

DC-30 with Full HD

Diagnostic Ultrasound System

Datasheet

Release V3.0.0



1 System Overview

1.1 Application

- Abdomen
- Gynecology
- Cardiology
- Vascular
- Urology
- Small Part
- ORTH (Orthopedics)
- EM (Emergency Medicine)
- Nerve
- Obstetrics

1.2 Transducer types

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

1.3 Imaging modes

- B-Mode
- Tissue Harmonic Imaging and PSH (Phase Shift Harmonic Imaging)
- M-Mode
- Color Doppler Imaging
- Power Doppler Imaging/Directional PDI
- Pulsed Wave Doppler
- Continuous Wave Doppler
- Free Xros M™ (Anatomical M-mode)
- TDI
- UWN (Ultra Wideband Non-linear) Contrast Imaging
- Natural Touch Elastography Imaging
- Smart 3D™ (Freehand 3D)
- Real-time 4D
- iScape™ View (Panoramic Imaging)

1.4 Standard features

- B-Mode
- THI and PSH™ (Phase Shift Harmonic Imaging)
- M-Mode
- Color M Mode
- Color Doppler Imaging
- Power Doppler Imaging and Directional PDI

- Pulsed Wave Doppler
 - iClear™ (Speckle Suppression Imaging)
 - iBeam™ (Spatial Compound Imaging)
 - iTouch™ (Auto Image Optimization)
 - Zoom/iZoom™ (Full Screen Zoom)
 - FCI (Frequency Compound Imaging)
 - B steer
 - ExFOV Imaging
 - iStation™
 - iVision™
 - Raw data processing
 - Integrated 1 TB hard drive
 - 3 transducer connectors
 - 3 USB ports
 - Auto Doppler Calculation
 - Medsight
 - iStorage (Direct Network Storage)
 - Smart Installment Reminder
 - Smart Track
- ## 1.5 Optional features
- iScape™ View
 - IMT (Intima-Media Thickness)
 - Continuous Wave Doppler
 - Free Xros M (Anatomical M-mode)
 - TDI
 - UWN (Ultra Wideband Non-linear) Contrast Imaging
 - Natural Touch Elastography Imaging
 - Smart 3D
 - Real-time 4D
 - iLive
 - Smart Face
 - Nerve Package
 - Emergency & Critical Package
 - DICOM
 - ECG function
 - Built-in battery
 - Network accessory package
 - Smart OB™ (Auto OB measurement)
 - Smart NT™ (Auto NT measurement)
 - DVD-RW Driver
 - Footswitch

- iScanHelper
- 1.6 Language support
- Software display: English, Chinese, German, Spanish, French, Italian, Portuguese, Russian, Czech, Polish, Icelandic, Norwegian, Swedish, Turkish, Finnish, Danish
- Keyboard input: English, Chinese, Russian, Czech, Polish
- Control panel overlay: Chinese, German, French, Russian, Italian, Spanish, Portuguese, Czech, Polish
- User manual: English, Chinese, Russian, French, Italian, German, Turkish, Spanish, Indonesian

2 Physical Specification

2.1 Dimension and weight

- 620mm×532mm×1040mm (Depth × Width × Height) (Adjustable control panel is configured; control panel and display at the lowest position)
- 620mm×532mm×1440mm (Depth × Width × Height) (Adjustable control panel is configured; control panel and display at the highest position)
- 620mm×532mm×1100mm (Depth × Width × Height) (Adjustable control panel is not configured; display at the lowest position)
- 620mm×532mm×1328mm (Depth × Width × Height) (Adjustable control panel is not configured; display at the highest position)
- Weight: ≤55kg (with battery)

2.2 Monitor

- 21.5-inch high resolution color LED monitor
- Resolution: 1920×1080
- Digital on-screen display of brightness and contrast controls
- Viewing angle: 178° up/down and left/right
- Tilt/Rotate independent adjustment:

- Tilt angle range: 110 degrees
- Rotate angle range: 180 degrees

2.3 Transducer port and holder

- 3 transducer ports
- Removable transducer holder

2.4 Electrical power

- AC adapter Input:
 - Voltage: 100-127V~; 220-240V~
 - Frequency: 50/60Hz
 - Power consumption: 420VA
- Built-in Battery: Lithium-ion Battery 14.8V, 6600mAh

2.5 Operating Environment

- Ambient temperature: 0-40 °C
- Relative humidity: 30%-85% (no condensation)
- Atmospheric pressure: 700hPa-1060hPa

2.6 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

- Power/Battery indicator
- Alphanumeric keys
- Function keys
- Knobs
- Backlit keys, ensuring accurate work in the dark room
- 8-segment TGC control
- 4 programmable keys, available for user-defined functions
- Trackball, sensitivity adjustment
- Key brightness adjustment
- Up/down of control panel
 - Down/Up range: 150mm

3.2 System boot-up

- Boot-up in about 46 sec
- Shut down in about 25 sec
- Boot-up from standby mode in

about 7 sec

- Enter standby mode in about 3 sec

3.3 Comments

- Support text input and arrow
- Adjustable text size, arrow size and direction
- Support home position
- Covers various application
- User customizable

3.4 Bodymark

- More than 150 bodymarks for versatile application
- User customizable

3.5 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
 - Transducer model
 - Operator
 - TGC Curve
 - Focus position
 - Thumbnail
 - Imaging parameters
 - iScanHelper guidance

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

4 Imaging Parameters

4.1 Overview

- Echo-enriched Beamformer
- Up to 27,648 channels
- 4-beam forming

4.2 B-mode

- A.Power: 32 levels
- TGC: 8 sliders
- Depth: 0.9-38.8 cm (depend on transducer)
- Frame rate (max): 400f/s

