

DC-70 Exp

Color Doppler Ultrasound System

Datasheet

Release V1.0



1 System Overview

1.1 Application

- Abdomen
- Obstetrics
- Gynecology
- Cardiology
- Small parts
- Urology
- Vascular
- Pediatrics
- Emergency Medicine
- Nerve
- Others

1.2 Transducer types

- Curved array transducer
- Linear array transducer
- Phased array transducer
- 4D Volume transducer

1.3 Imaging modes

- B-Mode
- THI and PSH™ (Phase Shift Harmonic Imaging)

- M-Mode/Color M-mode
- Free Xros M™ (Anatomical M-mode)
- Free Xros CM™ (Curved Anatomical M-mode)
- Color Doppler Imaging
- Power Doppler Imaging/Directional PDI
- Pulsed Wave Doppler
- Continuous Wave Doppler
- TDI
- Smart 3D™ (Freehand 3D)
- 4D
- Stress Echo
- Tissue Tracking with Quantitative Analysis
- Elastography
- UWN Contrast Imaging
- UWN Contrast Imaging™ Quantification Analysis Software
- iScape™ View (Panoramic Imaging)

1.4 Standard features

- B-Mode
- THI and PSH™
- M-Mode
- Color M Mode
- Color Doppler Imaging
- Power Doppler Imaging and Directional PDI
- Pulsed Wave Doppler
- iBeam™ (Spatial Compound Imaging)
- iClear™ (Speckle Suppression Imaging)
- iTouch™ (Auto Image Optimization)
- Echo Boost™
- Zoom/iZoom (Full Screen Zoom)
- FCI (Frequency Compound Imaging)
- B steer
- ExFOV (Extended Field of View)
- HR Flow™ (High Resolution Flow)
- Raw data processing

- 4 active universal probe ports, 1 more for pencil probe only
- 500GB hard drive
- DVD R/W driver
- Built-in wireless adapter
- 5 USB 3.0 ports, 1 more dedicated USB port for printer
- Touch gestures
- iStorage
- MedSight
- MedTouch
- iScanHelper

1.5 Optional features

- Continuous Wave Doppler
- ECG
- Free Xros M™
- Free Xros CM™
- iScape™ View
- Smart 3D™
- Real-time 4D
- iPage™ (Multi-Slice Imaging)
- SCV™ (Slice Contrast View)

- STIC (Spatio-Temporal Image Correlation)
- CMPR™ (Curved MPR)
- Color 3D
- Niche/3 Slice
- iLive
- Smart-V™ (Smart Volume)
- Auto IMT
- Elastography
- UWN Contrast Imaging
- UWN Contrast Imaging™ Quantification Analysis Software
- TDI (Include TVI, TVD, TVM, TEI)
- TDI QA (TDI Quantitative Analysis, including strain/strain rate)
- Stress Echo
- Tissue Tracking with Quantitative Analysis
- DICOM
- Clinical Measurement Package
- Smart OB™ (Auto OB measurement)

- Smart NT™(Auto NT measurement)
- iWorks™ (Auto Workflow Protocol)
- iNeedle™ (Needle Visualization Enhancement)
- Built-in battery
- Gel warmer
- UltraView

1.6 Language support

- Software: English, Chinese, German, Spanish, French, Italian, Portuguese, Russian, Czech, Polish, Turkish, Norwegian, Serbian
- Keyboard input: English, Chinese, German, Spanish, French, Italian, Portuguese, Russian, Czech, Polish Icelandic, Norwegian, Swedish, Finnish, Turkish, Danish, Hungarian, Serbian
- Control panel overlay: Chinese, Italian, Portuguese, Spanish, German, Russian, French, Czech,

Polish

- User manual: English, Chinese, German, Spanish, French, Italian, Portuguese, Russian, Polish, Turkish, Serbian, Hungarian

- Viewing angle: 120° left/right; 90° up/down
- Digital on-screen display of brightness and contrast controls
- Independent tilt up of 110 degrees from horizontal and swivel left/right of -90 to 90 degrees
- Frame rate (Hz): 60Hz

2 Physical Specification

2.1 Dimension and weight

- Depth: 835-885mm
- Width: 510mm
- Height: 1190-1680mm(1190 is measured when the display is in a horizontal position and 1680 is measured when the display is in a vertical position)
- Weight: Approx. 85Kg (no peripherals, no batteries) (battery weight: 1.03Kg)

2.2 Monitor

- 19-inch high resolution color LED monitor
- Resolution: 1280*1024

2.3 Audio speakers

- Stereo audio speakers
- Audio data range: 250Hz~15kHz

2.4 Multi-directional articulating monitor arm for better user-friendly experience

- Upper arm
 - ✓ Rotate: 90 degrees from center
 - ✓ Tilting range from -15 degree (down) to 30 degree (up)
 - ✓ Up: 170mm
 - ✓ Pull: 15mm
- Lower arm
 - ✓ Rotate: 90 degrees from

center

2.5 Wheels

- Diameter: 125mm
- Castors (4 ea): total lock and break

2.6 Probe port and holder

- Probe ports: 4 active ports, 1 more for pencil probe only
- Detachable probe holder: 7 as standard, including one dedicated holder for endocavity probe(left side holder as default, possible to select it as the right side holder before order); one more dedicated endocavity probe holder as optional

2.7 Electrical power

- Voltage: 100-127V~, or 220-240V~
- Frequency: 50/60 Hz
- Power consumption: Max. 630VA
- A/D-converter velocity (MHz): 40 (receiving)

2.8 Operating Environment

- Ambient temperature: 0-40 °C

- Relative humidity: 30%-85% (no condensation)

- Atmospheric pressure: 700hPa-1060hPa

2.9 Storage & Transportation Environment

- Ambient temperature: -20-55 °C
- Relative humidity: 20%-95% (no condensation)
- Atmospheric pressure: 700hPa-1060hPa

3 User Interface

3.1 Control panel

- User-centric control panel with home-based layout favors easy access to keys
- Backlit keys ensure accurate work in the dark room
- 5 Programmable keys available for user-defined functions (<P>,<F3-F6>)
- 8-segment TGC control



- Full-sized, backlit QWERTY keyboard for text input, function keys and system programming
- Adjustable key volume and trackball speed meet different needs
- Dedicated palm rest design to help reduce user repetitive stress injury
- Independent rotation and up/down of control panel facilitates optimal positioning
 - rotate: 45 degrees (from center)
 - down/up: 140 mm (pull 50 mm range)

3.2 Touch screen

- 10.4-inch multi-touch LED touch screen
- Resolution: 800*600
- Touch screen panel angle adjustable for easy visualization: 20 degrees in rotation
- Digital brightness and contrast adjustment through preset

- Viewing angle: 140 degrees left/right; 110 degrees up/down
- Support touch screen gestures
- Support thin latex gloves on touch screen.

3.3 Support touch gestures

- Image mapping on touch screen: swipe down from the top edge to project image from monitor to touch screen. Swipe up from the bottom edge to remove projected image and show regular parameter interface.
- Page up and down: swipe horizontally on regular imaging parameter interface to change different pages; or swipe horizontally on projected images/cine loops to review them one by one
- Menu display: swipe from left edge to right to show the hidden menu on

projected image.

- Image parameter adjustment.
- Measurement on projected image on touch screen
- Zoom in/out the projected image on touch screen
- Rotate or erase on projected 3D/4D image on touch screen
- 8 user defined gestures using two fingers for more functions, such as freeze, save, print, activate specific imaging modes, measurements, and some other special functions.

3.4 System boot-up

- Boot-up from complete shut-down in less than 59 sec
- Shut-down in less than 15 sec

3.5 Comments

- Supports text input and arrow
- Support freehand marking on touch screen
- Adjustable text size and arrow size

- Supports home position
- Covers various application
- User customizable

3.6 Body mark

- More than 140 bodymarks for versatile application
- User customizable

3.7 Numbers of exam mode presets: 35

system exam modes (unlimited number for user-defined ones)

3.8 Screen information*

- Common info:
 - Mindray logo
 - Hospital name,
 - Exam date
 - Exam time
 - Acoustic power
 - Mechanical index
 - Tissue thermal index
 - ID, Last name, First Name, Middle initial, Gender, Age
 - Probe model

- ECG icon (when ECG connected),
- Operator
- TGC Curve
- Focus position
- Thumbnail
- Imaging parameters
- Help guidance
- Dynamic Trackball indices

*Not all items are listed in this part, detail info please refer to user manual

- angles (L12-3E/L14-6NE/L14-6WE)
- iTouch™: On/off, -12~12, 3bd/step
- FCI
- Dual Live: side by side live display
- Image quality: Pen/Gen/Res;
HPen/HGen/HRes/HPen-Gen
(depend on probe)
- B steer: available on linear
transducers
- ExFOV: available on convex, linear,
and volume transducers
- Depth: 30 levels (1.5-40cm; all
depend on transducer)
- Frame rate (max): 1041 f/s
- Acoustic output power:
3.2%-100%;101 levels
- TGC: 8 pods on control panel
- LGC: 8 segments on touch screen
- Dynamic range: 30-180, 5/step
- Gain: 0-100, 1/step
- Focus number: 1-4 (depend on
transducer)

4 Imaging Parameters

4.1 Overview

- Echo-enriched Beamforming
- Up to 41472 channels
- 12-beamforming

4.2 B-mode

- Display formats: Single(B),
Dual(B+B), Quad(4B)
- iClear™: Off; 7 steps
- iBeam™: Off; 5 steps; max. 9

- Focus position: 16 levels (depends on probe)

