

FULL DIGITAL COLOR DOPPLER ULTRASOUND SYSTEM

PCB-VIEW-04



ABOUT THE PCB-VIEW-04

Comprehensive color-Doppler imaging in a premium ergonomic console.

The **PCB-VIEW-04 Full Digital Color Doppler Ultrasound System** is a premium imaging platform engineered for radiology, cardiology, OB/GYN, vascular, urology, musculoskeletal and neurological intervention. It is built around **uSeed metadata beamforming** — a CPU + GPU + FPGA heterogeneous computing architecture that increases computational speed by 50% and heat-dissipation efficiency by 30% over the previous generation.

The console pairs a **21.5" medical-grade LCD** (angle-adjustable, foldable) with a **13.3" high-sensitivity touchscreen** (50° adjustable) above a motorized height-adjustable, rotation-friendly control panel. Four universal probe connectors, a detachable gel-warming cup (37°/40°), 1 TB hard disk, integrated DVD-R/W and full I/O (HDMI, DVI, VGA, S-Video, RS-232, Ethernet, DICOM 3.0, Printer) make the unit ready for any clinical workflow.

The system ships with **two transducers as standard** — **3C5PDS convex** and **7L4PDS linear** — plus **4D + CW modules pre-installed**. AI-powered automatic measurements (Auto EF, Smart OB, Auto NT, Intelligent follicle, zMicroFlow) and the personalized **zWorkflow** deliver fast, repeatable exams. **Zonnect Imaging** (optional) enables real-time remote consultation, training and after-sales support across distances.

SPECIFICATIONS

Engineered around the uSeed beamforming platform.

MODEL

PCB-VIEW-04

TYPE

**Full Digital Color Doppler
Ultrasound · Trolley**

PLATFORM

**uSeed metadata beamforming ·
CPU + GPU + FPGA**

MAIN DISPLAY

**21.5" medical LCD · rotatable ·
foldable · angle adjustable**

TOUCH SCREEN

**13.3" high-sensitivity · 50° max
reversible**

CONTROL PANEL

**Motorized height adjustable ·
keyboard rotation · splash-
resistant**

PROBE CONNECTORS

**4 universal activated
connectors**

STANDARD TRANSDUCERS

**3C5PDS Convex + 7L4PDS
Linear (2 included)**

BUNDLED MODULES

4D module + CW module

IMAGING MODES

**B · 2B/4B · M · AMM · Curved
AMM · CM · CDFI · PDI · DPDI · CW
· PW · TDI · 3D/4D**

IMAGE TECHNOLOGIES

**PIHI · SCI · ZClear · EFOV ·
Panoramic · zonElast · FCI · THI ·
TSI · Contrast-enhanced · IMT ·
HR-Flow · MicroFlow**

CARDIOLOGY

**CW · TDI · IMT · Auto EF · zTrack ·
zMicroFlow**

OB&GYN

**Basin bottom measurement ·
3D/4D · Zlive · Smart OB · Auto
NT · Intelligent follicle
measurement**

MEASUREMENT PACKAGES

**Abdomen · OB&GYN · Cardiac ·
Vascular · Urology · Small organ**

AUTO FEATURES

**Automatic PW trace +
measurement in real time · One-
key Auto Optimization · QSave
presets**

ZWORKFLOW

**Personalized automated
workflow protocol**

GEL WARMER

**Detachable coupling cup · 37° /
40° optional**

STORAGE

**1 TB hard disk · Raw data for
offline reporting**

OPTICAL DRIVE

Built-in DVD-R/W

USB PORTS

4 USB ports

INTERFACES

**Video · S-Video · Audio in/out ·
DVI · VGA · HDMI · RS-232 · RJ45
· DICOM 3.0 · Printer**

WIRELESS

**Wi-Fi · Bluetooth · Ethernet
(wired)**

PUNCTURE

**Puncture enhancement
supported**

REMOTE (OPTIONAL)

**Zonnect Imaging — real-time
remote diagnosis + training**

WARRANTY

**2 years main unit · 1 year
transducers + battery (ex-
factory)**

CERTIFICATIONS

CE · ISO 13485

PLATFORM TECHNOLOGY

uSeed — the next-generation imaging engine.

