Portable Handheld Ultrasound Scanners

1. System Specification

1.1 Ultrasound platform: Easy, AI-powered App for Android

Harmonyos/Android: Harmonyos device 2.0 or newer/Android device 8.0 or greater, and devices which have the following architectures: x64 and ARM. Devices must be compatible with Wi-Fi 802.11n and BLE.;

Windows: (with dual core processor CPU) Win7, Win8, Win10 PC

1.2 Language: Chinese, English, Spanish, German, Russian, French, Portuguese, Italian, Arabic

1.3 Promising design

Medica-grade AL-Mg alloy design
Waterproof level: IP57
Splash-resistant design for reliable cleaning and hospital grade disinfectants
Huge battery provides more than enough power to last for over 4 hours
300g, ultra-light and thin, agile mobility
Wireless charging
Modular, maintenance-free, future-proof platform
External battery status display

1.4 Overview

Imaging Modes: M-mode, B-mode, Color Doppler, Power Doppler, Pulsed Wave Doppler
Dimensions: 162 x 58 x 30mm, Weight: 358g,Probe Button: 4
Controls: Gain,TGC (near, mid, far),Depth
Channels： Receiving on 32 channels / Optional 64(revised)
Elements： Standard 128/Optional 198(revised)
Gray scale levels: 256
Dynamic range: 120dB
Frames rate: 26/frame
Scanning depth: Min/max scan depth 1cm / 31cm

1.5 Trustworthy Imaging

Architecture: All-digital broadband
3-year warranty,no subscription required
iBTech+ platform,trustworthy imaging at any mobile clinical environment
Ibcear :Smooth Uniform Tissues
Synthetic-focus Beamforming
Probe S-crystal technology: broadband frequency response and higher sensitivity
Easy, AI-powered App for Android
Cutting-edge processor and new 5G, Wifi-6 for seamless connection performance
Broad-bandwidth linear/curved array transducer(12 to 1 MHz operating frequency range)
Midline

1.6 Advanced Technology:

Ibcear :Smooth uniform tissues
Synthetic-focus Beamforming
Probe S-crystal technology: Broadband frequency response and higher sensitivity;
AI-powered automated adjustments: Automated imaging gain, auto frequency, auto depth, automatic image adjustment with advanced imaging algorithm
Wifi-6 and 5G ultra-wideband radio technology
Quick Image Optimization
Free DICOM

1.7 Charging and Bootup:
Battery Spec: Lithion, 7.4V,5800mAh
AC Adaptor output: Voltage 12V, Output current 1.5A
Scan Time: ~4 hours
Recharge time: Ca, ~3hours (for full recharge)
Battery Life: 4-5 years
Standby: ~30 days
Wireless charging: Qi-compatible
Bootup: Platform dependent, generally < 30 seconds

1.8 Operating Range:
Ambient temperatures: between 0°C / 32°F and 40°C / 104°F
Relative Humidity: between 15% and 90%
Recommended maximum exam time: 20 minutes

1.9 Included Service:
BMV Service & Support: inclusive wireless upgrades, backed by a full 3-Year warranty;
No subscription required
Free DICOM
5 user licenses included
15-day risk free returns

2. Measurement and Calculation
2.1 B mode: Distance, angle, area, volume, trace length, distance ratio, area ratio, histogram
2.2 M mode: Distance, time, slope, heart rate
2.3 Color mode: Distance, angle, area, volume,
2.4 Power mode: Distance, angle, area, volume,
2.5 PW mode: Distance, angle, area, volume,

3 Connectivity:
3.1 Quickly send and share images, video and diagnostic data via Micro USB or DICOM to PACS
3.2 Display images through HDMI Port with transfer accessory
3.3 With Type-C connector for charging and data transfer
3.4 Print to wireless printers

4 Dedicated and Professional Solutions

4.1 **Any Mobile clinical environment:** Medical Education, Clinical research, Abdomen & lungs, OB/GYN, Critical Care, Emergency Medicine, Emergency Medical Services, MSK, Pain Management, Plastic Surgery, Primary Care, Veterinary

4.2 Visual tools: including puncture intervention guidance, surgical guidance, treatment guidance,

4.3 Emergency diagnosis: acute care, ICU medical, bedside diagnosis, health examination, outside field , battlefield rescue, etc.

