

TELEMED ULTRASOUND - OEM

Color Doppler

ClarUs OEM Beamformers


General

ClarUs OEM beamformer is a functionally complete ultrasound scanner module.

The beamformer has the following functions:

- forms short delayed impulses of high voltage to get a focused ultrasound beam;
- amplifies echo - signals deflected by an object being tested;
- focus while receiving;
- multifocus support;
- preamplifying, amplifying and filtration of echo-signals;
- detection of connected ultrasound transducer and passing its code to system;
- transferring ultrasound data to personal computer.

Main information

Type / Code	Photo	Transducer connectors	Mechanical drawings	Dimensions W x D x H, mm	Weight kg
ClarUs OEM-1M		1	pg. 4	142 x 175 x 38	1

Specifications

Imaging modes

- B
- B+B
- 4B
- B+M
- M
- B-steer
- Compound + Trapezoid
- Tissue Harmonic Imaging (THI), works with 3.5 MHz central frequency transducers
- Color Doppler (CFM)
- Power Doppler (PDI)
- Directional Power Doppler (DPDI)
- Pulsed Wave Doppler (PWD)
- B+PWD (Duplex)
- B+CFM/PDI/DPDI+PWD (Triplex)
- High Pulse Repetition Frequency (HPRF)

Transducers

- linear, convex, microconvex
- tZIF-260 type transducer connector, QLC type
- multifrequency transducers support (2.0-14.0 Mhz)
- can recognize unlimited number of transducers

Control interface

- USB 2.0 - USB 3.0

Power

- +12V +/- 5%, 1.5A

Computer Requirements

- Windows based PC
- screen resolution 1024x768 or more, IPS or PLS technology, touch screen support (option)
- CPU i3/i5/i7 1.8 GHz or faster
- 2 Gb of RAM or more
- USB 2.0 / USB 3.0 interface
- Windows XP SP3, Windows Vista SP2, Windows 7, Windows 8 / Windows 8.1 (all versions 32/64-bit)

Ultrasound software

Scanning Software

- Echo Wave II software (32/64-bit Windows)
- TELEMED Drivers Package (32/64-bit Windows)

SDK

- SDK - Software Development Kit documentation/sample code (available by agreement)
- Ultrasound Keyboard SDK (available by agreement)

Optional Software

- 3DView Plugin - rendering 3D (option)
- PanoView Plugin - panoramic imaging (option)

SDK - Software Development Kit

TELEMED SDK is a high level programming library that allows fast development of ultrasound scanning software for TELEMED ultrasound systems.

SDK contains setup package of redistributable files, programming documentation and samples with source code. Usgfw2 SDK can be used from different programming languages (native C++, Delphi, managed C++, C#, VB) that support Microsoft COM (Component Object Model).

Developed software (32-bit x86) can be run on x86 32-bit and 64-bit Microsoft Windows operating systems (Windows XP/Vista/7/8).

SDK is available for OEM partners and developers after NDA (Non-Disclosure Agreement) signing. SDK package is free.

SDK Keyboard documentation is available for OEM partners and developers after NDA (Non-Disclosure Agreement) signing. Documentation is free.

Ultrasound Console

To OEM partners we can provide ultrasound keyboard documentation (schematics, firmware code). Partner version of this keyboard can have unique design, unique buttons shape and positions. Schematics must be same, as those provided by Telemed.

Our standard Echo Wave II software will automatically detect this keyboard and whole system can be controlled by keyboard only. User interface of Echo Wave II software can be transformed to "traditional" ultrasound scanner view.

Keyboard is compatible with 32-bit and 64-bit Microsoft Windows operating systems (Windows XP/Vista/7/8) and not require drivers.

Clarus OEM-1M beamformer

