

SmartUs - Portable Ultrasound Scanner



Advanced technology.

Introduction

SmartUs is a compact, portable ultrasound scanner with Continuous Doppler technology, offering precise and reliable imaging for healthcare professionals. Its user-friendly design is ideal for clinical settings, enhancing the quality and efficiency of care.

Applications

- Primary Care
- Vascular Access
- Anesthesia
- Andrology
- Brest
- Vascular
- Cardiology
- Surgery
- Musculoskeletal
- Abdominal
- Urology
- OB/GYN
- Pediatrics
- Lungs



System Overview

Imaging Modes

- B, B+B, 4B, B+M, M
- B-mode:
 - B-steer for linear probes
 - Compound - linear probes
 - Trapezoid - linear probes
- Color Doppler (CFM)
- Power Doppler (PDI)
- Directional Power Doppler (DPDI)
- Pulsed Wave Doppler (PWD)
- Continuous Wave (CW)
- B+PWD (Duplex)
- B+CFM/PDI/DPDI+PWD (Triplex)
- High Pulse Repetition Frequency (HPRF)
- Tissue Harmonic (THI)

Transducers

Multi-frequency transducers from 1.5 to 18.0 MHz.

- Linear
- Convex
- Microconvex
- Phased Array sectorial

Scanning depth: 2 – 30 cm



Models

SmartUs EXT-1M



One probe port

SmartUs EXT-3M



Three probe ports

Probes - Linear



L12-5L40N-4

Frequency: 5.0 – 12.0 MHz
Field Of View: 38.4 mm
Applications: Vascular,
Small Parts, MSK/Neurol.,
Pediatrics



L13-4L55H-4

Frequency: 4.0 – 13.0 MHz
Field Of View: 55 mm
Applications: Vascular,
Small Parts, MSK/Neurol.



L15-6L25N-4

Frequency: 6.0 – 15.0 MHz
Field Of View: 25.6 mm
Applications: Vascular,
Small Parts, MSK/Neurol.,
Pediatrics



L15-7L40H-5

Frequency: 7.0 – 15.0 MHz
Field Of View: 38.4 mm
Applications: Vascular,
Small Parts, MSK/Neurol.,
Pediatrics



L18-10L30H-4

Frequency: 10.0 – 18.0 MHz
Field Of View: 28.8 mm
Applications: Vascular,
Small Parts, MSK/Neurol.,
Pediatrics

Probes - Convex / Microconvex



C5-2R60NI-5

Frequency: 2.0 – 5.0 MHz
Field Of View: 60.5°
Applications: Abdomen,
OB/GYN, Pediatrics



C5-2R60HI-5

Frequency: 2.0 – 5.0 MHz
Field Of View: 60.5°
Applications: Abdomen,
OB/GYN, Pediatrics



C7-3R50NI-5

Frequency: 3.0 – 7.0 MHz
Field Of View: 70°
Applications: Abdomen,
OB/GYN, Pediatrics



MC10-4R12N-4

Frequency: 4.0 – 10.0 MHz
Field Of View: 131°
Applications: Abdomen,
OB/GYN, Pediatrics



MCV9-5N10-A3

Frequency: 5.0 – 9.0 MHz
Field Of View: 131°
Applications: Transrectal,
Transvaginal

Probes - Phased Array



P5-1L15SI-6

Frequency range: 1.0 – 5.0 MHz

Applications:
Cardiac, Abdominal



P8-3L10SI-6

Frequency range: 3.0 – 8.0 MHz

Applications: Pediatric cardiac,
Pediatric abdominal

Physical Specifications

Enclosure

- Alluminium body
- SmartUs EXT-1M: 54 x 220 x 158 mm
- SmartUs EXT-3M: 213 x 155 x 90 mm

Power Supply

- External power supply,
100-240V AC, 50-60 Hz

Weight

SmartUs EXT-1M: 1.3 kg

SmartUs EXT-3M: 2.0 kg

Connectivity

- USB 2.0 & USB 3.0

Warranty

SmartUs: 2 years

Probes: 1 year

Certifications

CE Mark.

FDA Mark.

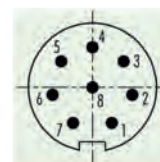


Research Tools

Intuitive tools for the Python, MATLAB, and LabView environments, enhanced by detailed documentation and understandable instructions, thus enabling a significant reduction in the learning curve.

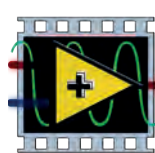
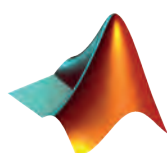
I/O Module

The SmartUs can be equipped with additional connectors for synchronizing the system with other equipment. (I/O Module is an optional feature.)



DLL for MATLAB and Python

Dynamic link library (DLL) that allows you to call SDK functions and perform real-time image and data acquisition from other programs such as MATLAB, Python, and Labview.



SDK – Software development kit

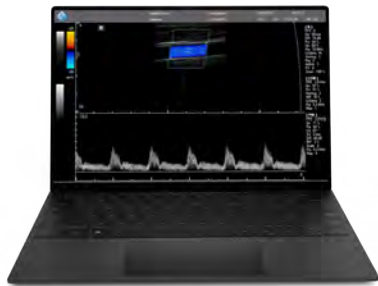
The Ultrasound Software Development kit is a versatile programming library for developing ultrasound scanning software on Windows for all TELEMED systems, and on Android for MicrUs and MicrUs Pro. This SDK is free for OEM partners and developers under an NDA with the manufacturer.



