

# *V8 Data Sheet*



*Powered by brand new platform Realview<sup>+</sup>, V8 high-performance portable digital color Doppler imaging system provides comprehensive professional solution kit supports all-round diagnosis with exceptional imaging performance and efficient workflow.*

## *Highlights*

- *Realview<sup>+</sup> Platform*
- *Workflow 3.0*
- *Nanopure*
- *Auto Flow*
- *S-Station*
- *S-View*

# General Specification

## Dimension

Gross dimension H*W*D(mm)	354*323*69
Net dimension H*W*D(mm)	560*490*300

## Weight

Gross weight	11kg
Net weight	6.1kg (Including 2 Batteries)

## Power Requirements

Battery	Rated Voltage: DC 11.1V Charging Voltage: DC 12.6V Rated Capacity: 5000mAh,56Wh
Adapter	Input: AC 100-240V, 2.5A, 50 Hz/ 60Hz Output: DC 15V, 10A Rated Power: 120VA

## Operation Conditions

Ambient temperature	0°C to +40°C
Relative humidity	30% to 85%
Atmospheric pressure	70kPa to 106kPa

## Stored Conditions

Ambient temperature	-20°C to +60°C
Relative humidity	15% to 93%
Atmospheric pressure	50kPa ~ 106kPa

## Connectivity

HDMI port ( Extendable to S-video/ Video/ print control port with video converter )
Network port
2 USB 3.0 port
ECG port
Adapter port

## Appearance

### Ergonomic appearance

Monitor	<ul style="list-style-type: none"> <li>· 15" high resolution color monitor</li> <li>· Angle Adjustment Rotate left and right 90° Lean back 125°</li> <li>· Visual Angle L&amp;R 170°/U&amp;D 170°</li> </ul>
Control panel	<ul style="list-style-type: none"> <li>· Backlit keyboard</li> <li>· Transparent keyboard membrane for minor languages: English, Spanish, German, Russian, French, Italian</li> <li>· 8 TGC</li> </ul>
Battery	· Working Time:About 90 mins

One Active Probe Connector

Solid State Disk: 500G

# System Overview

## Applications

Large Dog(>15kg): Abdomen, MSK, Superficial, Small Part, Cardiology, Reproduction

Medium Dog (5-15kg): Abdomen, MSK, Superficial, Small Part, Cardiology, Reproduction

Small Dog (<5kg): Abdomen, MSK, Superficial, Small Part, Cardiology, Reproduction

Cat: Abdomen, MSK, Superficial, Small Part, Cardiology, Reproduction

Others: Abdomen, MSK, Superficial, Small Part, Cardiology, Reproduction

## Standard Features

Frequency	<ul style="list-style-type: none"> <li>• Fundamental Frequency</li> <li>• THI (Tissue Harmonic imaging)</li> <li>• MFI(Inversion THI)</li> <li>• Fusion Frequency: Pen/Gen/Res</li> </ul>
Speckle reduction	<ul style="list-style-type: none"> <li>• Nanoview</li> <li>• Nanopure: Special for Cardiovascular</li> </ul>
X-Beam	Compound Imaging
Series customization	<ul style="list-style-type: none"> <li>• Examination customization</li> <li>• Measurement customization</li> <li>• Annotation customization</li> <li>• Bodymark customization</li> <li>• Report template customization</li> </ul>

Quick ID

Q-Preset

Trapezoidal/Extend imaging

Duplex/Triplex

Panoscope

Auto IMT

Auto Volume

Auto Flow

M/Color M/AMM

CFM/PDI/DPDI/VS Flow

PW/HPRF

Needle Enhancement

TDI

CW

Semi-auto EF

S-View

S-Station

SIUI MAI

Sono Air

Smarchive

Historical Archive Query

Spectrum measurement

- Auto Trace
- Semi Auto Trace
- Manual

Reverse Import

Cursor Zoom

Raw Data Analysis

Auto-Fit

Automatic Optimization

Post processing

## Optional Features

DICOM 3.0 (Basic)

DICOM 3.0 (Advanced)

PV Imaging

Glossy Flow

Strain Elastography

Contrast Harmonic Imaging(for liver and thyroid)