- FOV: continuously adjustable

- Line density: L, M, H, UH

- Persistence: 7 steps

- Horizontal Scale: on/off

- L/R flip and U/D flip: on/off

- Rotation: 0, 90, 180, 270

- TSI: general/muscle/fluid/fat

- Gray Map: 8 types

- Tint map: off; 8 types

- Middle Line: on, off

- Echo Boost: on, off

- Auto Merge: on, off

4.3 THI and PSH™

- Available on all types of transducer

- Patent PSH™ technology, obtains purer harmonic, better contrast

resolution, higher SNR, exceptional

high frequency harmonic

- iClear™ available

- Image quality:

HPen/HGen/HRes/HPen-Gen

4.4 M-mode

- Display formats:

V2:3,V3:2,H2:3,V3:1,FULL(V: vertical, H: horizontal)

- Color M-mode available

- Acoustic output power: 3.2%-100%, 101 levels

- Dynamic range: 30-180, 5/step

- Gain: 0-100, 1/step

- M sweep speeds: 6 levels;145mm/s, 75mm/s, 50mm/s, 35mm/s, 25mm/s, 20mm/s

- M soften: off; 4 steps

- Tint map: off; 8 types

- Gray Map: 8 types

- Edge enhance: off; 3 steps

- Focus position: 16 levels

- Image quality: Pen/Gen/Res; HPen/HGen/HRes/HPen-Gen

(depend on probe)

- Time Mark

4.5 Free Xros M™ (option)

- Display formats:
V2:3,V3:2,H2:3,V3:1(V: vertical, H:
horizontal)
- Color Free Xros M available
- Up to 3 lines
- Display all lines
- Sweep speeds: 6 levels; 145mm/s,
75mm/s, 50mm/s, 35mm/s, 25mm/s,
20mm/s
- M Tint map: off; 8 types
- Gray Map: 8 types
- Angle: 0-360 degrees, 1/step

4.6 Free Xros CM™ (option)

- Only available in TDI mode
- Display formats:
V2:3,V3:2,H2:3,V3:1(V: vertical, H:
horizontal)
- Acoustic output power:
3.2-100%;101 levels
- Gain: 0-100, 1/step
- Sweep speeds: 6 levels; 145mm/s,

75mm/s, 50mm/s, 35mm/s, 25mm/s,
20mm/s

- Tint map: off; 8 types
- Gray Map: 8 types
- Edit, undo, delete function for
curved line

4.7 Color Doppler Imaging

- Dual live
- HR Flow™: High Resolution Flow
provides better image quality and
flow sensitivity
- Image quality: Pen, Gen, Res
- Steer: max. 30 degrees (linear
transducer)
- Max frame rate: 322 f/s
- Acoustic output power:
3.2-100%;101 levels
- Gain: 0-100, 2/step
- ROI size/position: adjustable
- Scale: 30steps, 1cm/s to 150 cm/s
- Baseline:16 steps
- Wall filter: 8 steps

- PRF: 0.1kHz to 13 kHz
- Packet size: 3 steps
- Flow state: L, M, H
- Smooth: 6 steps
- B/C align: on/off
- Priority: 0-100%, 1%/step
- Color map: 21 types
- Invert: on/off
- Persistence: 6 steps
- Velocity tag: on/off
- Line density: L, M, H, UH
- Auto Invert: on/off
- iTouch: on/off
- B Display

4.8 Power Doppler Imaging

- Dual live
- HR Flow™: High Resolution Flow provides better image quality and sensitivity
- Support directional power doppler
- Image quality: 3 levels
- Acoustic output power:

3.2%-100%;101 levels

- Dynamic range: 10-70, 5/step
- Gain: 0-100, 2/step
- ROI size/position: adjustable
- Scale: 30 steps
- Wall filter: 8 steps
- PRF: 0.1 - 13kHz
- Packet size: 3 steps
- Flow state: L, M H
- Smooth: 6 steps
- B/C align
- Priority: 0-100%, 1%/step
- Color map: 4 types
- Directional color map: 4 types
- Persistence: 6 steps
- Line density: L, M, H, UH
- Steer: max. 30 degrees (linear transducer)
- Invert: on/off
- iTouch: on/off
- B Display

4.9PW/CW-Mode

- Display formats:
V2:3,V3:2,H2:3,V3:1,FULL(V:
vertical, H: horizontal)
- Image quality: 3 levels
- Sample volume size: 0.5-20 mm
(PW only)
- Sample gate depth: adjustable
- PW Scale: 30 steps, 0.02 cm/s to
9.21 m/s
- CW Scale: 30 steps, 0.03 cm/s to
38.39 m/s
- Baseline: -4-4, 1/step
- PW Steer: max.30 degrees (linear
transducer)
- Volume: 0-100%, 2%/step
- PW PRF: 0.7kHz to 24 kHz
- CW PRF: 0.3kHz to 100 kHz
- Gain: 0-100, 2/step
- Dynamic range: 24-72, 2/step
- Sweep speed: 6 steps;145mm/s,
75mm/s, 50mm/s, 35mm/s, 25mm/s,
20mm/s
- Wall filter: 7 steps
- Invert: on/off
- Auto invert: on/off
- Angle correction: -89-89 degrees,
1/step
- Quick angle: -60, 0, 60 degrees
- Gray map: 10 types
- Tint map: Off; 8 types
- Time/frequency resolution: 4 steps
- Auto calc: on/off
- Auto calc cycle: 1-5
- Trace area: above, below, all
- Duplex/Triplex: On/off
- HPRF: On/off
- Auto calc Parameter: On/off
- Trace Sensitivity: 0-5, 1/step
- Trace Smooth: off, 0-5, 1/stepTime
Mark

4.10 Tissue Velocity/Energy Imaging

(included in TDI option)

- Available on phased array
transducer

- Dual live: side by side displays B and B+TVI
- Max frame rate: 1847 f/s
- PRF: 0.4kHz to 15.2 kHz
- Acoustic output power: 3.2%-100%;101 levels
- Gain: 0-100, 2/step
- Dynamic range: 10-70, 5/step (TEI only)
- ROI size/position: adjustable
- Scale: 30 steps, 5 cm/s to 1.5 m/s (TVI only)
- Baseline: -8-8, 1/step (TVI only)
- Wall filter: 8 steps
- Packet size: 3 steps
- Tissue state: L, M, H
- Smooth: 6 steps
- B/C align
- Priority: 0-100%, 1%/step
- TVI maps: 10 types
- TEI maps: 8 types
- Invert: on/off (TVI only)

- Persistence: 6 steps
- Velocity tag (TVI only): On/off
- Line density: L, M, H, UH
- Image quality: 2 levels

4.11 Tissue Velocity Doppler(included in TDI option)

- Available on phased array transducer
- Display formats: V2:3,V3:2,H2:3,V3:1,FULL(V: vertical, H: horizontal)
- Sample volume size: 0.5-20 mm
- Sample gate depth: adjustable
- Scale: 30 steps, 4.34cm/s-368.53cm/s
- Baseline: -4-4, 1/ step
- Volume: 0-100%, 2%/step
- PRF: 0.7kHz to 24 kHz
- Gain: 0-100, 2/step
- Dynamic range: 24-72, 2/step
- Sweep speed: 6 steps
- Wall filter: 6 steps

- Invert: on/off
- Auto invert
- Angle correction: -89-89 degrees, 1/step
- Quick angle: -60, 0, 60 degrees
- Gray map: 10 types
- Tint map: Off; 8 types
- Time/frequency resolution: 4 steps
- Image quality: 2 levels
- Duplex/Triplex: On/off
- ITouch: On/off

4.12 Tissue Velocity Motion (included in TDI option)

- Display formats: V2:3,V3:2,H2:3,V3:1,FULL(V: vertical, H: horizontal)
- Dynamic range: 30-180, 5/step
- Gain: 0-100, 1/step
- M sweep speeds: 6 levels; 145mm/s, 75mm/s, 50mm/s, 35mm/s, 25mm/s, 20mm/s
- M soften: 4 steps

- Gray Map: 8 types
- Edge enhancement: 3 steps

4.13 Smart 3D™ (option)

- Smart 3D
 - Acquisition Method: Wobble, Linear
 - iClear
 - Acquisition mode: B, Color, Power
 - VR: on/off, select volume rendered image
 - MPR: on/off, select A, B and C plane
 - Display formats: MPR only/asymmetric
 - VOI: on/off
 - Reset: all, orientation, reset curve
 - Active quadrant: A, B, C, VR
 - VR orientation: 0, 90, 180, 270
 - Inversion: on/off
 - Accept VOI: on/off
 - Flip: flip VR
 - Sync: synchronize VR with

- selected plane
- Undo: undo, undo all
- Render modes: Surface, Min, Max, iLive, X-ray
- View direction: down/up, left/right, front/back
- Threshold: 0-100%, 1/step (only on VR)
- Opacity: 0-100%, 5%/step (only on VR)
- Smooth: 20 steps
- Brightness: 0-100%, 2%/step
- Contrast: 0-100%, 2%/step
- Tint: off; 8 types
- Auto rotation
 - Rotation control: play, single loop, loop
 - Direction: left/right, up/down
- Edit:
 - Area selection: inside polygon, outside polygon, inside contour, outside contour, inside rect, outside rect
- 4.14 4D (option)
 - Available on all volume transducers
 - Static 3D and 4D
 - 4D frame rate: max. 58.4 vps on DE10-3E
 - 4D frame rate: max. 57.1 vps on D6-2NE/D6-2E
 - iClear
 - VR: on/off, select volume rendered image
 - MPR: on/off, select A, B and C plane
 - Display formats: MPR only/asymmetric
 - VOI: on/off
 - Reset: all, orientation, reset curve
 - Active quadrant: A, B, C, VR
 - VR orientation: 0, 90, 180, 270
 - Inversion: on/off
 - Accept VOI: on/off
 - Flip: flip VR

- Sync: synchronize VR with selected plane
- Render modes: Surface, Min, Max, iLive, X-ray
- View direction: down/up, left/right, front/back
- Threshold: 0-100%, 1/step (only on VR)
- Opacity: 0-100%, 5/step (only on VR)
- Smooth: 20 steps
- Brightness: 0-100%, 2%/step
- Contrast: 0-100%, 2%/step
- Tint: off; 8 types
- Free View: -45-45, only on DE10-3E
- Color 3D
 - Supports Color and Power mode
 - Available in both Smart 3D and Static 3D
- STIC
 - Color STIC available
- Acquiring Time: 7.5s, 10s, 12.5s, 15s, 17.5s
- Support iPage viewing
- CMPR available
- SCV available
- 3 Slice and Niche available
- iPage™
 - Slice display mode: Slice only, Slice with MPR
 - Slice cut direction: Horizontal and Vertical
 - Slice layout: 2*2, 3*3, 4*4, 5*5
 - Active quadrant: A plane, B plane, or C plane
 - Reset: All, Reset Curve, Reset Ori
 - Range Pos: left or right
 - Spacing: 0.5-10mm, 0.1mm/step
 - Slice Number: odd numbers ranging from 3 to max. 16, depends on slice layout.
 - Slice Position: a unique number for current selected slice.

