

Transducers for SmartUs

The development made in ultrasound transducer technology is obviously related to the constantly increasing significance of ultrasound in diagnostic imaging. In medical industry, with its intricacy and continuous variation, we put all effort to keep up our technological competence.

That is why Teleded has been in the vanguard of the industrial progress since the early days, focused on indisputable quality, certain comfort and intuitive ease of use.

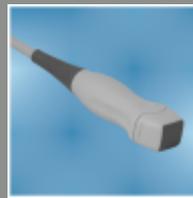
Teleded offers high resolution Convex, Linear, Phased Array, Endocavity and special purpose transducers for applications from veterinary, abdominal, vascular and cardiac through to transrectal and transvaginal. Each of the probes is carefully designed to position as high as possible near the anatomical structure of interest and to deliver optimum image quality in its product class.



MC4-2R20N-3



MC10-5R10N-3



P5-1L15SI-6



C7-3R50N-2



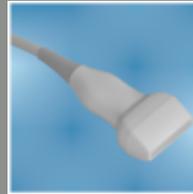
C5-2R60HI(NI)-5



L18-10L30H-5



L12-5L40N-4



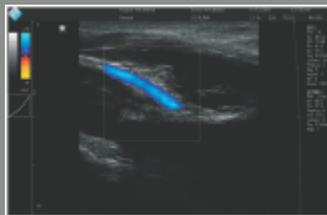
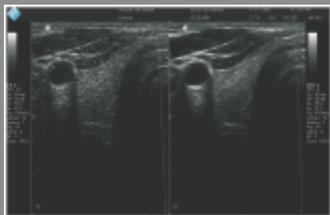
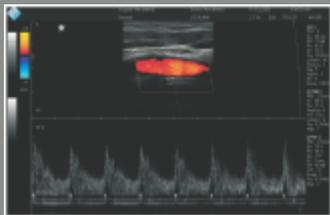
L15-7L40H-5



MCV9-5R10N-3



LV8-5L60N-2



Type	Frequency (MHz)	Scanning Method	Field of View Degree/mm	Applications
Convex				
C5-2R60HI-5	2.0-5.0	Convex R60	65	Abdominal, Obstetrics, Pediatrics
C5-2R60NI-5	2.0-5.0	Convex R60	65	Abdominal, Obstetrics, Pediatrics
C7-3R50N-2	3.0-7.0	Convex R50	70	Abdominal, Obstetrics, Pediatrics
MC4-2R20N-3	2.0-4.0	Convex R20	104	Abdominal, Cardiac
MC10-5R10N-3	5.0-8.0	Convex R10	156	Small Parts, Vascular, Veterinary
Linear				
L12-5L40N-4	5.0-12.0	Linear 40 mm	39	Pediatrics, Small Parts, Vascular, Anesthesia, Veterinary
L15-7L40H-5	7.0-15.0	Linear 40 mm	39	
L18-10L30H-5	10.0-18.0	Linear 30 mm	29	Pediatrics, Small Parts, Vascular
Phased Array				
P5-1L15SI-6	1.5-5.0	Phased Array	90	Abdominal, Cardiac
Endocavity				
MCV9-5R10N-3	5.0-8.0	Convex R10	147	Transvaginal
Veterinary				
LV8-5L60N-2	5.0-8.0	Linear 60 mm	59	Veterinary

SmartUs



General Specifications

Applications

- Primary care, vascular access, anesthesia, OB/Gyn, cardiology, abdomen, andrology breast, vascular, surgery
- Veterinary: small and large animals

Imaging Modes

- B, 2B, 4B, BM, M, Zoom, B-steer, Compound, Trapezoid
- Color Doppler, Power/Directional power, Spectral Doppler, Duplex, Triplex, HPRF, THI, CW
- One click automatic image optimization (B, CFM, PW)
- Thumbnails

Transducers

- Frequency range 1,5...18 MHz
- Wide bandwidth, multifrequency
- Automatic transducer recognition
- Phased Array transducer support

Cine loop and image store

- Number of images limited only by PC storage capacity
- Recording thousands of frames
- Storing ultrasound video file to a disk
- Loading ultrasound video file from a disk
- Review, processing and measurements available for previously stored images and cine loops
- AVI, JPG, BMP, DICOM, Telemed RAW and other popular formats support

Computer Requirements

- Desktop, notebook or Tablet PC
- CPU i3 / i5 / i7 1.8 GHz or better
- USB 2.0 interface
- 1 Gb RAM or better
- Windows® XP / Vista / 7 / 8 (32/64 Bit)

General measurements

- B-mode: distance, length, circumference, area, volume, angle, stenosis %
- M-mode: distance, time, velocity, heart rate, stenosis %
- Spectral Doppler: velocity, PG, PI and etc.
- Automatic PW tracing and calculations in real-time, Freeze mode and on stored image

Calculation packages

- Human: obstetrics, gynecology, urology, cardiology, abdominal, endocrinology, vascular
- GW estimations for animals

Functions

- Mouse / trackball / keyboard operation
- Unlimited programmable presets for clinically specific imaging
- Multi-Language support
- The set of predefined skin schemes for software interface
- Printing to system printer

System architecture

- PC-based architecture: ultrasound module connected to PC via USB interface
- Multi-focus and dynamic focus modes
- Variable scan line density
- High-speed software image processing

Ultrasound Software

- TELEMED Drivers Package
- Echo Wave II software
- Free upgrade via the Internet

Dimensions, weight

- 219 (W) x 158 (D) x 54 (H), mm

Power

- +12V +/- 15%, 2.5A input DC power line

SmartUs is a new generation of portable ultrasound color Doppler scanners. It employs latest technologies of ultrasound signal and image processing. Featured with high sensitivity sector probe together with linear and convex probes SmartUs is the first Telemed system that can be used in cardiology and neurology. Other features include spatial compound, harmonics, virtual convex and B-steer imaging. The system is capable to drive high density and high frequency transducers delivering detailed, rich and high dynamic range images.

Software features include Echo Wave II with Speckle noise reduction as a standard package and optional software for 3D rendering and Panoramic Imaging.

SmartUs is available in following modification:

SmartUs EXT-1M Kit: beamformer module with a single probe connector and a separated power supply.



TELEMED
Ultrasound Medical Systems

CE 0482 EN ISO 13485:2003

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