

Transducers for ArtUs

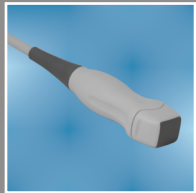
The development made in ultrasound transducer technology is obviously related to the constantly increasing significance of ultrasound in diagnostic imaging. In medical industry, with its intricacy and continuous variation, we put all effort to keep up our technological competence.

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.



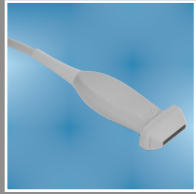
C6-1H50-A5



P5-1S15-A6



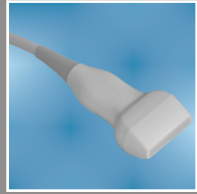
C5-2H60-A5



L18-7H30-A5



L12-5N40-A4



L15-7H40-A5



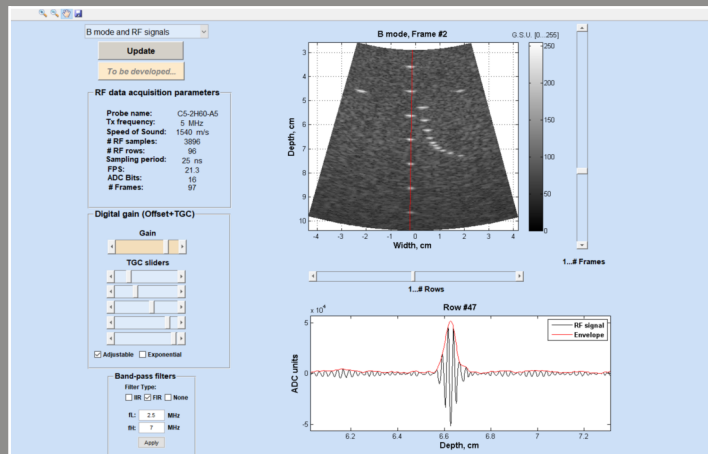
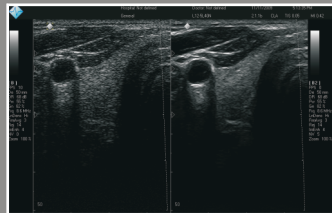
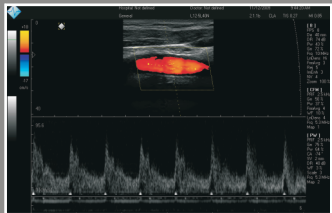
LF9-5N60-A3