- Gain: 0-100
 - Focus Position: 16 levels
 - B Steer: 3 levels
 - FOV: On/Off
 - FOV Size: random adjustable
 - FOV Position: random adjustable
 - Frequency: depend on transducer
 - Persistence: 0-7, 1/step
 - Dynamic Range: 30-220, 5/step
 - Gray Map: 1-25, 1/step
 - Tint Map: Off, 1-25, 1/step
 - ExFov: On/Off
 - iClear: Off, 1-4, 1/step
 - Focus Number: 1-4
 - iBeam: On/Off
 - Line Density: L, M, H, UH
 - L/R Flip: Left/Right
 - U/D Flip: Up/Down
 - Rotation: 0, 90, 180, 270
 - TSI: Fat/Fluid/General/Muscle
 - iTouch: On/Off
 - iTouch Bright: -12-12, 3db/step
 - Auto Merge: On/Off
 - H Scale: On/Off
 - LGC: 8 LGC node can be controlled, and the range of the node is 0~100
 - Gray Invert: On/Off
- ### 4.3 THI and PSH
- Available on all types of transducers
Patent PSH technology, obtains purer harmonic, better contrast resolution
 - iClear™ available
- ### 4.4 M-Mode
- A.Power: 32 levels
 - Focus Position: 16 levels
 - Gain: 0-100
 - Depth: same as B
 - Frequency: same as B
 - Speed: 1-6, 1/step
 - Dynamic Range: 30-220, 5/step
 - Gray Map: 1-25, 1/step
 - Tint Map: Off, 1-25, 1/step
 - Display Format: V1:2, V2:1, V1:1, Full
 - M Soften: 0-14, 1/step

- Edge Enhance: 0-14, 1/step
- #### 4.5 Color Doppler Imaging
- A.Power: 32 levels
 - Gain: 0-100
 - Baseline: -8-8, 1/step
 - Scale: 30 levels
 - Steer: dependent on transducer
 - ROI Width : random adjustable
 - ROI Height: random adjustable
 - ROI Center Depth: random adjustable
 - Frequency: dependent on transducer
 - Max. velocity: 262.9cm/s
 - Max. frame rate: 392f/s
 - PRF: max. 14.8kHz, min. 0.1kHz
 - Persistence: 0-4, 1/step
 - Smooth: 0-4, 1/step
 - Map: V0-V10; VV0-VV9
 - WF: 0-7, 1/step
 - Line Density: L, M, H, UH
 - Dual Live: On/Off
 - Invert: On/Off
 - B/C Align: On/Off
 - Packet Size: 0-3, 1/step
 - iTouch: On/Off
 - Smart Track: On/Off
- #### 4.6 Power Doppler Imaging
- A.Power: 32 levels
 - Gain: 0-100, 2/step
 - Steer: same as Color
 - Scale: 30 levels
 - PRF: Max. 14.8kHz
 - ROI Width: same as Color
 - ROI Height: same as Color
 - ROI Center Depth: same as Color
 - Frequency: dependent on transducer
 - Persistence: 0-4, 1/step
 - Smooth: 0-4, 1/step
 - Dynamic Range: 10-70, 5/step
 - Map: P0-P3, dP0-dP3
 - Priority: 0%-100%, 10%/step
 - WF: 0-7, 1/step
 - Line Density: L, M, H, UH

- Dual Live: On/Off
 - Invert: On/Off
 - B/C Align: same as Color
 - Packet Size: 0-3, 1/step
- #### 4.7 PW Mode
- A.Power: 32 levels
 - PW velocity: max. 924cm/s
 - PW PRF: max. 24kHz, min. 0.7kHz
 - Gain: 0-100, 2/step
 - Baseline: -4-4, 1/step
 - Steer: dependent on transducer
 - PRF/Scale: 30 levels
 - Audio: 0%-100%, 2%/step
 - Angle: -89-89, 1/step
 - Quick Angle: -60, 0, 60
 - SVD: random adjustable
 - Frequency: dependent on transducer
 - Speed: 1-6, 1/step
 - SV:
 - 0.5 - 3mm: 0.5mm/step
 - 3mm - 5mm: 1mm/step
 - 5mm - 10mm: 2.5 mm/step
 - 10mm - 20mm: 5mm/step
 - Dynamic Range: 24-72, 2/step
 - Gray Map: 1-25, 1/step
 - Tint Map: Off, 1-25, 1/step
 - Display Format: V1:2, V2:1, V1:1, Full
 - Invert: On/Off
 - WF: 0-6, 1/step
 - Auto Calc: On/Off
 - Duplex/Triplex: On/Off
 - HPRF: On/Off
 - T/F Res: 0-4, 1/step
 - Auto Calc Cycle: 1-5, 1/step
 - Auto Calc Param: selectable
 - Trace Area: Above, Below, All
 - iTouch: On/Off
- #### 4.8 CW Mode
- A.Power: 32 levels
 - CW velocity: max. 6160 cm/s
 - CW PRF: max. 160kHz, min. 0.4kHz
 - Gain: 0-100, 2/step
 - Baseline: -4-4, 1/step
 - Frequency: 1 level

- PRF/Scale: 30 levels
- Audio: same as PW
- Angle: -89-89, 1/step
- Quick Angle: -60, 0, 60
- SVD: random adjustable
- Speed: 1-6, 1/step
- Dynamic Range: 24-72, 2/step
- Gray Map: 1-25, 1/step
- Tint Map: Off, 1-25, 1/step
- Display Format: V1:2, V2:1, V1:1, Full
- Invert: On/Off
- WF: 0-6, 1/step
- T/F Res: 0-4, 1/step

4.9 Tissue Velocity/Energy Imaging (included in TDI option)

- A.Power: 32 levels
value is calculate by current volt
- Max velocity: 262.9cm/s (Only TVI)
- Max. frame rate: 392f/s
- PRF: max. 13.7kHz
- Gain: 0-100, 2/step
- Baseline: -8 - 8, 1/step (TVI only)
- Scale: 30 levels
- ROI Width: random adjustable
- ROI Height: random adjustable
- ROI Center Depth: random adjustable
- Frequency: dependent on transducer
- Persistence: 0 - 4, 1/step
- Smooth: 0 - 4, 1/step
- Dynamic Range: 10-70, 5/step (TEI only)
- Map: TVI: TVV1-TVV10
TEI: P0-P3, dP0-dP3
- Priority: 0% - 100%, 10%/step
- WF: 0 - 7, 1/step
- Line Density: L, M, H, UH
- Dual live: On/Off
- Invert: On/Off
- B/C Align: On/Off
- Packet size: 0 - 3, 1/step