ECG

Auto EF/Auto SG

Stress Echo

Free Hand 3D

## Standard Accessories

Video cable

- HDMI cable
- S-video cable

Power Cable

Printer Control Cable

Operation Manual

Recovery System USB

Video Converter

Power adapter

Fabric Cover

Wireless Adapter

Probe Holder

Camera

Tray

## Optional Accessories

Printer

- Video printer
- Laser or inkjet printer

Biopsy Guide

- Convex probe
- Linear probe
- Transvaginal probe
- Transrectal probe

Trolley

- CR-20
- CR-15

Probe Switcher

- TQ-B007(Extends 1 socket to 4 sockets;Plastic shell)
- TQ-B008(Extends 1 socket to 2 sockets;Metal shell)
- TQ-B009(Extends 1 socket to 2 sockets;Plastic shell)
- TQ-B010(Extends 1 socket to 4 sockets;Metal shell)

Charger (GD-B009)

Gel Warmer (work with charger GD-B009)

Trolley Case

ECG Cable

Wireless Adapter (If purchase WiFi or SIUI MAI function)

Camera (If purchase SIUI MAI function)

## Display Mode

B	B, 2B, 4B
M	<ul style="list-style-type: none"> <li>· M, B+M</li> <li>· B+M+CFM</li> <li>· B+TDI+M</li> <li>· AMM</li> </ul>
B+Color	<ul style="list-style-type: none"> <li>· B+CFM, B+PDI, B+DPDI</li> <li>· B+VS Flow</li> <li>· Split B/CFM</li> </ul>
B+Spectrum	<ul style="list-style-type: none"> <li>· B+PW</li> <li>· B+CW</li> <li>· HPRF</li> </ul>
B+Color+Spectrum	<ul style="list-style-type: none"> <li>· B+CFM+PW</li> <li>· B+PDI+PW</li> <li>· B+DPDI+PW</li> <li>· B+VS Flow+PW</li> <li>· B+CFM+CW</li> </ul>
Tissue Doppler	<ul style="list-style-type: none"> <li>· B+TDI</li> <li>· B+TDI+PW</li> </ul>
ECG	B+ECG
Volume	<ul style="list-style-type: none"> <li>· 3D</li> </ul>
Extend Mode	<ul style="list-style-type: none"> <li>· Trapezoid/Ext (Convex probe)</li> <li>· Panoscope</li> </ul>
CHI mode	
Needle Enhancement mode	

## System Parameters

### General Parameters

GPU+CPU

Windows 10

System language	English, Russian, Spanish, French, German, Italian
-----------------	--

Input language	English
----------------	---------

Broadband/Multi-Frequency Technology

System signal processing bandwidth: 1-18Mhz

Gray scale	256
Dynamic Range	30-245dB
Max. Frame Rate	>2000 fps, based on probe and mode
Maximum image display depth	41 cm, based on probe
Zoom	<ul style="list-style-type: none"> <li>· HD Zoom</li> <li>· Full-View Zoom</li> <li>· Full Screen</li> </ul>
Focus	<ul style="list-style-type: none"> <li>· Continuous dynamic focus</li> <li>· 1-8 selectable transmit focus</li> </ul>

8-step TGC slide pots

5/9-step digital LGC

### 2D Mode

- Gain
- Depth
- Frequency
- X-Beam
- Enhancement
- Smooth
- Nanoview
- Nanopure
- Persistence
- Chroma
- Gray Map
- Power
- B steer (Linear probe)
- B rotation
- TSI
- Line density
- Inversion
- Dual View/Quad View
- SF

### M Mode

- Gain
- Sweep speed
- Gray Map
- Chroma
- Display layout
- AMM

## CFM/PDI/DPDI Mode

- Gain control
- Pulse repetition frequency
- Wall filter
- C Priority
- C Gate
- Median Filter
- Threshold
- Color Map
- Smooth
- Color persistence
- Line density
- Color enhancement
- B MIX
- Power
- Baseline (CFM)
- Steer (Linear probe)
- Tag Range
- Tag Position
- Color Hidden
- B/C split
- VS Flow
- Color U/D
- Auto Fit

## PW/CW Mode

- Gain
- Gray Map
- Chroma
- PRFd
- Duplex
- Baseline
- Wall filter
- Angle
- Sampling volume
- Volume
- Sweep Speed
- Smooth
- Power
- Auto Trace
- Display layout
- Trace Type
- Trace Correction
- Trace Sensitivity

- CW: Available on the sector probes

## TDI Mode

Help to assess the directional and temporal phase of cardiac so as to display the movement state of myocardium and the movement speed of heart.

- TDG
- Persistence
- PRFc
- WF
- Baseline
- U/D
- ENH
- MIX
- TDI Map
- Thred
- Priority
- PWR
- Gate
- Smooth
- Med Filter
- Color Hidden
- B/C split
- Available on the sector probes

TDI+PW

- TDI-PW is used to display the trajectory of the movement velocity change of the myocardial tissue. On the time axis, it can intuitively reflect the movement velocity change of the myocardium during the cardiac cycle. It can measure the velocity of myocardial movement, the time length of each phase of the cardiac cycle, and calculate cardiac indicators such as TEI.