- SCV™
 - Layout: A/A, A/C
 - Reset: All, Reset Curve, Reset Ori
 - Thickness: 1-30mm, 1mm/step
 - Rotate RL: Only available when layout A/C is selected, ranging from 0-360°, 5°/step
- CMPR™
 - Trace Options: Line, Trace, Spline
 - Active Quadrant: A, B, C
 - Reset Curve
 - Rotate RL: ranges from 0-360°, 5°/step
- 3D Layout
 - 3 Slice
 - Niche
 - Reset: All, Reset Curve, Reset Ori
 - Active Quadrant: A, B, C, 3 Slice/Niche
 - Niche Views: Inner, Outer
- iLive
 - Shading
- Move Light
- Light Position: 6
- Render Modes: iLive
- Soft View
- Grad View
- Auto rotation
 - Rotation control: play, single loop, loop
 - Direction: left/right, up/down
- Edit:
 - Area selection: inside polygon, outside polygon, inside contour, outside contour, inside rect, outside rect
 - Undo: undo, undo all
 - Eraser: Soft Eraser, Hard Eraser
 - Edit diameter: 8-60, 1/step
- Smart-V™
 - Auto 3D volume calculation
 - Manual ROI on A, B, C plane separately
 - Auto detect contour of target

- Volume result shows in result window
- MPR Measurement
- Measurement types: Distance, Trace, Area, Angle, Volume, Ratio of Distance, Ratio of Area
- Support labeled measurements

4.15 iScape™ View (option)

- Available on all transducers
- Acquisition method: B and Power
- Supports speed indicator
- Actual size: on/off
- Fit size: on/off
- Ruler: on/off
- Tint map: off; 8 types
- Rotation: 0-360 degrees, 5/step

4.16 Elastography (option)

- Available on all linear transducers and endocavity transducer(V11-3E)
- Support strain ratio measurement
- Unique shell analysis function
- Stress compensation technology

- reduces deeper tissue artifacts, obtains more uniform stress throughout whole field
- Stress indicator: supports frame by frame stress indication.
- Display format: Dual live, Single E
- Elasto Map: 6 types
- Smooth: 5 steps

- Invert: on/off
- Opacity: 5 steps
- ROI size/position: adjustable
- Focus Position: 13 levels
- Depth: 9 levels

4.17 Stress Echo(option)

- Available on cardiac sector transducers
- 14 factory protocols
- User-defined protocols
- ECG triggered acquisition, display, selection, comparison, evaluation and archiving of multiple cardiac loops during various stages of a

- stress echo examination
 - ASE 16 (with score 4-7), ASE 17 (with score 4-7)
 - Customized stages: up to 6 views per stage, and up to 12 stages per study
 - View: standard views (PSLA, PSAX, A4C, A2C), and customized views
 - Image acquisition
 - R-wave trigger
 - Acquire mode: Manual ROI or full screen
 - Ability to acquire frames or clips in B-mode, M-mode, Color, PW and TDI
 - Image selection
 - Attach the images with view annotation label (PSLA, PSAX, A4C, A2C, and customized views)
 - Review
 - Automatically adjust to the number of images user defined
 - Wall Motion Scoring
 - ASE 16 (with score 4-7), or ASE 17 (with score 4-7)
 - Graphical display of scoring (Normal, Hyperkinetic, Severely Hyperkinetic, Akinetic, Dyskinetic)
 - LV volume measurement
 - Measurement of LV Volume in all phases of cardiac cycle
 - Report
 - Reporting for both Wall Motion Scoring and LV volume measurement
- 4.18 iBeam™**
- Spatial compound imaging
 - 9 angles maximum
 - Available on all convex and linear transducers
- 4.19 iClear™**
- Speckle suppression imaging
 - Available for B, 3D, 4D
- 4.20 iTouch™**

- Auto image optimization
- B-mode: gain, TGC
- Color: gain
- Power: gain
- PW: gain, baseline, scale, PRF, WF

4.21 Echo Boost™

- Only for cardiac exams
- improve the homogeneity of cardiac images through the whole field of view
- Better contrast resolution of myocardium tissue layers
- Better noise control in cardiac chambers and muscles

4.22 B steer

- Only for linear transducers

4.23 ExFov

- Extended field of view
- Available for all convex, linear and volume transducers

4.24 Zoom

- Zoom: Spot zoom (write zoom) up

to 10x, Pan zoom (read zoom)

0.8-10

- iZoom: convertible 3 steps ;normal image, zoom standard area, zoom only image area

4.25 QSave

- Quick save image parameter setting after image adjustment done
- Support Save, Save as, Restore

4.26 TDI QA (option)

- Dedicated quantification tool for TDI velocity, strain, strain rate analysis
- Ellipse ROI, Standard ROI
- Up to 8 of ROI
- Delete all
- Delete current
- ROI tracking: tracking ROI along with cardiac movement
- Smooth: 1-7, 1/step
- X scale: 1-5 ,1/step
- Std.Height: 1.5-50 mm
- Std.Width: 1.5-50 mm

- Std.Angle: -89-90 degrees
- Export: export current data as CSV format file

4.27 iNeedle (option)

- Needle visualization enhancement
- Available on all linear transducers
- Needle steer: -50, -40, -30, -20, 20, 30, 40, 50 degrees (30 levels by <Angle> knob)

4.28 iScanHelper

- Tutorial function as a guidance to show basic scanning skill with graphic of probe position, schematic of anatomy and example clinical image
- Support ABD, SMP, URO applications

4.29 UWN Contrast Imaging (option)

- UWN(Ultra Wideband Non-linear) contrast imaging technology, which provides exceptional contrast agent

detecting capability, not only extracts second harmonic, but also non-linear fundamental signals

- Available on C5-1E and C5-2E in Adult ABD, ABD-Difficult, Ped-ABD, GYN, Kidney, Urology, Prostate, Carotid, Upper Ext A, Lower Ext A, Upper Ext V, Lower Ext V, EM ABD, EM FAST, EM Vascular
- Supports Low MI contrast imaging
- Micro Flow Enhancement (MFE)available
- Timer1: on/off
- Timer2: on/off
- Pro capture: captures prospective image less than 480s preset table
- Retro capture: captures retrospective image less than

- 120s preset table
 - Dual live: side by side displays
 - tissue image and contrast
 - image
 - MFE: on/off
 - MFE period: 0.1s, 0.2s, 0.4s, 0.6s, 0.8s, 1.0s, MAX
 - Destruct: instantly destroy contrast bubbles
 - Destruct voltage: -30~0 dB, 0.3/step
 - Destruct time: 500-2000 ms
 - iClear: off; 7 steps
 - Mix: mix contrast image with tissue image
 - Mix map: 7 types, available when Mix mode is active
 - Persistence: 8 steps
 - Dynamic range: 30-180, 5/step
 - Gray map: 8 types
 - Tint map: off; 8 types
 - Supports U/D Flip and L/R Flip
 - Rotation: 0/90/180/270
 - CEUS Position: on/off
 - Line density: L/M/H/UH
 - FOV: on/off
 - FOV size/position: continuously adjustable
 - ExFov: off, 1-2, 1/step
 - Gain: 0-100, 1/step
 - iTouch: on/off, -8~8, 2/step
 - Image quality: 3 levels
 - Depth: 30 levels
 - TGC: 8 pods on control panel
 - Acoustic output power: 3.2%-100%;101 levels
- *The DC-70 Exp is designed for compatibility with commercially available ultrasound contrast agents. Because the availability of these agents is subject to government regulation and approval, product features intended for use with these agents may not

be commercially marketed nor made available before the contrast agent is cleared for use. Contrast related product features are enabled only on systems for delivery to an authorized country or region of use. Mindray medical systems makes no claims concerning the safety or effectiveness of contrast agents.