4.10 Tissue Velocity Doppler (included in TDI option)

- A.Power: 32 levels

- Max velocity: 462.0 cm/s
- PRF: max. 24.0kHz
- Max. frame rate: 392f/s
- Gain: 0-100, 2/step
- Baseline: -4 - 4, 1/step
- Scale: 30 levels
- Audio: 0-100%, 2%/step
- Angle: -89-89, 1/step
- SVD: random adjustable
- Frequency: dependent on transducer
- Speed: 1-6, 1/step
- SV: same as PW
- Dynamic Range: 24-72, 2/step
- Gray Map: 1-25, 1/step
- Tint Map: Off, 1-25, 1/step
- Display Format: V1:2, V2:1, V1:1, Full
- Invert: On/Off
- WF: 0-6, 1/step
- Quick Angle: -60, 0, 60
- Duplex/triplex: same as PW
- T/F Res: 0-4, 1/step
- iTouch: On/Off

4.11 Tissue Velocity Motion (included in TDI option)

- Display formats: V1:2, V2:1, V1:1, Full (V: vertical)
- Acoustic output power: 32 levels
- Dynamic range: 30-220, 5/step
- Gain: 0-100, 1-2/step
- Speed: 1-6, 6 steps
- M soften: 0-14, 1/step
- Gray Map: 25 types
- Edge enhance: 0-14, 1/step

4.12 Free_Xros M™

- Speed: same as M
- Tint Map: Off, 1-25, 1/step
- Display Format: V1:2, V2:1, V1:1
- Gray Map: 1-25, 1/step
- show A: On/off
- show B: On/off
- show C: On/off
- Angle: random adjustable

4.13 Natural Touch Elastography

- Available on transducers ~~75L38P,~~

- 7L4P and 7L4BP for small parts and MSK
- Stress compensation technology reduces deeper tissue artifacts, obtains more uniform stress throughout whole field
- Stress indicator: supports frame by frame stress indication
- Opacity: 0-5
- Single E: On/Off
- Map: E0-E5
- Smooth: 0-5
- ROI Width: random adjustable
- ROI Height: random adjustable
- ROI Center Depth: random adjustable
- Invert: On/Off
- Depth: dependent on transducer
- Focus Position: dependent on transducer

4.14 UWN Contrast Imaging™*

- Ultra Wideband Non-linear (UWN) contrast imaging technology, which provides exceptional contrast agent detecting capability, not only extracts second harmonic, but also non-linear fundamental signals
- Available on transducers ~~35C50P~~ and C6-2P in Adult ABD mode
- A.Power: 32 levels
- TGC: same as B
- Depth: same as B
- Gain: 0-100
- Focus Position: same as B
- Persistence: 0-7, 1/step
- Dynamic Range: 30-220, 5/step
- Gray Map: 1-25
- Tint Map: Off, 1-25, 1/step
- FOV: same as B
- FOV Size: same as B
- FOV Position: same as B
- ExFOV: same as B
- iClear: Off, 1-4, 1/step
- Line Density: same as B

- L/R Flip: same as B
- U/D Flip: same as B
- DualLive: On/Off
- Frequency: dependent on transducer
- Mix:
 - Dual Live on: Contrast/C&T
 - Dual Live off: Contrast/C&T/Tissue
- Mix Map: CT1-CT7
- Timer1: On/Off
- Timer2: On/Off
- Destruct: On/Off
- Destruct Time: 500-2000,75/step
- DestructAP: 32 levels
- HlmgPos: Left/Right

4.15 Smart 3D

- Smart 3D™
 - Angle: 10-80, 2/step
 - Distance: 10mm-200mm, 10mm/step
 - Display formats: Single, Dual, Quad, A4:1
 - Reset: Reset All, Reset Curve, Reset Ori.
 - Quick Rotation: 0°, 90°, 180°, 270°
 - Inversion: Gray, Invert
 - Accept VOI: on/off
 - Render: Surface, Max, Min, X-ray, iLive
 - Direct: D/U, U/D, L/R, R/L, F/B, B/F (D: down, U: up, L: left, R: right, F: front, B: back)
 - Threshold: 0%-100%, 1%/step
 - Opacity: 0%-100%, 5%/step
 - Smooth: 0-10, 11 steps
 - Brightness: 0%-100%, 2%/step
 - Contrast: 0%-100%, 2%/step
 - Tint: off; 25 types
 - Current window: VR, A, B, C
 - iClear: Off; 1-4, 4 steps
- Edit
 - Rotation control: X, Y, Z axis
 - Tool: Inside Contour, Outside

- Contour; Inside Rect, Outside Rect
- Other operations: undo, undo all
- 4.16 Real-time 4D
 - 4D frame rate: max. 32.1 vps
 - MPR/VR: MPR, VR
 - Threshold: 0%-100%, 1%/step
 - Smooth: 0-10, 11 steps
 - iClear: Off; 1-4, 4 steps
 - Current window: VR, A, B, C
 - Display formats: Single, Dual, Quad, A4:1
 - Brightness: 0%-100%, 2%/step
 - Contrast: 0%-100%, 2%/step
 - Opacity: 0%-100%, 5 %/step
 - Reset: Reset All, Reset Curve, Reset Ori.
 - Quick Rotation: 0°, 90°, 180°, 270°
 - Inversion: Gray, Invert
 - Accept VOI: on/off
 - Render: Surface, Max, Min, X-ray, iLive
 - Direct: D/U, U/D, L/R, R/L, F/B, B/F (D: down, U: up, L: left, R: right, F: front, B: back)
 - Tint: off; 25 types
 - Slice
 - Shading
 - Light Position: 7
 - Grad View
 - Edit
 - Rotation control: X, Y, Z axis
 - Tool: inside contour, outside contour; inside rect, outside rect
 - Format: Single, Dual, Quad, A4:1
 - Other operations: undo, undo all
 - Auto Rotation
- 4.17 iPage
 - Slices number: 3-25
 - Spacing: 0.5-10mm
 - Slice Position
 - Line Direction: V/H
 - Ref. Plane: A, B, C
 - Display format: 1×1, 2×2, 3×3, 4×4, 5×5