Ultrasound Software

Telemed software keeps getting better, always adding new features to make using ultrasound easier. You can download all updates for free, and there's no need to pay for a subscription.

Windows - Echo Wave II



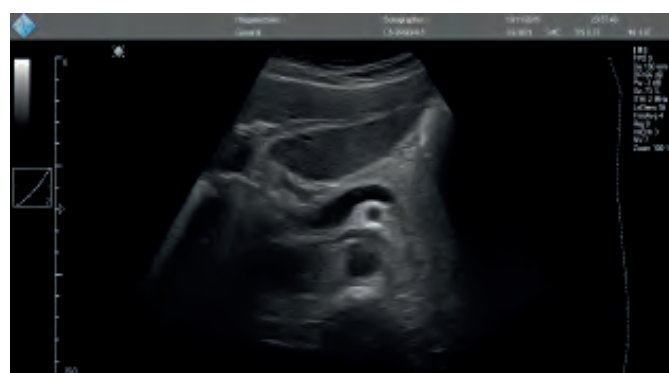
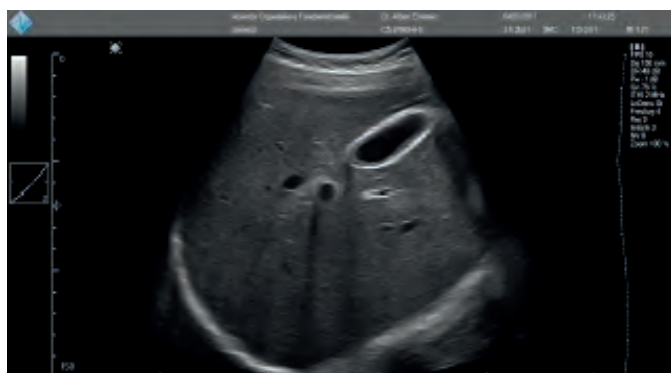
Windows - Echo Wave II touch



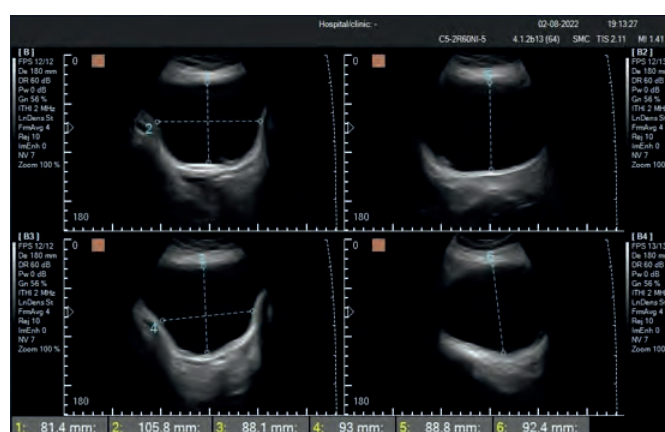
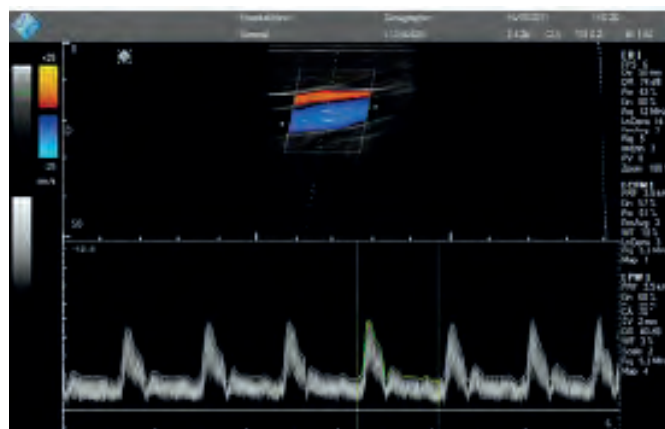
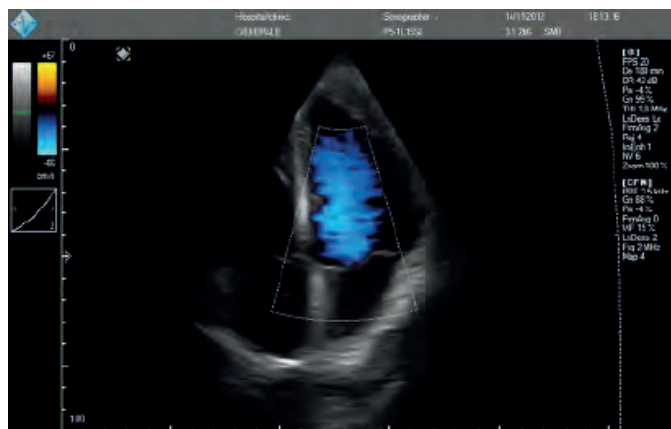
Imaging Parameters and Functions

- lines density control
 - TGC Control
 - dynamic range
 - overall gain control
 - M – mode sweep speed control
 - acoustic power control
 - variable frame averaging
 - brightness, contrast
 - advanced gamma control, fixed and custom curves
 - scan direction, rotation, up-down controls
 - negative / positive control
 - bi-linear interpolation
 - echo enhancement control
 - noise rejection function
 - speckle reduction
- PureView, NeatView, QuickView

Clinical Images



Clinical Images



Contacts

Design and manufacturing by;



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