4.30 UWN Contrast Imaging

Quantitative Analysis (option)

- Support Time-Intensity Curve analysis
- Table display: display data in table
- Freehand ROI: manually deploy ROI on the cine
- Up to 8 ROIs
- Delete all
- Delete current
- Fit curve

- Raw curve
- Motion tracking: Reduce the effect of tissue movement
- X scale:1-5, 1/step
- Export: export current data as CSV format file

4.31 Tissue Tracking with

Quantitative Analysis (option)

- Available on P4-2E / P7-3E / P10-4E / SP5-1E in adult cardiac/cardiac-difficult (car-penetration)/pediatric cardiac/neonatal cardiac.
- Tissue tracking quantitative analysis
- Mandatory ECG connection before TT QA cine acquisition
- Six views for analysis: ALAX, A4C, A2C, PSAXB, PSAXM, PSAXAP
- Reload: reload cine again for new study

- Edit: modify trace points adjustable
- Start tracking
- Accept & compute: start tracking myocardium movement when user accept trace result
- Display effect: 0/1; at 0, tracking in velocity vector arrow; at 1, tracking in dots
- Trace method: 3 point or manual for ALAX, A4C, A2C; manual for PSAXB, PSAXM, PSAXAP
- Bull's eye: trace result in bull's eye model
- LGC: available
- Valve's open and close time index: MVC, MVC', AVC, AVO, MVO
- Data export: export data in CSV file
- Cycle: ECG triggered cardiac cycle recognition for analysis;
- Auto play: stop, X1/10, X1/5, X1/4, X1/3, X1/2, X1, X2, X3
- Thickness: 1-30mm, 1mm/step; adjust trace thickness
- Track point: 20-40, 1/step
- Parameter: Volume, Speed, Displacement, L Strain, L Strain R, T Strain, T Strain R, Area, R Strain, R Strain R, C Strain, C Strain R
- Smooth: 0-4, 1/step

4.32 UltraView (option)

- UltraView is an off-line analysis workstation
- Support patient data management, precise measurement, professional analysis and streamlined connectivity between computer and ultrasound main unit

5 Cine Review and Raw Data

Processing

5.1 Cine review

- Available in all modes
- Frame by frame manual cineloop review or auto playback with variable speed
- Maximum cine memory up to 32346 frames or 427s (M)
- Maximum 4D cine memory up to 68089 frames or 1800s
- Retrospective and prospective storage are available and length is pre-settable (Max. time 480s, Max. frames: 480030)
- Frame compare: displays one cine in dual format and allows frame by frame compare side by side
- Image/cine compare: max 4 for 2D/Color/Power/TDI files compare; max 2 for M/PW/TVD/TVM files compare (compare cines which are

saved in same patient file)

- Jump to first and jump to last: one keystroke go to first or last frame in the cine

5.2 Raw data processing

- B-mode:
 - TGC
 - Gain
 - Dyn Ra.
 - Gray Map
 - Tint Map
 - iClear
 - L/R Flip
 - U/D Flip
 - Rotation
 - LGC
 - Dual Live
 - Auto Merge
 - H Scale
 - Echo Boost
- M-mode:
 - Gain

Speed	Dyn Ra.
Dyn Ra.	Gray Map
Gray Map	Tint Map
Tint Map	Invert
Edge Enhance	WF
Time Mark	Quick Angle
• Color:	T/F Res
Gain	Auto Calculate
Baseline	- Auto Calc Cycle
Smooth	- Auto Calc Parameter
Color Map	- Trace Sensitivity
Priority	- Trace Smooth
Dual Live	- Trace Area
Invert	Time Mark
Velocity tag	
B display only	
• PW:	
Gain	• 2D-mode
Baseline	- Distance
Volume	- Ellipse
Angle	- Trace
Speed	- Spline

6 Measurement/Analysis and Report*

6.1 Generic measurements

- 2D-mode
 - Distance
 - Ellipse
 - Trace
 - Spline

- Cross
- Angle
- Double Dist
- Trace Len
- Trace Len(Spline)
- Parallel
- IMT
- Depth
- Color Vel
- Strain Hist
- Volume
- Volume(Ellipse)
- Volume(E+Dist.)
- Ratio(D)
- Volume
- Volume
- Volume(Ellipse)
- Volume(E+Dist.)
- Ratio(A)
- Area1
- Area2
- Strain Ratio
- A
- B
- Volume Flow
- Vas Area
- TAMEAN
- TAMAX
- M-mode
 - HR
 - HR(R-R)
 - Slope
 - Distance
 - Time
 - Velocity
- Doppler mode
 - PS/ED
 - Vel
 - HR
 - HR(R-R)
 - Time
 - Acceleration
 - D Trace
 - Ratio(Vel)

- Ratio(VTI)
- Volume Flow
- Vas Area
- TAMEAN
- TAMAX
- Automatic Doppler Spectrum
 - Analysis
 - Heart cycle pre-settable (1, 2, 3, 4, 5)
 - Automatic real-time and retrospective tracing
 - User configurable display of items
 - Support PI, RI, TAMAX, TAMEAN, Volume Flow calculations
 - Appropriate factory setting according to applications
- Cortex
- Adrenal L
- Adrenal H
- Adrenal W
- CBD
- Portal V Diam
- CHD
- GB L
- GB H
- GB wall th
- Panc duct
- Panc head
- Panc body
- Panc tail
- Spleen
- Aorta Diam

6.2 Clinical option measurement package

- Abdominal
 - Liver
 - Renal L
 - Renal H
 - Renal W
- Iliac Diam
- Pre-BL L
- Pre-BL H
- Pre-BL W
- Post-BL L

- Post-BL H
- Post-BL W
- Ureter
- Renal Vol
- Pre-BL Vol
- Post-BL Vol
- Mictur.Vol
- Kidney
- Renal L
- Renal H
- Renal W
- Cortex
- Bladder
- Pre-BL L
- Pre-BL H
- Pre-BL W
- Post-BL L
- Post-BL H
- Post-BL W
- Adrenal
- Adrenal L
- Adrenal H
- Adrenal W
- Gynecology
- UT L
- UT H
- UT W
- Cervix L
- Cervix H
- Cervix W
- Endo
- Ovary L
- Ovary H
- Ovary W
- Follicle1 L
- Follicle1 W
- Follicle1 H
- Follicle2 L
- Follicle2 W
- Follicle2 H
- Follicle3 L
- Follicle3 W
- Follicle3 H
- Follicle4 L

- Follicle4 W
- Follicle4 H
- Follicle5 L
- Follicle5 W
- Follicle5 H
- Follicle6 L
- Follicle6 W
- Follicle6 H
- Follicle7 L
- Follicle7 W
- Follicle7 H
- Follicle8 L
- Follicle8 W
- Follicle8 H
- Follicle9 L
- Follicle9 W
- Follicle9 H
- Follicle10 L
- Follicle10 W
- Follicle10 H
- Follicle11 L
- Follicle11 W
- Follicle11 H
- Follicle12 L
- Follicle12 W
- Follicle12 H
- Follicle13 L
- Follicle13 W
- Follicle13 H
- Follicle14 L
- Follicle14 W
- Follicle14 H
- Follicle15 L
- Follicle15 W
- Follicle15 H
- Follicle16 L
- Follicle16 W
- Follicle16 H
- Ovary Vol
- UT Vol
- UT SUM
- UT-L/CX-L
- Follicle1
- Follicle2

- Follicle3
- Follicle4
- Follicle5
- Follicle6
- Follicle7
- Follicle8
- Follicle9
- Follicle10
- Follicle11
- Follicle12
- Follicle13
- Follicle14
- Follicle15
- Follicle16
- Uterus
- UT L
- UT H
- UT W
- Endo
- Uterine Cervix
- Cervix L
- Cervix H
- Cervix W
- Ovary
- Ovary L
- Ovary H
- Ovary W
- Follicle1
- Follicle1 L
- Follicle1 W
- Follicle1 H
- Follicle2
- Follicle2 L
- Follicle2 W
- Follicle2 H
- Follicle3
- Follicle3 L
- Follicle3 W
- Follicle3 H
- Follicle4
- Follicle4 L
- Follicle4 W
- Follicle4 H
- Follicle5

- Follicle5 L
- Follicle5 W
- Follicle5 H
- Follicle6
- Follicle6 L
- Follicle6 W
- Follicle6 H
- Follicle7
- Follicle7 L
- Follicle7 W
- Follicle7 H
- Follicle8
- Follicle8 L
- Follicle8 W
- Follicle8 H
- Follicle9
- Follicle9 L
- Follicle9 W
- Follicle9 H
- Follicle10
- Follicle10 L
- Follicle10 W
- Follicle10 H
- Follicle11
- Follicle11 L
- Follicle11 W
- Follicle11 H
- Follicle12
- Follicle12 L
- Follicle12 W
- Follicle12 H
- Follicle13
- Follicle13 L
- Follicle13 W
- Follicle13 H
- Follicle14
- Follicle14 L
- Follicle14 W
- Follicle14 H
- Follicle15
- Follicle15 L
- Follicle15 W
- Follicle15 H
- Follicle16

- Follicle16 L
- Follicle16 W
- Follicle16 H
- Obstetrics
 - GS
 - YS
 - CRL
 - NT
 - BPD
 - OFD
 - HC
 - AC
 - FL
 - TAD
 - APAD
 - TCD
 - CM
 - LVW
 - HW
 - OOD
 - IOD
 - HUM
 - Ulna
 - RAD
 - Tibia
 - FIB
 - CLAV
 - Vertebrae
 - MP
 - Foot
 - Ear
 - APTD
 - TTD
 - FTA
 - THD
 - HrtC
 - TC
 - Umb VD
 - F-kidney
 - Mat Kidney
 - Cervix L
 - AF
 - NF
 - Orbit

- PL Thickness
- Sac Diam1
- Sac Diam2
- Sac Diam3
- AF1
- AF2
- AF3
- AF4
- LVIDd
- LVIDs
- LV Diam
- LA Diam
- RVIDd
- RVIDs
- RV Diam
- RA Diam
- IVSd
- IVSs
- IVS
- LV Area
- LA Area
- RV Area
- RA Area
- Ao Diam
- MPA Diam
- LVOT Diam
- RVOT Diam
- Facial Angle
- HrtA
- MV Diam(Z-Score)
- PV Diam(Z-Score)
- Ao Asc Diam(Z-Score)
- Ao Desc Diam(Z-Score)
- Duct Art Diam(Z-Score)
- TV Diam(Z-Score)
- LPA Diam(Z-Score)
- RPA Diam(Z-Score)
- IVC Diam(Z-Score)
- AV Diam(Z-Score)
- MPA Diam(Z-Score)
- RV Diam(Z-Score)
- LV Diam(Z-Score)
- RV Area(Z-Score)
- LV Area(Z-Score)