- Adjust Slice
- Ref. Image: on/off
- Reset Orientation
- 4.18 iScape™ View
 - Panoramic imaging
 - Available on all transducers
 - Acquisition method: B mode
 - Imaging length: 88.3cm
 - Tint map: off; 25 types
 - Rotation: 0°~355°, 5°/step
- 4.19 Zoom
 - iZoom™
 - Full screen zoom
 - Normal image, Zoom standard area, Zoom image area, 3 steps
 - Spot zoom (write zoom) 0.8-10x
 - Pan zoom (read zoom) 0.8-10x
- 4.20 iBeam™
 - Spatial compound imaging
 - 3 angles maximum
 - Available on all convex and linear transducers
- 4.21 iClear™
 - Speckle suppression imaging
 - Available for B, 3D, 4D
- 4.22 iTouch™
 - Auto image optimization
 - B-mode: gain, TGC
 - Color: gain
 - Power: gain
 - PW: baseline, scale, PRF, WF
- 4.23 B steer
 - Only for linear transducers
- 4.24 ExFov
 - Extended field of view
 - Available for all convex, linear and volume transducers
- 4.25 QSave
 - Quick save image parameter setting after image adjustment done
 - Support Save, Save as, Restore
- 4.26 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, OB/GYN, Thyroid, Breast and Testicle applications

5 Cine Review and Post Processing

5.1 Cine review

- Available in all modes
- Frame by frame manual cineloop review or auto playback with variable speed
- Independent cine review in 2D Dual and Quad mode one by one
- Maximum cine memory is up to 12,384 frames and M mode up to 181.1s
- Cine length: 1-60s
- Frame compare: compare different frames for one cine in dual format
- Cine compare: compare two or more than two cines in dual or quad format
- Skip to first and skip to last: one keystroke review the first or last frame
- Start point and end point: selectable

5.2 Post Processing

- B-mode:
 - TGC
 - Gain
 - Gray map
 - Tint map
 - Flip
 - iClear
 - Rotation
 - H Scale
 - LGC
 - Gray invert
 - Auto merge
- M-mode:
 - Gray map
 - Tint map
- Color/Power:
 - Invert
 - Baseline (Color)

- Map
- Priority
- Smooth
- Dual Live
- Dynamic Range (Power)
- PW:
 - Gain
 - Baseline
 - Audio
 - Angle
 - Quick angle
 - Dynamic Range
 - Gray map
 - Tint map
 - Invert
 - Auto calc
 - Auto Calc Cycle
 - Auto Calc Param
 - Trace Area

6 Measurement/Analysis and

Report*

6.1 Generic measurements

- B-Mode
 - Distance
 - Ellipse
 - Trace
 - Spline
 - Cross
 - Angle
 - Double Dist
 - Trace Len
 - Trace Len(Spline)
 - Parallel
 - B-Profile
 - B-Hist(Ellipse)
 - B-Hist(Trace)
 - B-Hist(Spline)
 - B-Hist(Rectangle)
 - Depth
 - Color Vel
 - Color Vel Profile
 - IMT

Volume
Volume(Ellipse)
Volume(E+Dist.)
Ratio(D)
Ratio(Ellipse)
Ratio(Spline)
Ratio(Cross)

Volume
 Volume
 Volume(Ellipse)
 Volume(E+Dist.)
Ratio(A)
 Ratio(Trace)
 Ratio(Ellipse)
 Ratio(Spline)
 Ratio(Cross)
Volume Flow
 Vas Area
 TAMEAN
 TAMAX

- M-Mode
HR
Slope
Distance
Time
Velocity

- D-Mode
PS/ED
Vel
HR
Time
Acceleration
D Trace

Volume Flow
 Vas Area
 TAMEAN
 TAMAX

6.2 Clinical application measurement package

- Abdominal

B-Mode
Liver
Renal L
Renal H
Renal W
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
Aorta Bif
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 W

Pre-BL H
Post-BL L
Post-BL W
Post-BL H
Adrenal
Adrenal L
Adrenal W
Adrenal H

D-Mode

Ren A Org
Arcuate A
Segment A
Interlobar A
Renal A
M Renal A
Renal V
Aorta
Celiac Axis
SMA
C Hepatic A
Hepatic A
Splenic A
IVC
Portal V
M Portal V
Hepatic V
Lt Hepatic V
Rt Hepatic V
M Hepatic V
Splenic V
SMV

• Gynecology

B-Mode

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 W
Ovary H

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

- B-Mode

- 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)
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
MAD

AFI

AF1
AF2
AF3
AF4

M-Mode

FHR
LVIDd
LVIDs
RVIDd
RVIDs
IVSd
IVSs
RVIDd(Z-Score)
LVIDd(Z-Score)

D-Mode

Umb A
Duct Veno
Placenta A
MCA
Fetal Ao
Desc Aorta
Ut A
Ovarian A
FHR

• Cardiology

B-Mode

LA Diam(2D)
LA Major
LA Minor
RA Major
RA Minor
LV Major
LV Minor
RV Major
RV Minor
LA Area
RA Area
LV Area(d)
LV Area(s)
RV Area(d)
RV Area(s)
LVIDd(2D)
LVIDs(2D)
LVIDd(Teich-2D)
LVIDs(Teich-2D)
LVIDd(Cube-2D)
LVIDs(Cube-2D)
LVIDd(Gibson-2D)

LVIDs(Gibson-2D)
 RVDd(2D)
 RVDs(2D)
 LVPWd(2D)
 LVPWs(2D)
 RVAWd(2D)
 RVAWs(2D)
 IVSd(2D)
 IVSs(2D)
 Ao Diam(2D)
 Ao Arch Diam(2D)
 Ao Asc Diam(2D)
 Ao Desc Diam(2D)
 Ao Isthmus(2D)
 Ao st junct(2D)
 Ao Sinus Diam(2D)
 Duct Art Diam
 Pre Ductal
 Post Ductal
 ACS(2D)
 LVOT Diam(2D)
 AV Diam
 AVA
 PV Diam
 LPA Diam(2D)
 RPA Diam(2D)
 MPA Diam(2D)
 RVOT Diam(2D)
 MV Diam
 MVA
 MCS(2D)
 MV EPSS(2D)
 TV Diam
 TVA
 IVC Diam(Insp)
 IVC Diam(Expir)
 SVC Diam(Insp)
 SVC Diam(Expir)
 LCA Diam
 RCA Diam
 VSD Diam
 ASD Diam
 PDA Diam
 PFO Diam

PEd(2D)
 PEs(2D)
 Diastole(Teich-2D)
 Systole(Teich-2D)
 Diastole(Cube-2D)
 Systole(Cube-2D)
 Diastole(Gibson-2D)
 Systole(Gibson-2D)
 HR(Teich 2D)
 HR(Cube 2D)
 HR(Gibson 2D)