Remote diagnosis, conference, training, image and video case transmission and sharing

4.4 Professional solutions: abdominal, gynecology, obstetrics, abdomen, urology, kidney, bladder, vascular, small part, musculoskeletal, peripheral vessels, nerves, neonatal, pediatrics, orthopedics, basic cardiac, ophthalmology, thoracic cavity

5 Probe Specification

Medical Application：

5.1 **C2 HD convex probe:** Central Freq: 3.5MHz, Freq. Range: 2.0-5.0MHz, R60
Application: Abdomen, Obstetrics, Gynecology, Urology, Lung

5.2 **L7 HD - Linear:** Central Freq: 7.5MHz, Freq. Range: 6.0-11.0MHz, L40. Max Depth: 12 cm
Application: Orthopedic, Vascular, Lung, Breast, MSK, Nerve, Ocular, Small Parts, Anesthesia, Animals

5.3 **C7 HD - Microconvex**: Central Freq: 6.0MHz, Freq. Range: 5.0-9.0MHz, R15
Applications Ideal for:Small Parts,MSK,Pediatrics,Speech Therapy,Vet;
Also for: Abdominal, Bladder, Cardiac, Lung

5.4 **L15 HD - High Frequency Linear:** Freq. Range: 6.0-15.0MHz, L25
Applications: Ideal for: Injections, Nerve, Breast, MSK, Thyroid, Small Parts;
Also for: Lung, Vascular

5.5 **EC7 HD - Endocavity:** Central Freq: 6.5MHz, Freq. Frequency: 3-10 MHz, R10
Applications Ideal for:Gynecology, Obstetrics, Urology, IVF, Pelvic

Veterinary Application：

5.6 **C2 HD Vet-Convex**: Large Animals

5.7 **L7 HD Vet- Linear:** Equine

5.8 **C7 HD Vet-Microconvex**: Small and Medium Animal Scanner

5.9 **L11-4 Rectal Linear**: EQUINE/LARGE ANIMAL Applications: Large Animals Reproductive,Equine Tendon;
Frequency Bandwidth: 5.0/6.5/7.5/8.5MHz;
Center frequency: 6.5MHz;
Scanning width: 70 mm;
Scanning Depth: 18~184 mm;
Element: 128

5.10 **RC5-2 Rectal Curve**: EQUINE/LARGE ANIMAL Applications: Abdomen, Transabdominal Preg Check, MSK imaging of the Sacroiliac, Thoracolumbar Spine, Cervical Spine, Imaging insertion of DDFT on P3 and Impar ligament through the foot;

Frequency Bandwidth: 3.0/3.5/4.0/5.0MHz;
Central frequency: 3.5 MHz;
Radius: 60 mm;
View angle: 61 degrees;
Scanning Depth: 36-351 mm;
Element: 128

5.11 **L10-4VS**: Rectal linear probe: 6/7/8/H9/H9.5/H10MHz

6 Product configuration

6.1 Standard configuration:

Portable Pocket Handheld MX Ultrasound Scanners
APP software
Built-in rechargeable battery
USB line
power adapter and connecting cable
basic user manuals
travelling case

6.2 Optional accessories:

Mobile Trolley
Qi-compatible wireless charger
Cross-body Bag
Turnkey 10 inch Samsung Tablet with USB line, adapter and protect cover
Turnkey 10/12 iPad IOS Tablet, with IOS MX software
I-Scan Goggles
BMV Care Extended Warranty

7 Technical support, Repairing, Training and Others

7.1 In main city, local spear parts warehouse and local engineer supporting installment, commissioning and maintenance.

7.2 Professional on-site operation and training

8 App Specification

B Mode

8.1.1 Depth: 1.5-15.2
8.1.2 Gain: 0-100
8.1.3 Focus pos: 0-12
8.1.4 DR: 30-120

8.1.5 FrameCorre: 0-7 level
8.1.6 TSI: General, Muscle, Fat, Fluid
8.1.7 Enhance: 0-4 level
8.1.8 Gray map: 1-18
8.1.9 A. Power: 10-100
8.1.10 QBeam: On/Off
8.1.11 Expand: On/Off
8.1.12 L/R Flip: On/Off
8.1.13 U/D Flip: On/Off
8.1.14 THI Gain: 0-100
8.1.15 THI FrameCorre: 0-7level

