

Color Doppler Ultrasound Diagnostic Instrument Technical Parameters

一、 **Name of Goods:** Fully Digital Color Doppler Ultrasound Diagnostic System

二、 **Product use description**

2.1 Suitable for whole body ultrasound applications such as abdomen, gynecology, obstetrics, heart, superficial tissues and small organs, nerves, peripheral blood vessels, brain, urinary system, pediatrics, orthopedics, transrectal, and ultrasound-guided interventional therapy.

2.2★ It is required to be the latest version in 2021 or the latest factory model, with the user's on-site upgrade capability, which can meet the needs of future clinical application expansion

三、 **Quantity of goods : one set**

四、 **Main specifications and system overview:**

1. **The host color Doppler ultrasonic diagnostic instrument includes:**

- 1.1 digital beamformer
- 1.2 multiple beamforming
- 1.3 2D Grayscale Imaging Components
- 1.4 tissue harmonic imaging
- 1.5 Spectral Doppler Display and Analysis System
- 1.6 Color Doppler Ultrasound Diagnostic Components
- 1.7 Color and 2D Steer Angle Independent Deflection Technology
- 1.8 ★Convex array extended imaging technology,
- 1.9 ★With space composite imaging technology
- 1.10 Speckle Noise Reduction Technology
- 1.11 Frequency Composite Imaging
- 1.12 ★Intelligent real-time wide-view imaging anatomy M-type
- 1.13 ★ Tissue Doppler imaging (including TVI, TVD, TVM, TEI 4 modes)
- 1.14 Free Arm 3D Assembly
- 1.15 Image automatic optimization
- 1.16 tissue -specific imaging

- 1.17 ★Intelligent one-key zoom function
- 1.18 Image partial zoom function
- 1.19 Support languages, including English, Chinese
- 1.20 ★Support ultrasound teaching software, require that the machine can provide standard ultrasound images, anatomical diagrams, scanning manipulation diagrams and scanning skills introduction, and support doctors' self-study and training on ultrasound scanning

2. Measurement and analysis: (Type B , Type M , Spectral Doppler, Color Doppler)

- 2.1 General measurement (distance measurement, ellipse and trace measurement of area perimeter, volume measurement)
- 2.2 Obstetrics and gynecology measurement, gynecology / obstetrics-specific measurement and analysis, including twin measurement, fetal physiological score, Chinese population obstetric formula
- 2.3 ★Automatic measurement of intima-media
- 2.4 General Practice Measurement Packages: Abdominal, Gynecology, Obstetrics, Cardiac, Urology, Small Organ, Pediatrics, Vascular, Neurological, Emergency Department
- 2.5 Doppler measurement and analysis (automatic and manual envelope measurement, automatic calculation of measurement parameters)
- 2.6 Automated obstetric measurements
- 2.7 Automatic NT measurement

五、 Technical parameters and requirements

6.1 System general functions

6.1.1 Monitor: ≥ 17 -inch high-definition, medical professional color LCD display, the display angle can be adjusted within a range of $\geq 30^\circ$

6.1.2 Number of host probe interfaces: ≥ 3

6.1.3 Control panel supports lifting

6.2 Probe Specifications

Convex probe 3C5P (meet the routine abdominal, obstetrics, blood vessels, urology examination)

Linear array probe 7L4P (meet the routine superficial, peripheral blood vessels, small

organs, musculoskeletal examination)

2 options 1--phased array 2P2P (for cardiac, transcranial examination) or intracavity probe 6CV1P (for obstetrics and gynecology examination)

6.3 2D Grayscale Mode

6.3.1 Digital full dynamic focusing, digital variable aperture and dynamic apodization

6.3.2 Transmit sound beam focusing: transmit ≥ 4 segments

6.3.3 Maximum display depth: ≥ 35 cm

6.3.4 TGC: ≥ 8 segments

- dimensional gray scale: ≥ 256

: ≥ 220

6.3.7 Gain adjustment: B/M/D are independently adjustable, ≥ 100

6.3.8 Preset conditions: Preset the best image inspection conditions for different inspection organs

6.3.9 Maximum frame rate 400 frames per second

6.3.10 Support horizontal ruler, which is beneficial to puncture operation

6.4 Color Doppler Imaging

6.4.1 Display mode: B/ C, B/C/M, B/POWER, B/C/PW, B/C/CW

6.4.2 Sampling frame deflection: $\geq \pm 10$ degrees (Linear array probe)

2 segments can be adjusted independently

6.4.4 B/Color dual real-time display

6.4.5 Maximum frame rate ≥ 233 frames per second

6.5 Spectral Doppler Mode

6.5.1 Spectral Doppler modes: including pulsed Doppler, high pulse repetition frequency, continuous Doppler

6.5.2 Display mode: B, PW, B/ PW , B/CW , B/C/PW, B/C/ HPRF , B/ C/CW , 2D\Color Doppler\Spectral Doppler Tri-Sync display mode etc.

6.5.3 Maximum speed: ≥ 7.00 m/s, minimum speed: ≤ 1 mm/s (non-noise signal)

6.5.4 Sampling volume: 0.5-20mm

6.5.5 Deflection angle: $\geq \pm 10$ degrees (Linear array probe)

6.5.6 Zero position movement: ≥ 8 grades

6.5.7 Fast Angle Correction

6.5.8 Support spectrum automatic measurement

6.6 Movie playback

6.6.1 Available in all modes

6.6.2 Support manual and automatic playback, image comparison

6.6.3 ★ Image storage and (movie) playback reproduction unit: support synchronous storage (support single-frame image files include: BMP , JPG, TIFF , DCM movie files include: AVI, DCM , that is, while storing and exporting image data, it can be Complete real-time scan

6.7 Check storage and management

6.7.1 Digital ultrasound image hard disk storage \geq 1TB

6.7 .2 The built-in integrated workstation system supports the simultaneous preview of basic patient information and single patient image information

6.7.3 Input/output: USB port (3) , external video, VGA , network port

6.7.4 Support network storage, can transfer machine data to PC through wired network

6.7.5 DICOM3.0 basic components