 LA/Ao(2D)
 Ao/LA(2D)

 S-P Ellipse
 LVLd apical(SP Ellipse)
 LVAd apical(SP Ellipse)
 LVLs apical(SP Ellipse)
 LVAs apical(SP Ellipse)
 HR(SP Ellipse)
 B-P Ellipse
 LVIDd(BP Ellipse)
 LVIDs(BP Ellipse)
 LVAd sax MV(BP Ellipse)
 LVAs sax MV(BP Ellipse)
 LVAd apical(BP Ellipse)
 LVAs apical(BP Ellipse)
 HR(BP Ellipse)
 Bullet
 LVLd apical(Bullet)
 LVLs apical(Bullet)
 LVAd sax MV(Bullet)
 LVAs sax MV(Bullet)
 HR(Bullet)
 Mod.Simpson
 LVLd apical(Simp)
 LVLs apical(Simp)
 LVAd sax MV(Simp)
 LVAs sax MV(Simp)
 LVAd sax PM(Simp)
 LVAs sax PM(Simp)
 HR(Mod Simpson)
 Simp SP(A2C)

EDV(Simp SP-A2C)
 ESV(Simp SP-A2C)
 HR(Simp SP A2C)
 Simp SP(A4C)
 EDV(Simp SP-A4C)
 ESV(Simp SP-A4C)
 HR(Simp SP A4C)
 Simpson BP
 EDV(Simp BP-A2C)
 ESV(Simp BP-A2C)
 EDV(Simp BP-A4C)
 ESV(Simp BP-A4C)
 HR(Simp BP)
 Cube(2D)
 Diastole(Cube-2D)
 Systole(Cube-2D)
 IVSd(Cube-2D)
 LVIDd(Cube-2D)
 LVPWd(Cube-2D)
 IVSs(Cube-2D)
 LVIDs(Cube-2D)
 LVPWs(Cube-2D)
 HR(Cube 2D)
 Teichholz(2D)
 Diastole(Teich-2D)
 Systole(Teich-2D)
 IVSd(Teich-2D)
 LVIDd(Teich-2D)
 LVPWd(Teich-2D)
 IVSs(Teich-2D)
 LVIDs(Teich-2D)
 LVPWs(Teich-2D)
 HR(Teich 2D)
 Gibson(2D)
 Diastole(Gibson-2D)
 Systole(Gibson-2D)
 IVSd(Gibson-2D)
 LVIDd(Gibson-2D)
 LVPWd(Gibson-2D)
 IVSs(Gibson-2D)
 LVIDs(Gibson-2D)
 LVPWs(Gibson-2D)
 HR(Gibson 2D)
 LA Vol(A-L)
 LA Diam(LA Vol A-L)
 LAA(A2C)
 LAA(A4C)
 LA Vol(Simp)
 LA Vol(A2C)
 LA Vol(A4C)
 RA Vol(Simp)
 RA Vol(A4C)
 LV Mass(Cube-2D)
 IVSd(LV Mass Cube-2D)
 LVIDd(LV Mass Cube-2D)
 LVPWd(LV Mass Cube-2D)
 LV Mass(T-E)
 LVAd sax Epi(LV Mass T-E)
 LVAd sax Endo(LV Mass T-E)
 a
 d
 LV Mass(A-L)
 LVAd sax Epi(LV Mass A-L)
 LVAd sax Endo(LV Mass A-L)
 LVLd apical(LV Mass A-L)
 MVA(VTI)
 LVOT Diam(MVA VTI)
 LVOT VTI(MVA VTI)
 MV VTI(MVA VTI)
 AVA(VTI)
 LVOT Diam(AVA VTI)
 LVOT VTI(AVA VTI)
 AV VTI(AVA VTI)
 Qp/Qs
 AV Diam(Qp/Qs)
 AV VTI(Qp/Qs)
 AV HR(Qp/Qs)
 PV Diam(Qp/Qs)
 PV VTI(Qp/Qs)
 PV HR(Qp/Qs)
 PISA MR
 MR Rad
 MR AIs Vel
 MR VTI(PISA MR)
 PISA AR
 AR Rad
 AR AIs Vel
 AR VTI(PISA AR)

PISA TR
TR Rad
TR Als Vel
TR VTI(PISA TR)
PISA PR
PR Rad
PR Als Vel
PR VTI(PISA PR)

M-Mode

LA Diam(M)
LVIDd(M)
LVIDs(M)
LVIDd(Teich-M)
LVIDs(Teich-M)
LVIDd(Cube-M)
LVIDs(Cube-M)
LVIDd(Gibson-M)
LVIDs(Gibson-M)
RVDd(M)
RVDs(M)
LVPWd(M)
LVPWs(M)
RVAWd(M)
RVAWs(M)
IVSd(M)
IVSs(M)
Ao Diam(M)
Ao Arch Diam(M)
Ao Asc Diam(M)
Ao Desc Diam(M)
Ao Isthmus(M)
Ao st junct(M)
Ao Sinus Diam(M)
LVOT Diam(M)
ACS(M)
LPA Diam(M)
RPA Diam(M)
MPA Diam(M)
RVOT Diam(M)
MV E Amp
MV A Amp
MV E-F Slope
MV D-E Slope

MV DE
MCS(M)
MV EPSS(M)
PEd(M)
PEs(M)
LVPEP(M)
LVET(M)
RVPEP(M)
RVET(M)
Diastole(Teich-M)
Systole(Teich-M)
Diastole(Cube-M)
Systole(Cube-M)
Diastole(Gibson-M)
Systole(Gibson-M)
HR(Teich M)
HR(Cube M)
HR(Gibson M)
HR

LA/Ao(M)
Ao/LA(M)

LV Tei Index(M)
MV C-O dur(M)
LVET(LV Tei Index-M)
Cube(M)
Diastole(Cube-M)
Systole(Cube-M)
IVSd(Cube-M)
LVIDd(Cube-M)
LVPWd(Cube-M)
IVSs(Cube-M)
LVIDs(Cube-M)
LVPWs(Cube-M)
HR(Cube M)
Teichholz(M)
Diastole(Teich-M)
Systole(Teich-M)
IVSd(Teich-M)
LVIDd(Teich-M)
LVPWd(Teich-M)
IVSs(Teich-M)
LVIDs(Teich-M)