LF11-5H60-A3



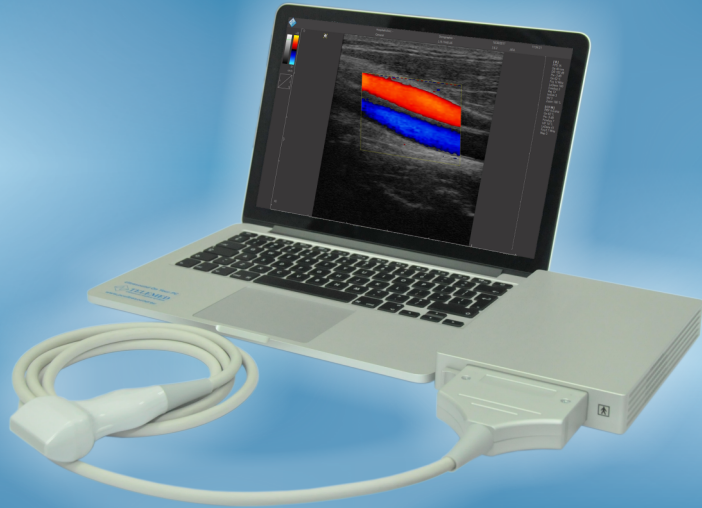
MCV9-5N10-A3



Type	Frequency (MHz)	Scanning Method	Field of View Degree/mm	Applications
Convex				
C6-1H50-A5	1.5-6.0	Convex R50	70	Abdominal, Fetal, Adult Cardiac
C5-2H60-A5	2.0-5.0	Convex R60	65	Abdominal, Fetal, Adult Cardiac
Linear				
L12-5N40-A4	5.0-12.0	Linear 40 mm	39	MSK, Peripheral Vessel, Small Organ
L15-7H40-A5	7.0-15.0	Linear 40 mm	39	
L18-7H30-A5	7.0-18.0	Linear 30 mm	29	
Phased Array				
P5-1S15-A6	1.5-5.0	Phased Array	90	Adult Cephalic, Adult Cardiac, Abdominal
Flat Linear				
LF9-5N60-A3 *	5.0-9.0	Linear 60 mm	59	MSK, Peripheral Vessel, muscle Dynamics
LF11-5H60-A3 *	5.0-11.0	Linear 60 mm	59	
Endocavity				
MCV9-5N10-A3 *	5.0-9.0	Microconvex R10	150	Transvaginal

* not for sale in USA

ArtUs



ArtUs is Telemed's very compact yet highly powerful application-based ultrasound device. Featured with high-speed USB3.0 interface it allows to not only increase scanning speed without compromising image quality but also provides real-time transfer RF ultrasound data to a PC. New "WideView" imaging mode maximizes viewing area for linear, convex and endocavity transducers. Other features includes improved spatial compound available for linear and convex transducers, parallel beamforming, harmonics, B-steer imaging. The system is capable to drive high-density and high-frequency transducers delivering detailed, rich and wide dynamic range images. Software features include Echo Wave II with Speckle noise reduction as a standard package and optional research package: SDK library and a advanced data processing and visualization procedures for Matlab environment.

ArtUs is available in following modifications:

- ArtUs EXT-1H Kit: a beamformer module with a single probe connector and a separated power supply;
- ArtUs EXT-2H Kit: a beamformer module with two probe connectors and power supply (In development);
- Advanced synchronization (option): provides up to 8 trigger signals to/from external equipment through additional connectors;
- RF data access (option) using Telemed's SDK and Matlab.



TELEMED
ULTRASOUND MEDICAL SYSTEMS

General Specifications

Applications

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

Imaging Modes

- B, B+B, 4B, B+M, M
- B-steer for linear probes
- Compound for linear and convex probes
- Virtual convex for linear probes
- Expanded view angle for convex probes
- Color Doppler (CFM)
- Spectral Doppler (PW), Duplex
- Inverted Tissue Harmonic Imaging (ITHI)
- Tissue Harmonic Imaging (THI)
- Parallel beam forming
- RF data access thru SDK library

Transducers

- Frequency range 1,5...18 MHz
- Wide bandwidth, multifrequency
- Automatic transducer recognition
- Phased Array transducer support
- Dual Head 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 3.0 / 3.1 interface
- 8 Gb RAM or better
- Windows® 8 / 10 / 11 (32/64 Bit)

General measurements

- B-mode: distance, length, circumference, area, volume, angle, stenosis %
- M-mode: distance, time, velocity, heart rate, stenosis %
- In Freeze mode and 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
- External synchronization, inputs / outputs connectors (optional)

System architecture

- PC-based architecture: ultrasound module connected to PC via USB interface
- Point-to-point dynamic focusing
- Variable scan line density
- High-speed software image processing

Ultrasound Software

- TELEMED Drivers Package
- Echo Wave II software
- Free upgrade via the Internet
- MATLAB (RF data tool)

Dimensions, weight

- 190 (W) x 136 (D) x 32 (H), mm

Power

- +12V +/- 10%, 3A input DC power line



TELEMED Ltd
Highway Business Center
Savanoriu pr. 178A
Vilnius LT-03154
Lithuania

<http://www.pcultrasound.com>
e-mail: info@pcultrasound.com

phone1: (+370-5) 2106272
phone2: (+370-5) 2106273
fax: (+370-5) 2306733