TDI+M

- Provide both myocardium motion velocity and direction

## AMM

The M mode scanning line can be adjusted 360 degrees to meet the measurement requirements of different cardiac chamber structures, so that the accuracy and reliability of measurement results are not affected by intracardiac structure or position deviation.

- Chroma
- Line Number
- Layout

· Sweep Speed

## Auto Fit

The system can reduce noise and artifacts purify tissue shading and edging improve contrast resolution and help early identification of tissue/structure lesion

Available on B/CFM/PW

B	TGC, Gain
CFM/PDI/ DPDI	Gain
PW/CW	Baseline, PRF

## Post Processing

Parameter or mode can be adjusted in the saved original data image or movie, it helps to better diagnose the lesion

Available on B/CFM/PW/M mode

B	<ul style="list-style-type: none"><li>· B Gain, Chroma, Gray Map, L/R, U/D, Rotation, F-Zoom</li><li>· Activate AMM (Phased array probe only)</li></ul>
CFM	<ul style="list-style-type: none"><li>· B Gain, F-Zoom, Baseline, MIX, B Mix, Color Map, Color U/D, Priority, Tag Pos, Tag Range, Smooth, Thred</li><li>· CFM: Turn off color image and display B mode image, B/C split</li></ul>
PDI/DPDI	<ul style="list-style-type: none"><li>· B Gain, F-Zoom, Map, Color U/D, MIX, B MIX, Priority, Smooth, Thred</li><li>· PDI: Turn off color image and display B mode image, B/C split</li></ul>
PW/CW	<ul style="list-style-type: none"><li>· B Gain, PWG, F-Zoom, Baseline, Volume, Angle, Chroma, Trace correction, Trace Sensitivity, Trace Type, Layout, U/D, Gray Map</li><li>· PW: Turn off PW image and display B mode image</li></ul>
M/AMM	M Gain, F-Zoom, Chroma, Gray Map, Layout, Line No.(AMM)

## Quick ID

Quickly create ID, no need to input patient information, suitable for emergency situations

## Q-Preset

Without entering the setup interface, the user-defined parameters can be saved quickly with one click to improve the operation efficiency

## Archive Data Protection

The system will automatically continue the last exam if it is ended abnormally, it helps to protect archive data

## Historical File Query

After inputting the patient ID, the system will automatically search for the existence of previous files, so that doctors can consult and quickly understand the patient's situation

## S-View

File comparison function to simultaneously compare multiple files, including images and films

## S-Station

Image processing system to select or create report templates, and quickly add system default report entries

## Reverse Import

General measurement results can be set as specialty measurement items and be used in related calculations

## Independent Sound Control

Sound of the spectrum and the buttons on the touch screen and control panel can be controlled independently to meet the daily needs of different users

## Measurement Cursor Zoom

During the measurement process, the enlarged image around the measurement cursor is displayed in the lower right corner of the screen, which is suitable for the measurement of small lesions and accurate positioning

## Trapezoidal (Virtual Convex)

Available on linear transducers

Extended Angle: L/R 15°

## Panoscope

Available on Linear/Convex/Phased array transducers

Max scan length	2m
Max scan time	60S

Scale mark

Advance function | Measure, Annot, Zoom, Rotate, Crop

Color Panoscope

## Needle Enhancement

based on the ultrasonic beam deflection and imaging fusion, needle enhancement is used to strengthen the view of biopsy needle. Cooperated with the custom biopsy guides with adjustable needle angle available, it implements an effective biopsy for tumor.

Steer Correction

Auto Enhance

## VS Flow

Basing on MircoFlow, VS-Flow significantly upgrades the sensitivity and resolution of blood flow which helps doctors to maximize the clinical application value

## Auto IMT

Auto IMT greatly improve the accuracy of intima-media measurement, simultaneously measure the thickness of anterior and posterior intima-media, and improve the clinical efficiency

## Strain Elastography

visualize the stiffness of tissues in real time by delivering an external compression on the tissues.