LVPWs(Teich-M)
 HR(Teich M)
 Gibson(M)
 Diastole(Gibson-M)
 Systole(Gibson-M)
 IVSd(Gibson-M)
 LVIDd(Gibson-M)
 LVPWd(Gibson-M)
 IVSs(Gibson-M)
 LVIDs(Gibson-M)
 LVPWs(Gibson-M)
 HR(Gibson M)
 LV Mass(Cube-M)
 IVSd(LV Mass Cube-M)
 LVIDd(LV Mass Cube-M)
 LVPWd(LV Mass Cube-M)

D-Mode

MV Vmax
 MV E Vel
 MV A Vel
 MV E VTI
 MV A VTI
 MV VTI
 MV AccT
 MV DecT
 IVRT
 IVCT
 MV E Dur
 MV A Dur
 LVOT Vmax
 LVOT VTI
 LVOT AccT
 A Ao Vmax
 D Ao Vmax
 AV Vmax
 AV VTI
 LVPEP(Doppler)
 LVET(Doppler)
 AV AccT
 AV DecT
 RVET(Doppler)
 RVPEP(Doppler)
 TV Vmax

TV E Vel
 TV A Vel
 TV VTI
 TV AccT
 TV DecT
 TV A Dur
 RVOT Vmax
 RVOT VTI
 PV Vmax
 PV VTI
 PV AccT
 MPA Vmax
 RPA Vmax
 LPA Vmax
 PVein S Vel
 PVein D Vel
 PVein A Vel
 PVein A Dur
 PVein S VTI
 PVein D VTI
 PVein DecT
 IVC Vel(Insp)
 IVC Vel(Expir)
 SVC Vel(Insp)
 SVC Vel(Expir)
 MR Vmax
 MR VTI
 MS Vmax
 dP/dt
 AR Vmax
 AR VTI
 AR DecT
 AR PHT
 AR Ved
 TR Vmax
 TR Vmax(RVSP)
 TR VTI
 PR Vmax
 PR VTI
 PR PHT
 PR Ved
 RAP
 VSD Vmax
 ASD Vmax

PDA Vel(d)
 PDA Vel(s)
 Coarc Pre-Duct
 Coarc Post-Duct
 Ea (medial)
 Aa (medial)
 ARa (medial)
 DRa (medial)
 Sa (medial)
 Ea (lateral)
 Aa (lateral)
 ARa (lateral)
 DRa (lateral)
 Sa (lateral)
 HR
 AV HR
 MV HR
 TV HR
 PV HR
 LVOT HR
 RVOT HR

 MVE/A
 MVA(PHT)
 TV E/A
 TVA(PHT)

 MVA(VTI)
 LVOT Diam(MVA VTI)
 LVOT VTI(MVA VTI)
 MV VTI(MVA VTI)
 AVA(VTI)
 LVOT Diam(AVA VTI)
 LVOT VTI(AVA VTI)
 AV VTI(AVA VTI)
 LVTei Index(Doppler)
 MV C-O dur(Doppler)
 LVET(LV Tei Index-Doppler)
 RVSP
 TR Vmax(RVSP)
 RAP
 PAEDP
 PR Ved(PAEDP)
 RAP

RVTei Index
 TV C-O dur
 RVET(RV Tei Index)
 Qp/Qs
 AV Diam(Qp/Qs)
 AV VTI(Qp/Qs)
 AV HR(Qp/Qs)
 PV Diam(Qp/Qs)
 PV VTI(Qp/Qs)
 PV HR(Qp/Qs)
 PISA MR
 MR Rad
 MR Als Vel
 MR VTI(PISA MR)
 PISA AR
 AR Rad
 AR Als Vel
 AR VTI(PISA AR)
 PISA TR
 TR Rad
 TR Als Vel
 TR VTI(PISA TR)
 PISA PR
 PR Rad
 PR Als Vel
 PR VTI(PISA PR)

• Urology

B-Mode
 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

Renal Vol
Prostate Vol
Prostate Quality
Testicular Vol
Pre-BL Vol
Post-BL Vol
Mictur.Vol

Kidney
 Renal L
 Renal H
 Renal W
 Cortex
Adrenal
 Adrenal L
 Adrenal W
 Adrenal H
Prostate

Prostate W
Prostate H
Prostate L
Seminal Vesicle
 Seminal L
 Seminal W
 Seminal H
Testis
 Testicular L
 Testicular W
 Testicular H
Bladder
 Pre-BL L
 Pre-BL W
 Pre-BL H
 Post-BL L
 Post-BL W
 Post-BL H
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

- Vascular
 B-Mode

CCA IMT
Bulb IMT
ICA IMT
ECA IMT

Stenosis D
Stenosis A

IMT
 CCA IMT
 Bulb IMT
 ICA IMT
 ECA IMT

D-Mode

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

B-Mode
Thyroid L
Thyroid H
Thyroid W
Isthmus H
Testicular L
Testicular H
Testicular W
Breast Mass1 d1
Breast Mass1 d2
Breast Mass1 d3

Breast Mass2 d1
Breast Mass2 d2
Breast Mass2 d3
Breast Mass3 d1
Breast Mass3 d2
Breast Mass3 d3
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

Thyroid Vol

Thyroid

Thyroid L
Thyroid W
Thyroid H

Testis

Testicular L
Testicular W
Testicular H

Breast Mass1

Breast Mass1 d1
Breast Mass1 d2
Breast Mass1 d3

Breast Mass2

Breast Mass2 d1
Breast Mass2 d2
Breast Mass2 d3

Breast Mass3

Breast Mass3 d1
Breast Mass3 d2
Breast Mass3 d3

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

D-Mode

STA

ITA

Orthopedics

HIP

HIP-Graf

HIP(α)

HIP(β)

d/D

EM (Emergency Medicine)

B-Mode

Renal L

Renal H

Renal W

CBD

Portal V Diam

CHD

GB wall th

Aorta Diam

Aorta Bif

Ureter

Pre-BL L

Pre-BL H

Pre-BL W

Post-BL L

Post-BL H

Post-BL W

GS

YS

CRL

BPD

UT L

UT H

UT W

Endo

Ovary L

Ovary H

Ovary W

Renal Vol
Pre-BL Vol
Post-BL Vol
Mictur.Vol
Ovary Vol
UT Vol
UT SUM

Uterus
 UT L
 UT H
 UT W
 Endo
Ovary
 Ovary L
 Ovary W
 Ovary H
Kidney
 Renal L
 Renal H
 Renal W
 Cortex
Bladder
 Pre-BL L
 Pre-BL W
 Pre-BL H
 Post-BL L
 Post-BL W
 Post-BL H