USEED METADATA BEAMFORMING

Brand-new platform developed on CPU + GPU + FPGA heterogeneous computing. Images are saved as **metadata** for post-processing — you can re-tune gain, dynamic range, color and Doppler parameters AFTER the patient has left the room.

UPGRADED PERFORMANCE

+50% computational speed and **+30% heat-dissipation efficiency** compared to the previous-generation Zoncare architecture. Result: more stable real-time imaging, lower fan noise, longer service life.

PIHI · PULSE INVERSE HARMONIC IMAGING

Reduces distortion generated by the fundamental wave and greatly improves the signal-to-noise ratio — sharper images in technically difficult patients.

SCI · SPATIAL COMPOUND IMAGING

Provides better contrast resolution, reduces speckle noise and smooths the imaging of homogeneous tissue — cleaner liver, breast, thyroid, vascular views.

ZCLEAR SPECKLE REDUCTION

Significantly reduces unwanted speckle while preserving tissue boundary and tissue echo — confident clinical diagnosis with cleaner background.

RAW DATA + POST-PROCESSING

Metadata storage means you can adjust parameters and re-generate reports OFFLINE after the exam — consistent quality, repeatable measurements, no need to recall the patient.

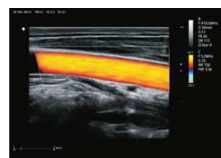
AI SOLUTIONS

Automated measurements across specialties.



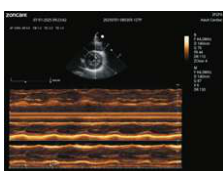
AMM · ANATOMICAL M-MODE

Place up to three sampling lines at any angle. Facilitates multi-directional observation of ventricular wall movement.



AUTO EF

Automatic recognition of the cardiac chamber during diastolic and systolic periods. Calculates ejection fraction automatically — reduces operator dependency and improves work efficiency.



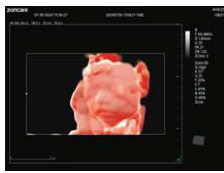
AUTO OB

Automatic identification of obstetric standard sections and automatic measurement of **BPD**, **HC**, **AC**, **FL** and other biometric parameters.



AUTO FOLLICLE

Automatic identification and calculation of follicle size in real time — critical for IVF cycle monitoring and fertility workups.



ZLIVE · 4D RENDERING

Leveraging ray-casting and innovative virtual lighting, Zlive renders highly realistic fetal visuals featuring lifelike skin textures.



ZMICROFLOW + HR-FLOW

Enhances visualization of micro-vascular or complex flow patterns, especially in small vessels — thyroid nodule characterization, tumor vascularity, plaque assessment.

ERGONOMIC DESIGN

Built to fit any exam room.



ADJUSTABLE CONSOLE + FOLDABLE DISPLAY

Motorized height-adjustable control panel, rotation-capable keyboard and foldable 21.5" medical display let the sonographer work in any position — sitting, standing, bedside or in a tight bay.



SPLASH-RESISTANT PANEL · CABLE MANAGEMENT

Splash-resistant protection film on the panel enables reliable cleaning and disinfection between patients. Integrated cable management keeps probe cables off the floor.

4 UNIVERSAL ACTIVE CONNECTORS

Four activated transducer connectors mean up to four probes are always plugged in — switch from convex to linear to phased-array to transvaginal with a single tap on the touchscreen.

13.3" HIGH-SENSITIVITY TOUCHSCREEN

Responsive touchscreen for fast probe switching and parameter adjustments. Multi-function efficient touch screen with **Clipboard, QSave, Station and user-defined buttons.**

ZWORKFLOW PERSONALIZATION

Automated personalized workflow protocol — configure exam routines per sonographer or per specialty for a workflow suited to your team's habits.

DETACHABLE GEL WARMER

Detachable coupling-agent heating cup with selectable **37° / 40°** temperature — patient comfort + faster scanning in cold rooms.

TRANSDUCERS

Standard configuration plus 4 optional probes.

3C5PDS CONVEX (STANDARD)

General-purpose convex transducer included with every PCB-VIEW-04. Covers abdomen, OB, gynecology, urology and general scanning.