- Clarity
- Smooth
- E Map
- Persistence
- Dynamic range
- E Gain
- Dual live with E and B mode
- Pressure pilot lamp
- Pressure guide with motion curves

Available on the Linear/Vaginal probes

## Contrast Harmonic Imaging

Ultrasound Contrast Imaging effectively enhances the 2D imaging and blood flow Doppler imaging of the liver and thyroid, which is safe, real-time and affordable. It empowers the detection and qualitative diagnosis of tumors in liver, thyroid and other organs

- CHI Chroma
- CHI Frq
- CHI PWR
- CHI DR
- Focus Pos
- CHI SR
- CHI Gray Map
- LD
- B Chroma
- B Gray Map
- B DR
- Width (Linear Probe)
- FOV (Convex Probe)
- U/D
- Timer
- Agent Burst

Layout

Available on the Convex probes

## SIUI MAI

Ultrasound device SIUI MAI platform support

SIUI MAI client-side APP: Android and iOS device

Remote service support

Realtime live broadcast

## Calculation

Measurement package	Caliper,Abdomen, Repro(Cat), Repro(Dog), Small Part,Cardiology
---------------------	--

Expand the measurement menu automatically

Measurement Rule: Repeat, Next, Non

Measurement Across Modes	Measurement items in different modes are contained in the same measurement package. When the mode is activated, the corresponding measurement items are also activated
--------------------------	--

Measurement Result	<ul style="list-style-type: none"> <li>· Reverse Import</li> <li>· Delete any measurement item at will</li> <li>· Move location at will</li> <li>· Adjustable size and color</li> </ul>
--------------------	---

## Smarchive

Display the number of images in each archive

Preview images and movies without entering archives

## Archive Backup Function

Archive Transmission	·Background transmission ·Multi path simultaneous transmission ·Task manager to view the transfer progress
----------------------	--

## Worksheet

Measurement results are placed in the front, which can be viewed without the need to enter the worksheet

Specialty worksheet for easy viewing and comparing the measurement results of various exam types

Worksheet interface supports modifying patient information

Report type	PDF, HTML
-------------	-----------

S-Station

## Memory

Film Length	2D playback: 1~10000 frames, 1~3600S; M/PW:600S DVR record: 1~3600S
-------------	---

Image Format	Raw data (sfm)/BMP/JPG/ DCM
--------------	-----------------------------

Cine Format	Raw data(cin) /AVI/ MP4/ DCM
-------------	------------------------------

Reedit the movie playback area

2B/4B movie playback simultaneously

Store forward or backward

## Probe Parameters

### C6LN

Micro-convex probe

Applications	1.Large Dog(>15kg): Abdomen, Reproduction, Cardiology 2.Medium Dog (5-15kg): Abdomen, Reproduction, Cardiology 3.Small Dog (<5kg): Abdomen, Reproduction, Cardiology 4.Cat: Abdomen, Reproduction, Cardiology 5.Others: Abdomen, Reproduction, Cardiology
FOV	99.8°
Biopsy Guide	Unavailable
Frequency (B)	2.5-13.0 MHz

### L8LN

HD Linear probe

Applications	1.Large Dog(>15kg): Abdomen, MSK, Superficial, Small Part 2.Medium Dog (5-15kg):Abdomen, MSK, Superficial, Small Part 3.Small Dog (<5kg):Abdomen, MSK, Superficial, Small Part 4.Cat: Abdomen, MSK, Superficial, Small Part , Reproduction 5.Others: Abdomen, MSK, Superficial
Width	50mm
Biopsy Guide	Available
Frequency (B)	3.0-13.5MHz

### P5IN

High Frequency Phased array probe

Applications	1.Large Dog(>15kg): Cardiology, Abdomen 2.Medium Dog (5-15kg): Cardiology, Abdomen 3.Small Dog (<5kg): Cardiology, Abdomen 4.Cat: Cardiology, Abdomen 5.Others: Cardiology, Abdomen
FOV	90°
Biopsy Guide	Unavailable
Frequency (B)	1.9-8.2MHz

### P8IN

High Frequency Phased array probe

Applications	1.Small Dog (<5kg): Cardiology, Abdomen 2.Cat: Cardiology, Abdomen 3.Others: Cardiology, Abdomen
FOV	90°
Biopsy Guide	Unavailable
Frequency (B)	3.0-13.5MHz

### Identification

- ISO 9001:2015
- ISO 13485:2016



- 
- UL 60601-1
  - EN 60601-1 and IEC 60601-1
  - EN 60601-1-1 and IEC 60601-1-1
  - EN 60601-1-2 and IEC 60601-1-2
  - EN 60601-1-4 and IEC 60601-1-4
  - EN 60601-1-6 and IEC 60601-1-6
  - EN 60601-2-37 and IEC 60601-2-37
  - EN 62304 and IEC 62304
  - CE Declaration
-