or better
- OS Windows XP - Windows 7 / 8 (32-64 bit)

Ultrasound Software

- Echo Wave II Software & Drivers Package
- Free Telemed software upgrades

Power supply

- 100~240 VAC, 50~60 Hz AD

Dimensions, weight

- 16,5 cm (W) x 21 cm (L) x 6,2 cm (H) - 1,8 kg

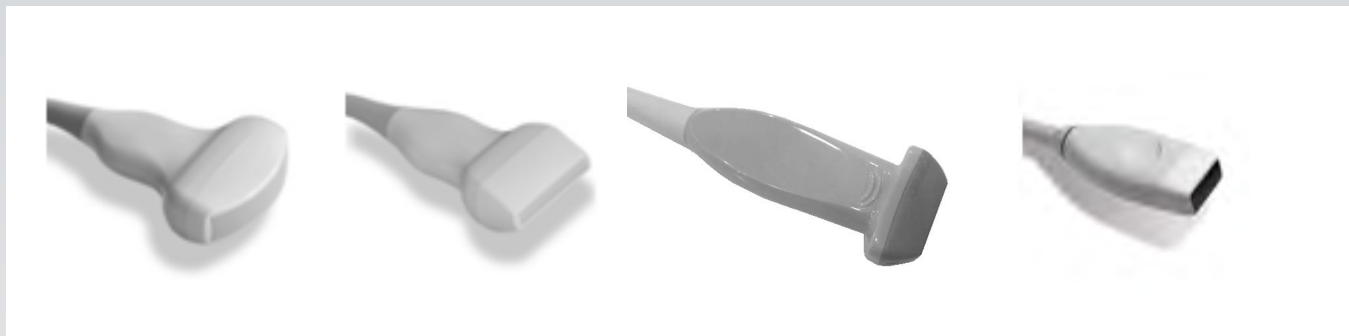
Transducers

High Resolution. Excellent image quality

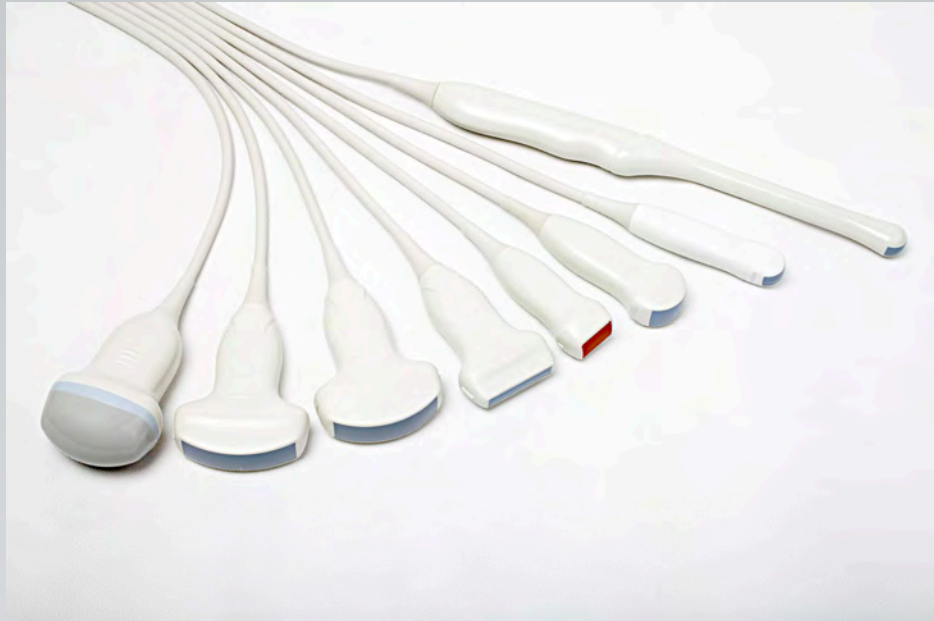
Telemed is at the forefront for innovation, design and development of the transducers technology.

It is available a wide range of transducers: high crystals density, high sensitivity, wide range of frequencies up to 18 MHz.

Each transducer is carefully designed with the most advanced technology to provide high resolution, excellent image quality, and to ensure reliability and durability.



Type	Frequency (MHz)	Scanning Method	Applications
High Density		Field of View	
Convex			
C5-2R60HI-5	2.0-5.0	Convex HD R60 65°	Abdominal, Obstetrics, Paediatrics
Linear			
L15-7L40H-5	7.0-15.0	Linear HD 40 mm	Small Parts, Vascular,MSK, Paediatrics
L18-10L30H-4	10.0-18.0	Linear HD 30 mm	Small Parts, Neurology, MSK
L12-5L40H-4	5.0-12.0	Linear HD 40 mm	Small Parts, Vascular, MSK, Paediatrics
Phased Array			
P5-1L15SI-6	1.5-5.0	Electronic Sector 90°	Cardiac, Abdominal, Transcranial



Type	Frequency (MHz)	Scanning Method	Applications
Normal Density		Field of View	
Convex			
C5-2R60NI-5	2.0-5.0	Convex R60 65°	Abdominal, Obstetrics, Paediatrics
C7-3R50N-2	3.0-7.0	Convex R50 70°	Abdominal, Obstetrics, Paediatrics
MC10-5R10N-3	5.0-10.0	Convex R10 147°	Small Parts, Vascular, Paediatrics
MC4-2R20N-3	2.0-4.0	Convex R20 104°	Abdominal, Cardiac
Linear			
L12-5L40N-4	5.0-12.0	Linear 40 mm	Small Parts, Vascular, MSK, Paediatrics
L12-5L60N	5.0-12.0	Linear 60 mm	Small Parts, Vascular, MSK, Paediatrics
L15-7L25N	7.0-15.0	Linear 25 mm	Intraoperative, Small Parts
LV8-5L60N-2	5.0-8.0	Linear 60 mm	MSK, Intraoperative, Vet
Endocavitary			
MCV9-5R10N	5.0-8.0	Convex R10 147°	Transvaginal, Transrectal

The TELEMED Beamformers
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TELEMED
Ultrasound medical systems

TELEMED Medical Systems

Via Eugenio Villoresi, 24

20143 Milano

ITALY

Phone: +39 02 36594100

Mobile: +39 348 3190513

mail: info@telemedultrasound.com

www.telemedultrasound.com

