

Technical Specifications of CCB-C80 color doppler

System Overview

Application

Abdomen / Obstetrics / Gynecology /
Urology / Andrology / Small Parts / Vascular /
Pediatrics / Musculoskeletal

Electrical Power

Voltage: 100 V~240 V
Power: DC12.8V 3A
Frequency: 50/60 Hz

Conditions

Operating

Temperature: 5°C~40°C
Humidity: ≤80%
Pressure: 700hPa~1060hPa

Storage

Temperature: -5°C~40°C
Humidity: ≤80%
Pressure: 500hPa~1060hPa

Connectivity/Media/Peripherals

Transducer Ports: 3
USB Ports: 2
Hard Disc: 60GB (SSD)
120G/256GB SSD (Optional)
Footswitch: USB
Ethernet Port: 2(100Mb/1000Mb)
External Display: VGA
HDMI
USB Printer
Digital Laser Printer
Digital B/W Thermal Printer

Cine/Image Memory

Cine Memory: 1200 frame
Cine Review Speed: 1-5
Cine Review Loop
Cine Capture Function

DICOM Connectivity



DICOM3.0 Compliant

Image Storage

Storage Format:

PNG, AVI, BMP, JPEG, DICOM

Export Video Format: AVI

Export Image Format:

PNG, JPEG, BMP, DICOM

USB Flash Drive

Technology

Panoramic Imaging Tech

All-digital signal processing Tech

Multibeam formation Tech

Speckle Reduction Tech

Tissue Harmonic Imaging Tech

Dynamic Tissue Optimization Tech

Duplex & Triplex Synchronous Display

Directional Power Doppler

Imaging Parameters Preset

General Performance

Digital Broadband: 12288 channels

Beam-former: Re-programmable

Transmit Voltage: Adjustable (15 steps)

Beam-former Frequency Range: 1~40 MHz

Pan/Zoom

Real-Time Image Zoom

Zoom Range: 100%~400%

Up/Down/Left/Right Inversion

Hardware Specification

LCD Monitor

Size (Diagonal): 15"

Contrast Ratio: 800:1

Resolution: 1024×768 pixels

Brightness: 230 cd/m²

Color Depth: 24bit

Rotate Angle: ± 90°

Grey Levels: 256

Embedded Speakers

Impedance: 4Ω

Power: 5 W

UPS (Optional)

Imaging Performance

Startup Time (Max):

Avg. < 90 seconds

Preset Switching Time:

Avg. < 1 second

Storage Time (Image to Disk):

Avg. < 0.5 second

Transducers

Convex Probe

Frequency: Central 3.5 MHz

Min. 2.0 MHz

Max. 5.0 MHz

Pitch: 0.516 mm

Radius: 60 mm

Number of Elements: 96

Linear Probe:

Frequency: Central 7.5 MHz

Min. 6.0 MHz

Max. 12.0 MHz

Pitch: 0.352 mm

Radius: N/A

Number of Elements: 96

Trans-vaginal Probe:

Frequency: Central 6.5 MHz

Min. 5.0 MHz

Max. 9.0 MHz

Pitch: 0.216 mm

Radius: 10 mm

Number of Elements: 96

User Interface

- Intuitive Windows-based operating principles
- User-centric control panel with HomeBase layout and control customization
- On/Off task light and back-lit illumination of control panel
- Variable brightness indicates active state of function keys

- Easily accessible, full size QWERTY keyboard for text entry, function keys and system programming
- Cine Playback, Multiple Arrows, Configurable Worksheets, Exam Review, Pictograms (Body Marks), System Setup Menu

Imaging Modes

B, 2B, 4B, M, B/M, B/C, B/D,
 B/C/D, B/CFM/D, PDI
 Color, Dual Color
 Simultaneous 2D/Color Compound
 PW, Duplex/Triplex
 CFM, CDE, PD, Directional PD, CD