M Mode

8.1.16 M Gain: 0-100
8.1.17 M Speed: 1-3
8.1.18 M DR: 30-120
8.1.19 M Gray: 1-18 level
8.1.20 Depth: 1.5-15.2
8.1.21 Gain: 0-100
8.1.22 Focus pos: 0-12
8.1.23 DR: 30-120
8.1.24 FrameCorre: 0-7 level
8.1.25 TSI: General, Muscle, Fat, Fluid
8.1.26 Enhance: 0-4 level
8.1.27 Gray map: 1-18
8.1.28 A. Power: 10-100
8.1.29 QBeam: On/Off
8.1.30 Expand: On/Off
8.1.31 L/R Flip: On/Off
8.1.32 U/D Flip: On/Off
8.1.33 THI Gain: 0-100
8.1.34 THI FrameCorre: 0-7level

Color Mode

8.1.35 C Scale: 5.0-39.5
8.1.36 C Gain: 0-100
8.1.37 C Steer: -6 - +6
8.1.38 C WF: 0-7
8.1.39 C Priority: 0-100
8.1.40 C Persistence: 0-4
8.1.41 C Color Map: V0-V5
8.1.42 Depth: 1.5-15.2
8.1.43 Gain: 0-100
8.1.44 Focus pos: 0-12
8.1.45 DR: 30-120
8.1.46 Frame Corre: 0-7
8.1.47 TSI: General/ Muscle/ Fat/ Fluid/

8.1.48 Enhance: 0-4
8.1.49 Gray Map: 1-18
8.1.50 A. Power: 10-100
8.1.51 Q Beam: On/ Off
8.1.52 Expand: On/Off
8.1.53 L/R Flip: On/Off
8.1.54 U/D Flip: On/Off

Power Mode

8.1.55 P Scale: 5.0-39.5
8.1.56 P Gain: 0-100
8.1.57 P Steer: -6 - +6
8.1.58 P WF: 0-7
8.1.59 P Priority: 0-100
8.1.60 P Persistence: 0-4
8.1.61 P Color Map: P0-P3
8.1.62 Depth: 1.5-15.2
8.1.63 Gain: 0-100
8.1.64 Focus pos: 0-12
8.1.65 DR: 30-120
8.1.66 Frame Corre: 0-7
8.1.67 TSI: General/ Muscle/ Fat/ Fluid/
8.1.68 Enhance: 0-4
8.1.69 Gray Map: 1-18
8.1.70 A. Power: 10-100
8.1.71 Q Beam: On/ Off
8.1.72 Expand: On/Off
8.1.73 L/R Flip: On/Off
8.1.74 U/D Flip: On/Off

PW Mode

8.1.75 PW Scale: 5.0-102.7
8.1.76 PW Gain: 0-100
8.1.77 PW Steer: -6 - +6
8.1.78 PW SV Size: 0.5-20.0
8.1.79 PW Base Line: -4 - +4
8.1.80 PW Speed: 1-3
8.1.81 PW WF: 0-6
8.1.82 PW Angle: -80 - +80
8.1.83 PW Invert: On/Off
8.1.84 PW Volume: 0-100
8.1.85 PW DR: 24-72
8.1.86 PW A. Power: 10-100
8.1.87 PW Auto Calc Param:
PS/ED/MD/TAMAX/PPG/MPG/HR/VTI/RI/DT/AT/SD/PI/DS

8.1.88 C Scale: 5.0-39.5
8.1.89 C Gain: 0-100
8.1.90 C Steer: -6 - +6
8.1.91 C WF: 0-7
8.1.92 C Priority: 0-100
8.1.93 C Persistence: 0-4
8.1.94 C Color Map: V0-V5
8.1.95 Depth: 1.5-15.2
8.1.96 Gain: 0-100
8.1.97 Frame Corre: 0-7
8.1.98 Focus pos: 0-12
8.1.99 DR: 30-120
8.1.100 Enhance: 0-4
8.1.101 TSI: General/ Muscle/ Fat/ Fluid/
8.1.102 Gray Map: 1-18
8.1.103 A. Power: 10-100
8.1.104 Q Beam: On/ Off
8.1.105 Expand: On/Off
8.1.106 L/R Flip: On/Off
8.1.107 U/D Flip: On/Off

9 Other business terms:

9.1 The manufacturer of the product with the international environmental certification