M-Mode
 FHR

D-Mode
 FHR

6.3 Auto Calculation
PS
ED
MD
PPG
TAMAX
Vol Flow(TAMAX)

TAMEAN
Vol Flow(TAMEAN)
DT
MPG
MMPG
VTI
AT
S/D
D/S
PI
RI
PV
HR
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

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

6.7 Report

- Specific report template to the application
- Editable value in report
- Images are selectable
- Titles are pre-settable in setup
- Export as PDF/RTF format

* 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

- 1TB hard drive. About 726GB internal hard drive reserved for patient data storage
- Capable of storage up to approximately 79087 single frames (FRM format)
- Storage area
 - Pre-settable: image area, standard area, full area
 - Image area: 1100*790
 - Standard area: 1260*910
 - Full-screen: 1920*1080

7.2 Exam management

- iStation™ workstation dedicated for patient exam management
- Patient exam query/retrieve
- Support review of current and past exam
- New exam, Activate exam, Continue exam functions, End exam are available
- Support measurements and calculations on archived exam and images
- Export image as BMP/JPG/TIFF/DCM/FRM format (FRM: system format)
- Export cine as DCM/AVI/CIN/MP4 format (CIN: system format)
- Support backup/send to USB devices, CD-RW/DVD-RW media

8 Connectivity

8.1 Ethernet Network Connection

- Wired connection

8.2 DICOM 3.0

- DICOM Basic
 - Task management
 - Print
 - Storage
 - Storage Commitment
 - Media Exchange

- DICOM Worklist
 - DICOM Modality Performed Procedure Step - MPPS
 - DICOM OB/GYN structure report
 - DICOM Cardiac structure report
 - DICOM Vascular structure report
 - DICOM Query/Retrieve
- ### 8.3 iStorage (included in UltraAssist tool)

- 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 Wi-Fi
- 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

9 Transducers

9.1 Curve array

- 3C5P
 - Application: Gynecology, obstetrics, pediatric, abdominal, vascular, urology
 - Bandwidth: 1.7-6.0 MHz (-20dB)
 - Number of Elements: 128
 - Depth: 2.8- 38.8 cm
 - FOV (max): 72°
 - ExFOV: 92°
 - Convex Radius: 50 mm
 - Physical Footprint: 76.0 mm×29.5 mm
 - Aperture: 62.0 mm×16.0 mm
 - B-mode Frequencies: 2.0, 3.5, 4.5,

- 5.0 MHz
 - Harmonic Frequencies: 5.0, 6.0 MHz
 - Doppler Frequencies: 2.5, 3.0 MHz
 - Biopsy Guide: NGB-006, multi angle, reusable
 - 6C2P
 - Application: Pediatric, cardiac, abdominal, nerve, vascular, Small parts, musculo-skeletal
 - Bandwidth: 3.3-11.3MHz(-20dB)
 - Number of Elements: 128
 - Depth: 0.9 - 29.6 cm
 - FOV (max): 100°
 - ExFOV: 120°
 - Convex Radius: 15mm
 - Physical Footprint: 33.5mm×24.8 mm
 - Aperture: 29.0 mm×10.0 mm
 - B-mode Frequencies: 5.0, 6.5, 7.5, 8.5MHz
 - Harmonic Frequencies: 8.0, 9.0MHz
 - Doppler Frequencies: 4.4, 5.0MHz
 - Biopsy Guide: NGB-005, multi angle, reusable
 - 6CV1P
 - Application: Gynecology, obstetrics, pediatric, urology
 - Bandwidth: 3.5-12.3 MHz (-20dB)
 - Number of Elements: 128
 - Depth: 1.8 - 29.6 cm
 - FOV (max): 150°
 - ExFOV: 190°
 - Convex Radius: 10 mm
 - Physical Footprint: 22.1 mm×21.5 mm
 - Aperture: 22.12 mm×9.1 mm
 - B-mode Frequencies: 5.0, 6.5, 7.5, 8.5MHz
 - Harmonic Frequencies: 8.0, 9.0MHz
 - Doppler Frequencies: 4.0, 5.0MHz
 - Biopsy Guide: NGB-004, single angle, reusable
 - C6-2P
 - Application: Gynecology, obstetrics, pediatric, abdominal, vascular, urology
 - Bandwidth: 1.7-6.0 MHz (-20dB)
 - Number of Elements: 128
 - Depth: 2.8 - 38.8 cm
 - FOV (max): 60°
 - ExFOV: 80°
 - Convex Radius: 60 mm
 - Physical Footprint: 76.5 mm×28 mm
 - Aperture: 68 mm×19.2 mm
 - B-mode Frequencies: 2.0, 3.5, 4.5, 5.0 MHz
 - Harmonic Frequencies: 5.0, 6.0 MHz
 - Doppler Frequencies: 2.5, 3.0 MHz
 - Biopsy Guide: NGB-022, multi-angle, reusable
 - V10-4BP
 - Application: Gynecology, obstetrics, pediatric, urology
 - Bandwidth: 3.4- 11.0 MHz (-20dB)
 - Number of Elements: 128
 - Depth: 1.8 - 29.6 cm
 - FOV (max): 161°
 - ExFOV: 181°
 - Convex Radius: 10 mm
 - Physical Footprint: 22.1 mm×21.5 mm
 - Aperture: 22.12 mm×9.1 mm
 - B-mode Frequencies: 5.0, 6.5, 7.5, 8.5 MHz
 - Harmonic Frequencies: 8.0, 9.0 MHz
 - Doppler Frequencies: 4.0, 5.0 MHz
 - Biopsy Guide: NGB-004, single angle, reusable
- 9.2 Volume curved array
- D6-2P
 - Application: Gynecology, obstetrics, abdominal
 - Bandwidth: 1.7-5.6 MHz (-20dB)
 - Number of Elements: 80
 - Depth: 2.8 - 38.8 cm