B-Mode

Maps: 17
 Focus Count: Max. 4
 Gain: 0~255
 TGC: 8 Sliders
 Dynamic Range: 0~150dB
 Depth: Max. 30cm
 Acoustic Power: 0 ~ 15
 Chroma: 0~7
 Grayscale Levels: 256
 Frame Rate: Max. 1028Hz
 Persistence/ Frame Average: Up to 7
 Image Optimization: 0~6
 Top/Bottom/Left/Right Reverse
 Speckle Reduction
 Second Harmonics

M-Mode

Maps: 16
 Chroma: 16
 Sweep Speed: 3
 Gain: 0~255
 Distance: Point-to-Point
 Max Steer Angle: 15°
 Diameter Reduction: Point-to-Point
 Heart Rate/Time/Distance/Slope
 Side-by-Side/Bottom

Color Mode

Gain: 0~255
 Color Maps: 0~6
 Doppler Steer Angles: 7 Steps

Wall Filter: 0~3
Spatial Filtering: 0~3
Acoustical Power: 0 ~ 15
Doppler Multi-Frequency: 2MHz~10MHz
Line Density Max: 256 Lines
Persistence/Frame Average: 0~7
Bloodstream Gain: 0~127
Packet Size: 8~15
Baseline/Invert/Color ROI/M-Mode

PW Mode

Gain: 0~255
D Linear Velocity: 0~2
Doppler Steer Angles: 7 Steps
Edge Enhancement: 0~7
Wall Filtering: 0~3
Audio: 0~255
Correction Angle: 80°/-80°
Doppler Multi-Frequency: 2MHz~10MHz
Pulse Repetition Frequency: 2khz~6khz
Chroma: 0~7
Baseline Adjustment: 0~6
Three Synchronizations
Spectrum Inversion

Measurement Specifications

Analysis Packages

Basic
Obstetrics
Gynecology
Urology
Andrology
Peripheral Vascular
Venous
Small Parts
Orthopedic

Basic Measurement

B-mode basic measurement: Distance, Angle, Perimeter and Area (ellipse or track-based method), Volume, Histogram, Sectional Map

M-mode basic measurement: Heart Rate, Time, Distance, Speed

Obstetrics

All general measurements and calculations

Obstetrical data versions to calculate gestational age:

— Two fixed data revisions: Asia & Europe

— One editable data version: User Custom

— Each version can estimate the gestational age and expected date of confinement based on measured gestational sac (GS), biparietal diameter (BPD), crown-rump length (CRL), femur length (FL), humeral length (HL), abdominal transverse diameter (ATD), vertebral length (LV), occipitofrontal diameter (OFD), abdominal circumference (AC) and head circumference (HC)

Obstetrical Report

Amniotic Fluid Index (AFI)

BPD/OFD, FL/AC, FL/BPD and HC/AC ratio

Estimate Weight Of Fetus

Gestational Age

Expected Date Of Confinement (LMP/BBT)

Fetal Biophysical Score

Fetus Growth Curve

Gynecology

All general measurements and calculations

Uterus, Ovary, Follicle

Gynecology Report

Urology

All general measurements and calculations

Kidney, Bladder, Residual Urine Volume

Urology Report

Andrology

All general measurements and calculations

Prostate, Testis

Prostate Specific Antigen (PSA)

Prostate Specific Antigen Density (PSAD)

Andrology report

Small Parts

All general measurements and calculations

Thyroid, Mammary Gland, Nodule

Small Parts Report

Peripheral Vascular

All general measurements and calculations

Area Stenosis

Vessel Diameter Stenosis

Peripheral Vascular Report

Venous

All general measurements and calculations

Right and left extremity measurements

Venous patient report

Orthopedic

All general measurements and calculations

Right and left hip angle measurement

Hip angle patient report

Standard Configurations

3.5Mhz convex probe

Hard Disc: 60GB (SSD)

Transducer Ports: 3

15" LCD Medical Monitor

Clinical report

Option Configurations

Micro-convex probe

Linear probe

Trans-vaginal probe

Trans-rectal probe

Sony video printer