7L4PDS LINEAR (STANDARD)

Linear-array transducer included as standard for vascular (carotid, peripheral), thyroid, breast, small parts, MSK and superficial structures.

6E1PDS TRANSVAGINAL (OPTIONAL)

Endocavity transducer for transvaginal OB/GYN exams — early-pregnancy assessment, gynecology, IVF follicle monitoring. Compatible with ZNG-09 puncture guide.

3P2PA PHASED ARRAY (OPTIONAL)

Adult and pediatric cardiac imaging. Bundles the Extended Cardiac Package (Free Steering M, Color M) at no charge.

4V4CDS 4D VOLUME (OPTIONAL)

Volumetric 4D obstetric / gynecologic imaging. Bundles Zlive lighting rendering at no charge.

6C1PD MICROCONVEX (OPTIONAL)

Microconvex transducer for pediatric / neonatal abdomen, cardiac and superficial scanning where a small footprint is required.

OPTIONAL ACCESSORIES & SOFTWARE**Configure the workflow you need.****BUILT-IN BATTERY PACKAGE**

Integrated lithium battery (built-in by order before delivery) for bedside / inter-room use without unplugging.

ECG MODULE

Integrated ECG module (built-in by order before delivery) for cardiac exams synchronized with ECG trace.

PUNCTURE GUIDES (ZNG-07 / 08 / 09)

Dedicated puncture brackets for the 3C5PDS convex (ZNG-07), 7L4PDS linear (ZNG-08) and 6E1PDS transvaginal (ZNG-09) probes — for guided biopsy and interventional procedures.

FOOT SWITCH

Hands-free foot switch for image freeze, capture and parameter toggle — useful during sterile interventional procedures.

VIDEO PRINTER (SONY-UP-X898MD)

High-resolution thermal video printer for on-the-spot image printing of clinical-grade B-mode, Color and Doppler captures.

ELASTOGRAPHY (LINEAR ONLY)

Software package for tissue stiffness measurement with the 7L4PDS linear transducer — breast, thyroid, lymph node, MSK applications.

DICOM 3.0 PACKAGE

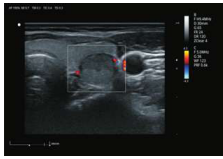
Full DICOM 3.0 connectivity package for PACS/HIS integration — Store, Print, Worklist, Storage Commitment, MPPS.

ZONNECT IMAGING (REMOTE)

Independently developed remote ultrasound system enabling real-time sharing and interaction of images across distances — supports remote consultation, live teaching, remote guidance, training and after-sales support.

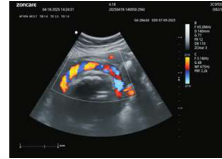
IMAGE GALLERY

Comprehensive clinical capability.



ZMICROFLOW · RADIOLOGY

Micro-vascular flow visualization in small vessels — thyroid nodule characterization, hepatic perfusion, plaque assessment.



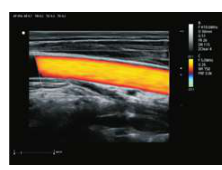
INTELLIGENT BLOOD FLOW TRACKING

Intelligently identifies the location of blood vessels. Continuous tracking of blood flow, supporting real-time optimization to achieve better blood flow optimization.



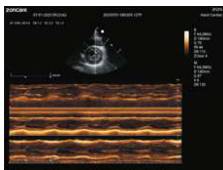
AMM · ANATOMICAL M-MODE

Up to three sampling lines placed at any angle for multi-directional ventricular wall movement analysis.



AUTO EF · CARDIOLOGY

Auto recognition of the cardiac chamber during diastolic + systolic periods; auto ejection-fraction calculation reduces operator variability.



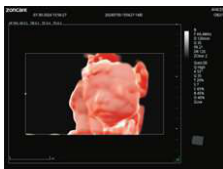
AUTO OB · OBSTETRICS

Auto identification of obstetric standard sections + auto biometry (BPD, HC, AC, FL).



AUTO FOLLICLE · GYNECOLOGY

Auto identification and size calculation of ovarian follicles — speeds up IVF cycle monitoring.



ZLIVE · 4D RENDERING

Ray-casting + innovative virtual lighting produces highly realistic fetal visuals with lifelike skin texture.