- FOV (max): 70°
- ExFOV: 90°
- Convex Radius: 40mm
- Physical Footprint: 74.0 mm×49.0 mm
- Aperture: 49 mm×14.15 mm
- B-mode Frequencies: 2.0, 3.5, 4.0, 5.0 MHz
- Harmonic Frequencies: 5.0, 6.0MHz
- Doppler Frequencies: 2.5, 3.0MHz
- Biopsy Guide: not available

9.3 Linear array

- 7L4P

- Application: Pediatric, small parts, musculo-skeletal, vascular, nerve
- Bandwidth: 3.7-13.1 MHz (-20dB)
- Number of Elements: 128
- Depth: 0.9 - 29.6 cm
- Field of View (max): 38 mm
- Steered Angle: +/-6°(B); +/-12° (Color, PW)
- Physical Footprint: 45.7 mm×10.9 mm
- Aperture: 43.0 mm×10.0 mm
- B-mode Frequencies: 5.0, 7.5, 10.0, 12.0 MHz
- Harmonic Frequencies: 8.0, 10.0 MHz
- Doppler Frequencies: 5.0, 5.7 MHz
- Biopsy Guide: NGB-007, multi angle, reusable

- 7L5P

- Application: Pediatric, small parts, musculo-skeletal, vascular, nerve
- Bandwidth: 3.2-11.8 MHz (-20dB)
- Number of Elements: 128
- Depth: 0.9 - 29.6 cm
- Field of View (max): 52.6 mm
- Steered Angle: +/-6°(B); +/-10° (Color, PW)
- Physical Footprint: 59.1 mm×12.0 mm
- Aperture: 56.0 mm×10.0 mm
- B-mode Frequencies: 5.0, 7.5, 8.5,

- 10.0 MHz
- Harmonic Frequencies: 8.0, 10.0MHz
- Doppler Frequencies: 5.0, 5.7MHz
- Biopsy Guide: NGB-007, multi angle, reusable

- 7L4BP

- Application: Pediatric, small part, MSK, vascular, nerve
- Bandwidth: 3.2-11.2 MHz (-20dB)
- Number of Elements: 128
- Depth: 0.9 - 29.6 cm
- Field of View (max): 38 mm
- Steered Angle: +/-6°(B); +/-20° (Color, PW)
- Physical Footprint: 61 mm×24.4 mm
- Aperture: 45.7 mm×10.9 mm
- B-mode Frequencies: 5.0, 6.5, 8.5, 10.0 MHz
- Harmonic Frequencies: 9.0, 10.0 MHz
- Doppler Frequencies: 5.0, 5.7 MHz
- Biopsy Guide: NGB-007, multi angle, reusable

- 6LE7P

- Application: Gynecology, obstetrics, pediatric, urology
- Bandwidth: 3-12 MHz (-20dB)
- Depth: 1.8 - 29.6 cm
- Number of Elements: 128
- Field of View (max): 65.8 mm
- Steered Angle: +/-6° (B, Color, PW)
- Physical Footprint: 17 mm×17 mm
- Aperture: 72 mm×11 mm
- B-mode Frequencies: 5.0, 6.5, 7.5, 8.5
- Harmonic Frequencies: 8.0, 9.0 MHz
- Doppler Frequencies: 4.4, 5.3 MHz
- Biopsy Guide: NGB-009, single angle, reusable

9.4 Phased array

- 2P2P

- Application: Abdominal, cardiac
- Bandwidth: 1.5-5.0 MHz (-20dB)
- Number of Elements: 64
- Depth: 2.8 - 31.4 cm
- Field of View (max): 90°
- Physical Footprint: 25.2 mm×20.6 mm
- Aperture: 23.0 mm×15.0 mm
- B-mode Frequencies: 2.0, 2.5, 3.0, 3.5 MHz
- Harmonic Frequencies: 3.2, 3.6 MHz
- Doppler Frequencies: 2.0, 2.3 MHz;
- TDI Frequencies: 2.0, 2.3MHz
- CW Frequency: 2.0 MHz
- Biopsy Guide: NGB-011, multi angle, reusable

10 Peripheral Devices and

Accessories

- 10.1 Analog Black/white video printer
 - MITSUBISHI P93W-Z
 - SONY UP-X898MD
- 10.2 Digital Color Video Printer
 - SONY UP-D25MD
- 10.3 Graph/text printer
 - HP OFFICEJET PRO 8100
- 10.4 Footswitch
 - USB port: FS-81-SP-2 (1-pedal)
 - USB port: 971-SWNOM (2-pedal)
 - USB port: 971-SWNOM (3-pedal)
 - Support User-definable functions (Freeze, Save, Print)
- 10.5 ECG
 - 6-pin, AHA/IEC, for 3-lead wires
 - ECG wave display: on/off
 - Gain: 0-30
 - Sweep speed: 1-6, 1/step
- 10.6 Built-in Battery
 - Replaceable and rechargeable lithium battery
 - Continuous work time: more than 1.5 hour in B mode

- Full battery lasts about 24h in standby mode
 - Empty battery recharged to full in less than 3h
- 10.7 Built-in DVD R/W
- DVD R/W drive

11 System Inputs and Outputs

- 11.1 Video/Audio output
 - Video out: 1 port
 - Audio out: 2 ports
 - S-Video out: 1 port
 - HDMI out: 1 port
- 11.2 Physio input
 - Support ECG signal
 - ECG: 1 port
- 11.3 Other input/output
 - USB: 3 ports
 - Ethernet: 1 port
 - Remote control: 1 port

12 Safety and Conformance

- 12.1 Quality standards
 - ISO 9001:2008
 - ISO 13485:2003
- 12.2 Design standards
 - EN 60601-1 and IEC 60601-1
 - EN 60601-1-2 and IEC 60601-1-2
 - EN 60601-2-37 and IEC60601-2-37
 - EN ISO 14971 and ISO 14971
 - EN ISO10993-1 and ISO10993-1
 - EN 62366 and IEC 62366
 - EN ISO 17664
 - EN 62304 and IEC 62304
 - EN 1041
 - EN ISO 15223-1
- 12.3 CE declaration

DC-30 system is fully in conformance with the Council Directive 93/42/EEC Concerning Medical Devices, as amended by 2007/47/EC. The number adjacent to the CE marking (0123) is the code of the EU-notified body that certified meeting the requirements of Annex II of the Directive.

NOTICE:

Not all features or specifications described in this document may be available in all transducers 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