- RVIDd(Z-Score)
- LVIDd(Z-Score)
- UT L
- UT H
- UT W
- Endo
- AC(c)
- Mean Sac Diam
- AFI
- EFW
- EFW2
- HC/AC(Campbell)
- FL/AC
- FL/BPD
- AXT
- CI
- FL/HC(Hadlock)
- HC(c)
- HrtC/TC
- TCD/AC
- LVW/HW
- LVD/RVD
- LAD/RAD
- AoD/MPAD
- LAD/AoD
- UT Vol
- UT SUM
- UT-L/CX-L
- AFI
- AF1
- AF2
- AF3
- AF4
- Uterus
- UT L
- UT H
- UT W
- Endo
- Cardiology
- RVAWd(2D)
- RVAWs(2D)
- RVDd(2D)
- RVDs(2D)
- IVSd(2D)

- IVSs(2D)
- LVIDd(2D)
- LVIDs(2D)
- LVPWd(2D)
- LVPWs(2D)
- Diastole(2D)
- Systole(2D)
- LVLd apical
- LVLs apical
- LVAd apical
- LVAs apical
- LVAd sax MV
- LVAs sax MV
- LVAd sax Endo
- LVAd sax Epi
- LV Major
- LV Minor
- LV Area(d)
- LV Area(s)
- HR(2D)
- RA Major
- RA Minor
- RA Area
- RA Vol(A4C)
- RV Area(d)
- RV Area(s)
- RV Major
- RV Minor
- LA Diam(2D)
- LA Major
- LA Minor
- LA Area
- LVOT Diam
- Ao Diam(2D)
- ACS(2D)
- AV Diam
- Ao Isthmus(2D)
- Ao Sinus Diam(2D)
- Ao st junct(2D)
- AVA
- Ao Arch Diam(2D)
- Ao Asc Diam(2D)
- Ao Desc Diam(2D)
- Duct Art Diam

- Post Ductal
- Pre Ductal
- MCS(2D)
- MV Diam
- MV EPSS(2D)
- MVA
- TV Diam
- TVA
- PV Diam
- RVOT Diam
- MPA Diam(2D)
- RPA Diam(2D)
- LPA Diam(2D)
- IVC Diam(Expir)
- IVC Diam(Insp)
- SVC Diam(Expir)
- SVC Diam(Insp)
- LCA Diam
- RCA Diam
- PEd(2D)
- PEs(2D)
- VSD Diam
- ASD Diam
- PDA Diam
- PFO Diam
- LA/Ao(2D)
- LV(2D)
- Diastole(2D)
- Systole(2D)
- IVSd(2D)
- LVIDd(2D)
- LVPWd(2D)
- IVSs(2D)
- LVIDs(2D)
- LVPWs(2D)
- HR(2D)
- Simpson
- A2Cd
- A2Cs
- A4Cd
- A4Cs
- HR(2D)
- Mod.Simpson
- LVLd apical

- LVLs apical
- LVAd sax MV
- LVAs sax MV
- LVAd sax PM
- LVAs sax PM
- HR(2D)
- S-P Ellipse
- LVLd apical
- LVAd apical
- LVLs apical
- LVAs apical
- HR(2D)
- B-P Ellipse
- LVIDd(2D)
- LVAd sax MV
- LVIDs(2D)
- LVAs sax MV
- LVAd apical
- LVAs apical
- HR(2D)
- Bullet
- LVLd apical
- LVLs apical
- LVAd sax MV
- LVAs sax MV
- HR(2D)
- LV Mass(Cube-2D)
- IVSd(2D)
- LVIDd(2D)
- LVPWd(2D)
- LV Mass(A-L)
- LVLd apical
- LVAd sax Epi
- LVAd sax Endo
- LV Mass(T-E)
- LVAd sax Epi
- LVAd sax Endo
- a
- d
- LA Vol(Simp)
- LA Vol(A2C)
- LA Vol(A4C)
- LA Vol(A-L)
- LA apical

- LAA(A2C)
- LAA(A4C)
- MVA(VTI)
- LVOT Diam
- LVOT VTI
- MV VTI
- AVA(VTI)
- LVOT Diam
- LVOT VTI
- AV VTI
- CO(LVOT)
- LVOT Diam
- LVOT VTI
- AV HR
- CO(RVOT)
- RVOT Diam
- RVOT VTI
- PV HR
- CO(MV)
- MV Diam
- MV VTI
- MV HR
- CO(TV)
- TV Diam
- TV VTI
- TV HR
- PISA MR
- MR Rad
- MR Als Vel
- MR VTI
- PISA AR
- AR Rad
- AR Als Vel
- AR VTI
- PISA TR
- TR Rad
- TR Als Vel
- TR VTI
- PISA PR
- PR Rad
- PR Als Vel
- PR VTI
- Qp/Qs
- LVOT Diam

- LVOT VTI
- RVOT Diam
- RVOT VTI
- RVAWd(M)
- RVAWs(M)
- RVDd(M)
- RVDs(M)
- Ao Arch Diam(M)
- Ao Asc Diam(M)
- Ao Desc Diam(M)
- Ao Diam(M)
- Ao Isthmus(M)
- Ao Sinus Diam(M)
- Ao st junct(M)
- ACS(M)
- HR(M)
- IVSd(M)
- IVSs(M)
- LA Diam(M)
- LPA Diam(M)
- Diastole(M)
- Systole(M)
- LVET(M)
- LVIDd(M)
- LVIDs(M)
- LVOT Diam
- LVPEP(M)
- LVPWd(M)
- LVPWs(M)
- MCS(M)
- MPA Diam(M)
- MV A Amp
- MV E Amp
- MV D-E Slope
- MV D-E Amp
- MV E-F Slope
- MV EPSS(M)
- PEd(M)
- PEs(M)
- RPA Diam(M)
- RVET(M)
- RVOT Diam
- RVPEP(M)
- TAPSE

- MV ALL
- LA/Ao(M)
- LV(M)
- Diastole(M)
- Systole(M)
- IVSd(M)
- LVIDd(M)
- LVPWd(M)
- IVSs(M)
- LVIDs(M)
- LVPWs(M)
- HR(M)
- LV Mass(Cube-M)
- IVSd(M)
- LVIDd(M)
- LVPWd(M)
- LV Tei Index(M)
- MV C-O dur(M)
- LVET(M)
- MV Aa(lateral)
- MV Aa(medial)
- AAo Vmax
- AV VTI
- AV HR
- AV Vmax
- AR DecT
- AR PHT
- AR Ved
- AR Vmax
- AR VTI
- MV ARa(lateral)
- MV ARa(medial)
- ASD Vmax
- AV AccT
- AV DecT
- Coarc Post-Duct
- Coarc Pre-Duct
- DAo Vmax
- MV DRa(lateral)
- MV DRa(medial)
- MV Ea(lateral)
- MV Ea(medial)
- IVC Vel(Expir)
- IVC Vel(Insp)

- IVCT
- LPA Vmax
- LVET(Doppler)
- LVOT AccT
- LVOT VTI
- LVOT Vmax
- LVPEP(Doppler)
- MPA Vmax
- dP/dt
- MR VTI
- MR Vmax
- MS Vmax
- MV A Dur
- MV A Vel
- MV A VTI
- MV AccT
- MV DecT
- MV E Dur
- MV E Vel
- MV E VTI
- IVRT
- MV VTI
- MV HR
- MV Vmax
- PVein A Dur
- PVein A Vel
- PVein D Vel
- PVein D VTI
- PVein DecT
- PVein S Vel
- PVein S VTI
- PDA Vel(d)
- PDA Vel(s)
- PR PHT
- PR VTI
- PR Ved
- PR Vmax
- PV AccT
- PV VTI
- PV HR
- PV Vmax
- RAP
- RPA Vmax
- RVET(Doppler)

- RVOT Vmax
- RVOT VTI
- RVPEP(Doppler)
- MV Sa(lateral)
- MV Sa(medial)
- SVC Vel(Expir)
- SVC Vel(Insp)
- TR VTI
- TR Vmax
- TV A Dur
- TV A Vel
- TV AccT
- TV DecT
- TV E Vel
- TV VTI
- TV HR
- TV Vmax
- VSD Vmax
- Hepatic V S Vel
- Hepatic V D Vel
- MV E/A
- MVA(PHT)
- TV E/A
- TVA(PHT)
- LV Tei Index(Doppler)
- MV C-O dur(Doppler)
- LVET(Doppler)
- RVSP
- TR Vmax
- RAP
- PAEDP
- PR Ved
- RAP
- MVA(VTI)
- LVOT Diam
- LVOT VTI
- MV VTI
- AVA(VTI)
- LVOT Diam
- LVOT VTI
- AV VTI
- CO(LVOT)
- LVOT Diam
- LVOT VTI

- AV HR
- CO(RVOT)
- RVOT Diam
- RVOT VTI
- PV HR
- CO(MV)
- MV Diam
- MV VTI
- MV HR
- CO(TV)
- TV Diam
- TV VTI
- TV HR
- RV Tei Index
- TV C-O dur
- RVET(Doppler)
- PISA MR
- MR Rad
- MR Als Vel
- MR VTI
- PISA AR
- AR Rad
- AR Als Vel
- AR VTI
- PISA TR
- TR Rad
- TR Als Vel
- TR VTI
- PISA PR
- PR Rad
- PR Als Vel
- PR VTI
- Qp/Qs
- LVOT Diam
- LVOT VTI
- RVOT Diam
- RVOT VTI
- Urology
 - Renal L
 - Renal H
 - Renal W
 - Cortex
 - Adrenal L
 - Adrenal H

- Adrenal W
- Prostate L
- Prostate H
- Prostate W
- Seminal L
- Seminal H
- Seminal W
- Testicular L
- Testicular H
- Testicular W
- Ureter
- Pre-BL L
- Pre-BL H
- Pre-BL W
- Post-BL L
- Post-BL H
- Post-BL W
- Prostate Mass1 d1
- Prostate Mass1 d2
- Prostate Mass1 d3
- Prostate Mass2 d1
- Prostate Mass2 d2
- Prostate Mass2 d3
- Prostate Mass3 d1
- Prostate Mass3 d2
- Prostate Mass3 d3
- Testicular Mass1 d1
- Testicular Mass1 d2
- Testicular Mass1 d3
- Testicular Mass2 d1
- Testicular Mass2 d2
- Testicular Mass2 d3
- Testicular Mass3 d1
- Testicular Mass3 d2
- Testicular Mass3 d3
- Epididymis L
- Epididymis H
- Epididymis W
- Scrotal Wall
- Renal Vol
- Prostate Vol
- Testicular Vol
- Pre-BL Vol
- Post-BL Vol

- Mictur.Vol
- Kidney
- Renal L
- Renal H
- Renal W
- Cortex
- Adrenal
- Adrenal L
- Adrenal H
- Adrenal W
- Prostate
- Prostate L
- Prostate H
- Prostate W
- Seminal Vesicle
- Seminal L
- Seminal H
- Seminal W
- Testis
- Testicular L
- Testicular H
- Testicular W
- Bladder
- Pre-BL L
- Pre-BL H
- Pre-BL W
- Post-BL L
- Post-BL H
- Post-BL W
- Prostate Mass1
- Prostate Mass1 d1
- Prostate Mass1 d2
- Prostate Mass1 d3
- Prostate Mass2
- Prostate Mass2 d1
- Prostate Mass2 d2
- Prostate Mass2 d3
- Prostate Mass3
- Prostate Mass3 d1
- Prostate Mass3 d2
- Prostate Mass3 d3
- Testicular Mass1
- Testicular Mass1 d1
- Testicular Mass1 d2

- Testicular Mass1 d3
- Testicular Mass2
- Testicular Mass2 d1
- Testicular Mass2 d2
- Testicular Mass2 d3
- Testicular Mass3
- Testicular Mass3 d1
- Testicular Mass3 d2
- Testicular Mass3 d3
- Epididymis
- Epididymis L
- Epididymis H
- Epididymis W
- Testicular A
- Testicular V
- Epididymis A
- Epididymis V
- Vascular
 - CCA IMT
 - Bulb IMT
 - ICA IMT
 - ECA IMT
- Stenosis D
- Stenosis A
- Stenosis A
- A1
- A2
- IMT
- CCA IMT
- Bulb IMT
- ICA IMT
- ECA IMT
- CCA
- Bulb
- ICA
- ECA
- Vert A
- Innom A
- Subclav A
- Axill A
- Brachial A
- Ulnar A
- Radial A
- Subclav V

- Axill V
- Cephalic V
- Basilic V
- Ulnar V
- Radial V
- C.Iliac A
- Ex.Iliac A
- CFA
- SFA
- Pop A
- TP Trunk A
- Peroneal A
- P.Tib A
- A.Tib A
- Dors.Ped A
- C.Iliac V
- Ex.Iliac V
- Femoral V
- Saph V
- Pop V
- TP Trunk V
- Sural V
- Soleal V
- Peroneal V
- P.Tib V
- A.Tib V
- ACA
- MCA
- PCA
- AComA
- PComA
- BA
- IIA
- DFA
- Ba V
- Brachial V
- IIV
- CFV
- SFV
- DFV
- SSV
- ASP
- BSP
- ICA/CCA

- ABI
- ASP
- BSP
- Small Parts:
 - Thyroid L
 - Thyroid H
 - Thyroid W
 - Isthmus H
 - Thyroid Mass1 d1
 - Thyroid Mass1 d2
 - Thyroid Mass1 d3
 - Thyroid Mass2 d1
 - Thyroid Mass2 d2
 - Thyroid Mass2 d3
 - Thyroid Mass3 d1
 - Thyroid Mass3 d2
 - Thyroid Mass3 d3
 - Testicular L
 - Testicular H
 - Testicular W
 - Epididymis L
 - Epididymis H
 - Epididymis W
 - Scrotal Wall
 - Testicular Mass1 d1
 - Testicular Mass1 d2
 - Testicular Mass1 d3
 - Testicular Mass2 d1
 - Testicular Mass2 d2
 - Testicular Mass2 d3
 - Testicular Mass3 d1
 - Testicular Mass3 d2
 - Testicular Mass3 d3
 - Breast Mass1 L
 - Breast Mass1 H
 - Breast Mass1 W
 - Nip.-Mass1 Dist.
 - Skin-Mass1 Dist.
 - Breast Mass2 L
 - Breast Mass2 H
 - Breast Mass2 W
 - Nip.-Mass2 Dist.
 - Skin-Mass2 Dist.
 - Breast Mass3 L

- Breast Mass3 H
- Breast Mass3 W
- Nip.-Mass3 Dist.
- Skin-Mass3 Dist.
- Breast Mass4 L
- Breast Mass4 H
- Breast Mass4 W
- Nip.-Mass4 Dist.
- Skin-Mass4 Dist.
- Breast Mass5 L
- Breast Mass5 H
- Breast Mass5 W
- Nip.-Mass5 Dist.
- Skin-Mass5 Dist.
- Breast Mass6 L
- Breast Mass6 H
- Breast Mass6 W
- Nip.-Mass6 Dist.
- Skin-Mass6 Dist.
- Breast Mass7 L
- Breast Mass7 H
- Breast Mass7 W
- Nip.-Mass7 Dist.
- Skin-Mass7 Dist.
- Breast Mass8 L
- Breast Mass8 H
- Breast Mass8 W
- Nip.-Mass8 Dist.
- Skin-Mass8 Dist.
- Breast Mass9 L
- Breast Mass9 H
- Breast Mass9 W
- Nip.-Mass9 Dist.
- Skin-Mass9 Dist.
- Breast Mass10 L
- Breast Mass10 H
- Breast Mass10 W
- Nip.-Mass10 Dist.
- Skin-Mass10 Dist.
- Thyroid Vol
- Testicular Vol
- Thyroid
- Thyroid L
- Thyroid H

- Thyroid W
- Thyroid Mass1
- Thyroid Mass1 d1
- Thyroid Mass1 d2
- Thyroid Mass1 d3
- Thyroid Mass2
- Thyroid Mass2 d1
- Thyroid Mass2 d2
- Thyroid Mass2 d3
- Thyroid Mass3
- Thyroid Mass3 d1
- Thyroid Mass3 d2
- Thyroid Mass3 d3
- Testis
- Testicular L
- Testicular H
- Testicular W
- Testicular Mass1
- Testicular Mass1 d1
- Testicular Mass1 d2
- Testicular Mass1 d3
- Testicular Mass2
- Testicular Mass2 d1
- Testicular Mass2 d2
- Testicular Mass2 d3
- Epididymis
- Epididymis L
- Epididymis H
- Epididymis W
- Breast Mass1
- Breast Mass1 L
- Breast Mass1 H
- Breast Mass1 W
- Nip.-Mass1 Dist.
- Skin-Mass1 Dist.
- Breast Mass2
- Breast Mass2 L
- Breast Mass2 H
- Breast Mass2 W
- Nip.-Mass2 Dist.

- Skin-Mass2 Dist.
- Breast Mass3
- Breast Mass3 L
- Breast Mass3 H
- Breast Mass3 W
- Nip.-Mass3 Dist.
- Skin-Mass3 Dist.
- Breast Mass4
- Breast Mass4 L
- Breast Mass4 H
- Breast Mass4 W
- Nip.-Mass4 Dist.
- Skin-Mass4 Dist.
- Breast Mass5
- Breast Mass5 L
- Breast Mass5 H
- Breast Mass5 W
- Nip.-Mass5 Dist.
- Skin-Mass5 Dist.
- Breast Mass6
- Breast Mass6 L
- Breast Mass6 H
- Breast Mass6 W
- Nip.-Mass6 Dist.
- Skin-Mass6 Dist.
- Breast Mass7
- Breast Mass7 L
- Breast Mass7 H
- Breast Mass7 W
- Nip.-Mass7 Dist.
- Skin-Mass7 Dist.
- Breast Mass8
- Breast Mass8 L
- Breast Mass8 H
- Breast Mass8 W
- Nip.-Mass8 Dist.
- Skin-Mass8 Dist.
- Breast Mass9
- Breast Mass9 L
- Breast Mass9 H
- Breast Mass9 W
- Nip.-Mass9 Dist.
- Skin-Mass9 Dist.
- Breast Mass10

- Breast Mass10 L
- Breast Mass10 H
- Breast Mass10 W
- Nip.-Mass10 Dist.
- Skin-Mass10 Dist.
- STA
- ITA
- Testicular A
- Testicular V
- Epididymis A
- Epididymis V

- Orthopedics

- HIP
- HIP-Graf
- HIP(α)
- HIP(β)
- d/D

6.3 Report

- Specific report template by application
- User-defined report template
- Editable value in report

- Images selectable
- Able to Export as PDF/RTF file

6.4 IMT

- Intima-Media Thickness Measurement
- Automatic detection of IMT when ROI is set
- Support CCA, ICA, ECA, Bulb IMT
- Near wall and far wall detection
- Angle selectable
- IMT trend analysis

6.5 Smart OB™

- Auto measurement for OB, a special tool for easy OB scan, and greatly reduce time and increase productivity
- Support BPD, HC, OFD, FL, AC
- Better get GA before start auto AC
- Measurement result can be modified by user

6.6 Smart NT™

- NT auto measurement

- Auto detection of NT inside ROI

* Not all measurements are listed in this part; For more detailed information please refer to User Manual

7 Exam Storage and Management

7.1 Exam storage

- 500G hard drive. Up to 429 GB internal hard drive for patient data storage
- Capable to store up to approximate 858000 single frames
- Direct digital storage of single frame and cine 2D, color and Doppler

7.2 Exam management

- iStation™ workstation dedicated for patient exam management
- Patient exam query/retrieve
- Support review of current and past

exam

- New exam, Active exam, Continue exam functions, End exam are available
- Support measurements and calculations on archived exam and images
- Export images as (BMP/JPG/TIFF/DCM/AVI format)
- Support backup/send to USB devices, DVD-RW media

7.3 iWorks™ (option)

- Auto workflow protocol
- Templates are user configurable
- Functions: pause, stop, replace, repeat, skip, insert single step, return and continue, steps in thumbnail, iNSert™ another template
- iWorks setup mode:
B/Dual/B+Color/B+
PW/B+Color+PW/B+CW/B+Color+

CW/ B+M

- iWorks setup annotation: support up to 2 annotations, location and font size are configurable.
- iWorks setup bodymark: select existing library, and probe indicator is pre-settable
- iWorks setup measurement: select existing measurement library
- Template import and export are available

-Storage Commitment

-Media Exchange

- DICOM Worklist (option, HL7 supported)
- DICOM Query/Retrieve (option)
- DICOM Modality Performed Procedure Step - MPPS (option)
- DICOM OB/GYN structure report (option)
- DICOM Cardiac structure report (option)
- DICOM Vascular structure report (option)
- DICOM Breast Report (option)

8 Connectivity

8.1 Ethernet Network Connection

- Cable connection
- Wireless connection: built-in wireless adaptor

8.2 DICOM 3.0

- DICOM basic (option)
 - Verify (SCU, SCP)
 - Print
 - Store

8.3 iStorage (included in UltraAssist)

- Direct network storage tool between ultrasound system and personal computer

8.4 MedSight

- An interactive app that lets you transfer clinical images straight from Mindray Ultrasound system to

a smart device, such as mobile phone or tablet PC.

- Needs to be installed on mobile terminal
- Transfer images or clips from system to mobile terminal through WiFi
- Support both IOS and Android powered system.
- For IOS powered smart device: DICOM is mandatory, IOS 5.0 or above; For Android powered smart device: DICOM not necessary, Android 4.0 or above.

8.5 MedTouch

- Connect Ultrasound machine to smart devices, such as tablet PC or mobile phone. Remote control of Ultrasound machine, review of patient information, and tutorial software iScanHelper study on smart devices.

- Support IOS and Android powered smart devices
- Android 4.0 or above
- DICOM not necessary

9 Transducers

9.1 Curved array

- C5-2E
 - Application: Adult Abdomen, Pediatric Abdomen, OB/GYN, Vascular, Nerve
 - Bandwidth: 1.3-6MHz
 - Number of Elements: 128
 - FOV (max): 75°
 - Extended FOV: 115°
 - Convex Radius: 51mm
 - Depth: 4-40cm
 - Physical Footprint: 76.3mm × 25.6mm
 - Footprint: 64mm × 16.2mm
 - B-mode Frequencies: 1.3-3.2, 1.9-4.6, 2.3-5.7 MHz
 - Harmonic Frequencies: 3.8, 4.0,

- | | |
|---|---|
| 5.0, 6.0 MHz | MHz |
| - Doppler Frequencies: 2.0, 2.5, 3.0 MHz | - Biopsy Guide: NGB-022, multi angle, reusable |
| - Biopsy Guide: NGB-015, multi angle, reusable | • C7-3E |
| • C5-1E | - Application: OB/GYN, Adult Abdomen, Pediatric Abdomen, Vascular |
| - Application: Obstetrics, gynecology, abdomen, vascular, nerve | - Bandwidth: 2.2-8.1MHz |
| - Bandwidth: 1.3-6.0MHz | - Number of Elements: 192 |
| - Number of Elements:128 | - FOV (max): 70° |
| - FOV (max): 60° | - Extended FOV: 110° |
| - Extended FOV: 100° | - Convex Radius: 51 mm |
| - Convex Radius: 60mm | - Depth:3-32cm |
| - Depth: 4-40cm | - Physical Footprint: 71mm × 21.5 mm |
| - Physical Footprint: 76.5*28mm | - Footprint: 60.5mm × 12.2 mm |
| - Footprint: 65mm × 16.2mm | - B-mode Frequencies: 2.6-4.8, 3.6-6.4, 3.6-7.2 MHz |
| - B-mode Frequencies: 1.3~3.2, 1.9~4.6, 2.3~5.7MHz | - Harmonic Frequencies: 5.5, 6.0, 6.5 MHz |
| - Harmonic Frequencies: 3.8, 4.0, 5.0, 6.0MHz | - Doppler Frequencies: 3.0, 3.3, 3.6 MHz |
| - Doppler Frequencies: 2.0, 2.5, 3.0 MHz | |

- Biopsy Guide: NGB-019, multi angle, reusable
- C11-3E
 - Application: Pediatric abdominal, Neonatal Head
 - Bandwidth: 2.6-12.8MHz
 - Number of Elements: 128
 - FOV (max): 102°
 - Extended FOV: 142°
 - Convex Radius: 15mm
 - Depth: 1.5-28cm
 - Physical Footprint: 32.8 mm × 25mm
 - Footprint: 27.4 mm × 8.4mm
 - B-mode Frequencies: 2.6-6.5, 3.2-7.9, 4.7-12.8 MHz
 - Harmonic Frequencies: 7.0, 8.0, 9.0 MHz
 - Doppler Frequencies: 4.4, 5.0, 5.7 MHz
 - Biopsy Guide: NGB-018, multi angle, reusable
- V11-3E
 - Application: OB/GYN, Urology
 - Bandwidth: 2.6-12.8MHz
 - Number of Elements: 128
 - FOV (max): 139°
 - Extended FOV: 179°
 - Convex Radius: 11mm
 - Depth: 1.5-28cm
 - Physical Footprint: 24.9mm × 21.8mm
 - Footprint: 24mm × 9mm
 - B-mode Frequencies: 2.6-6.5, 3.2-7.9, 4.7-12.8 MHz
 - Harmonic Frequencies: 7.0, 8.0, 9.0 MHz
 - Doppler Frequencies: 4.4, 5.0, 5.7 MHz
 - Biopsy Guide: NGB-004, single angle, reusable
- V11-3BE
 - Application: OB/GYN, Urology
 - Bandwidth: 2.6-12.8MHz

- Number of Elements: 128
 - FOV (max): 139°
 - Extended FOV: 179°
 - Convex Radius: 11mm
 - Depth: 1.5-28cm
 - Physical Footprint: 24.8mm × 21.8mm
 - Footprint: 24mm × 9mm
 - B-mode Frequencies: 2.6-6.5, 3.2-7.9, 4.7-12.8 MHz
 - Harmonic Frequencies: 7.0, 8.0, 9.0 MHz
 - Doppler Frequencies: 4.4, 5.0, 5.7 MHz
 - Biopsy Guide: NGB-004, single angle, reusable
- V11-3WE
 - Application: OB/GYN, Urology
 - Bandwidth: 2.6-12.8MHz
 - Number of Elements: 160
 - FOV (max): 173°
 - Extended FOV: 213°
- CB10-4E
 - Convex Radius: 11mm
 - Depth: 1.5-28cm
 - Physical Footprint: 24.9mm × 21.8mm
 - Footprint: 24mm × 9mm
 - B-mode Frequencies: 2.6-6.5, 3.2-7.9, 4.7-12.8 MHz
 - Harmonic Frequencies: 7.0, 8.0, 9.0 MHz
 - Doppler Frequencies: 4.4, 5.0, 5.7 MHz
 - Biopsy Guide: NGB-004, single angle, reusable
- Application: Urology
 - Bandwidth: 2.6-12.8MHz
 - Number of Elements: T:128, S:128
 - FOV (max):165°
 - Extended FOV: 205
 - Convex Radius: 9mm
 - Depth: 1.5-28cm

- Physical footprint: 22.5mm*20.1mm
- Footprint: 20.1mm × 9mm
- B-mode Frequencies: 2.6~6.5, 3.2~7.9, 4.7~12.8MHz
- Harmonic Frequencies: 7.0, 8.0, 9.0MHz
- Doppler Frequencies: 4.4, 5, 5.7MHz
- Biopsy Guide: NGB-004, single angle, reusable (TY-JD-02 disposable)
- Physical Footprint: 65.3mm × 45.5mm
- B-mode Frequencies: 2.6-4.8, 3.6-6.4, 3.8-8.2 MHz
- Harmonic Frequencies: 4.5, 6.0, 6.5 MHz
- Doppler Frequencies: 2.5, 3.0, 4.0 MHz
- Biopsy Guide: NGB-020, multi angle, reusable

9.2 Volume curved array

- D6-2NE
 - Application: OB/GYN, Abdomen
 - Bandwidth: 2.6-8.2 MHz
 - Number of Elements: 128
 - FOV (max): 67°(B) × 70°(sweep)
 - Extended FOV: 107°(B)
 - Convex Radius: 41mm
 - Volume Sweep Radius: 19mm
 - Depth: 4-40cm
- D6-2E
 - Application: OB/GYN, Abdomen
 - Bandwidth: 2.6-8.2MHz
 - Number of Elements: 128
 - FOV (max): 67°(B) × 70°(sweep)
 - Extended FOV: 107°(B)
 - Convex Radius: 41mm
 - Volume Sweep Radius: 19mm
 - Depth: 4-40cm
 - Physical Footprint: 71mm × 51.6mm
 - B-mode Frequencies: 2.6-4.8,

3.6-6.4, 3.8-8.2 MHz

- Harmonic Frequencies: 4.5, 6.0, 6.5 MHz

- Doppler Frequencies: 2.5, 3.0, 4.0 MHz

- Biopsy Guide: NGB-020, multi angle, reusable

- DE10-3E

- Application: OB/GYN, Urology
- Bandwidth: 2.1-12.8MHz
- Number of Elements: 192
- FOV (max): 155°(B) × 90°(sweep)
- Extended FOV: 195°(B)
- Convex Radius: 11 mm
- Depth: 1.5-28cm
- Physical Footprint: 24.4mm (diameter)
- B-mode Frequencies: 2.6~6.5, 3.2~7.9, 4.7~12.8 MHz
- Harmonic Frequencies: 7.0, 8.0, 9.0 MHz
- Doppler Frequencies: 4.4, 5.0,

5.7 MHz

- Biopsy Guide: NGB-021, multi angle, reusable

9.3 Linear

- L12-3E

- Application: Small parts, Vascular, Musculoskeletal, Nerve, Pediatrics
- Bandwidth: 3-13.5MHz
- Number of Elements: 192
- Field of View (max): 38mm
- Steered Angle: +/-6°, 12°(B); +/-10°, 20°, 30° (C, PW)
- Depth: 1.5-28cm
- Physical Footprint: 45.7mm × 10.9mm
- Footprint: 44.2mm × 8.5mm
- B-mode Frequencies: 4.4-9.6, 5.4-11.5, 6.6-13.5 MHz
- Harmonic Frequencies: 8.0, 9.0, 10.0 MHz
- Doppler Frequencies: 4.4, 5.0,

- 5.7 MHz
- Biopsy Guide: NGB-007, multi angle, reusable
- L14-6NE
 - Application: Small parts, Vascular, Musculoskeletal, Nerve, Pediatrics, Neonatal Head
 - Bandwidth: 3.5-16MHz
 - Number of Elements: 192
 - Field of View (max): 38mm
 - Steered Angle: $\pm 6^\circ, 12^\circ$ (B); $\pm 10^\circ, 20^\circ, 30^\circ$ (C, PW)
 - Depth: 1.5-28cm
 - Physical Footprint: 45.7mm $\times$ 10.9mm
 - Footprint: 44.2mm $\times$ 8.5mm
 - B-mode Frequencies: 5.4-11.6, 6.0-12.6, 6.6-13.5 MHz
 - Harmonic Frequencies: 8.0, 10.0, 12.0 MHz
 - Doppler Frequencies: 5.0, 5.7, 6.6 MHz
- Biopsy Guide: NGB-007, multi angle, reusable
- L14-6WE
 - Application: Small parts, Vascular, Musculoskeletal, Nerve, Pediatrics
 - Bandwidth: 3.5-16MHz
 - Number of Elements: 256
 - Field of View (max): 50mm
 - Steered Angle: $\pm 6^\circ, 12^\circ$ (B); $\pm 10^\circ, 20^\circ, 30^\circ$ (C, PW)
 - Depth: 1.5-28cm
 - Physical Footprint: 59.1mm $\times$ 12mm
 - Footprint: 56.1mm $\times$ 10mm
 - B-mode Frequencies: 4.8-10.6, 5.4-11.6, 6.6-13.5 MHz
 - Harmonic Frequencies: 8.0, 10.0, 12.0 MHz
 - Doppler Frequencies: 5.0, 5.7, 6.6 MHz
 - Biopsy Guide: NGB-007, multi

angle, reusable

9.4 Phased array

- P4-2E

- Application: Adult cardiac, Pediatric Cardiac, TCD, Adult Abdomen
- Bandwidth: 1.3-5.4MHz
- Number of Elements: 64
- Field of View (max): 90°
- Depth: 3-32cm
- Physical Footprint: 25.2mm × 20.6mm
- Footprint: 23.4mm × 15.2mm
- B-mode Frequencies: 1.3-3.2, 1.6-3.8, 1.9-4.6 MHz
- Harmonic Frequencies: 3.4, 3.8, 4.2 MHz
- Doppler Frequencies: 2.0, 2.3, 2.6 MHz; TDI 2.5, 4.0MHz
- CW Frequency: 2.0MHz
- Biopsy Guide: NGB-011, multi angle, reusable

- P7-3E

- Application: Pediatric cardiac, Neonatal Cardiac, Neonatal Head, Pediatric Abdomen
- Bandwidth: 2-8.0 MHz
- Number of Elements: 96
- Field of View (max): 90°
- Depth: 2-31cm
- Physical Footprint: 34 mm×24.5 mm
- Footprint: 21mm*13.8mm
- B-mode Frequencies: 2.3-5.4, 2.8-6.4, 3.3-7.2MHz
- Harmonic Frequencies: 6.0, 6.5, 7.0 MHz
- Doppler Frequencies: 2.7, 3.3, 4.0 MHz; TDI 5.0, 6.2MHz
- CW Frequency: 2.5MHz
- Biopsy Guide: not available

- P10-4E

- Application: Neonatal Cardiac, Neonatal Head, Neonatal

- Abdomen, Pediatric cardiac,
- Pediatric Abdomen
- Bandwidth: 3-11.4MHz
- Number of Elements: 128
- Field of View (max): 90
- Depth: 2-16.5 cm
- Physical Footprint: 28.5mm*20.4mm
- Footprint: 15mm*9.1mm
- B-mode Frequencies: 3.0~6.8, 3.8~10.2, 4.6~11.4 MHz
- Harmonic Frequencies: 7.5, 8.0, 9.0MHz
- Doppler Frequencies: 4.4, 5.0, 5.7MHz; TDI 5.0, 6.2MHz
- CW Frequency: 5.0MHz
- Biopsy Guide: not available
- P7-3TE
 - Application: transesophagel
 - Bandwidth: 2.3-7.2MHz
 - Number of Elements: 64
 - Field of View (max): 90
- Depth: 2-31cm
- Physical Footprint: 14mm ×12mm
- B-mode Frequencies: 2.3~5.4, 2.8~6.4, 3.3~7.2MHz
- Harmonic Frequencies: 6.0, 6.5, 7.0MHz
- Doppler Frequencies: 2.7, 3.3, 4.0MHz; TDI 4.0MHz; TDI: 2.7, 5.0
- CW Frequency: 2.5MHz
- Biopsy Guide: not available
- SP5-1E
 - Application: Cardiac, transcranial, abdomen
 - Bandwidth: 1.0-5.0MHz
 - Number of Elements: 80
 - Field of View (max): 90 °
 - Depth: 2-38cm
 - Physical Footprint: 28.1mm × 18.9mm
 - Footprint: 22.4mm × 13.6mm
 - B-mode Frequencies: 1.0~3.5, 2.0~4, 2.5~5.0MHz

- Harmonic Frequencies: 3.0, 3.4, 3.8MHz
- Doppler Frequencies: 2.0, 2.3, 2.5 MHz; TDI 2.5, 4.0MHz
- CW Frequency: 2.0MHz
- Biopsy Guide: NGB-011, multi angle, reusable

9.5 Pencil

- CW5s
 - Application: Vascular
 - Number of Elements: 2
 - CW Frequency: 5.0MHz
 - Physical Footprint: 11.3mm × 11.3mm

10 Peripheral Devices and

Accessories (Option)

10.1 Black/white digital video printer

- SONY UP-D897, MITSUBISHI P95DW-N, SONY UP-D898MD, SONY UP-X898MD

10.2 Color digital printer

- SONY UP-D25MD

10.3 Graph/text printer

- HP Deskjet 1050 J410 series, HP Officejet 7000 wide format, HP Officejet Pro 8100

10.4 Wireless printer

- HP Officejet Pro 8100

10.5 Gel warmer

- Easily be disassembled off system for cleaning
- Temperature: 37°C, 40°C, off
- Light indicator:
 - Green--- working normally;
 - Flickering orange---working abnormally

10.6 Footswitch

- USB port: 971-SWNOM (2-pedal)
- USB port: 971-SWNOM (3-pedal)
- Support User-definable functions (Freeze, Save, Print)

10.7 ECG

- 6-pin, AHA/IEC, for 3-lead wires

- ECG wave display: on/off
- Gain: 0-30, 1/step
- Sweep speed: 1-6, 1/step

10.8 Barcode reader

- Laser barcode scanner
- Model: SYMBOL LS2208, DS6067

10.9 Built-in Battery

- Replaceable and rechargeable lithium battery
- Restore from standby mode: less than 12s
- Full battery lasts more than 24h in standby mode
- Light indicator for standby mode
- Empty battery recharged to full in less than 4h

11 System Inputs and Outputs

11.1 Video/Audio input

- Microphone: 1 port

11.2 Video/Audio output

- S-Video out: 1 port, PAL/NTSC
- HDMI: 1 Port

- VGA out: 1 port
- Audio out: 1 port

11.3 Physio input

- Support ECG signal
- ECG: 1 port
- PCG: 1 port (reserved)

11.4 Other input/output

- USB: 5 USB 3.0 ports, 1 more dedicated USB port for printer
- Ethernet: 1 port

12 Safety and Conformance

12.1 Quality standards

- ISO 9001
- ISO 13485

12.2 Design standards

- EN 60601-1 and IEC 60601-1
- EN 60601-1-2 and IEC 60601-1-2
- EN 60601-1-6 and IEC 60601-1-6
- EN 60601-2-37 and IEC60601-2-37
- EN 62304 and IEC 62304
- EN 62366 and IEC 62366

- EN ISO 17664 and ISO 17664

12.3 CE declaration

DC-70 Exp system is fully in conformance with the Council Directive 93/42/EEC Concerning Medical Devices. The number adjacent to the CE marking (0123) is the code of the EU-notified body that certified meeting the requirements of Annex II excluding (4). of the Directive.

described in this document may be available in all probes and/or modes. Mindray reserves the right to make changes in specifications and features shown herein, or discontinue the product at any time without notice or obligation. Contact Mindray Representative for the most current information

NOTICE:

Not all features or specifications