

Diagnostic Ultrasound System

System Description

The Z60 is an ergonomically designed portable and ease-of-use machine for multi-specialty use like adults, pregnant women, pediatric patients and neonates.

Intended Use

- CE Region: It is applicable for adults, pregnant women, pediatric patients and neonates. It is intended for use in gynecology, obstetrics, abdominal, pediatric, small organ, cephalic, transcranial, musculo-skeletal, cardiac, vascular, urology, orthopedics, nerve and intraoperative exams.
- FDA Region: It is applicable for adults, pregnant women, pediatric patients and neonates. It is intended for use in fetal, abdominal, Intra-operative (abdominal, thoracic, and vascular), pediatric, small organ(breast, thyroid, testes), neonatal and adult cephalic, trans-rectal, trans-vaginal, musculo-skeletal(conventional, superficial), adult and pediatric cardiac, peripheral vessel, and urology exam .

General Specification

Dimensions and Weight

- Size: 147±5mm×361±5mm×358±5mm (Depth×Width×Height)
- Net Weight: 8.2±0.5kg (without battery, two probe ports)

Electrical Power

Input power

- Voltage: 100-240V~
- Frequency: 50/60Hz
- Input current: 1.5- 0.8A

Battery

- Lithium-ion Battery Pack: 14.8 V --- , 6600 mAh
- Charge time: < 3 hours (connected on AC power supply, with the system powered off)

- Endurance time: > 100 min

Boot time

- Boot time: >38 s
- Wake up time (from standby): >7 s

Operating Environment

Ambient temperature: 0°C ~ 40°C

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

Atmospheric pressure: 700 hPa ~ 1060 hPa

Storage & Transportation Environment

Ambient temperature: -20°C ~ 55°C

Relative humidity: 30% ~ 95% (no condensation)

Atmospheric pressure: 700 hPa ~ 1060 hPa

Probe

Probe Types

- Convex array
- Linear array
- Phased array

Scanning Methods

- Electronic convex with extend FOV
- Electronic linear with slant scanning and trapezoid
- Electronic sector

Probe Model

| | |
|-----------|----------------------------|
| > C6-2P | Convex |
| > 6C2P | Convex |
| > 6CV1P | Endocavity |
| > CB10-4P | Bi-plane (convex & convex) |
| > 7L4BP | Linear |
| > 7L5P | Linear |
| > L14-6P | Linear |
| > V10-4BP | Convex |
| > 7LT4P | Linear |
| > 6LE7P | Linear |
| > 2P2P | Phased |
| > P7-3P | Phased |
| > D6-2P | Volume |

Available Needle-guided Bracket for Probe:

| | |
|-----------|---------|
| ➢ C6-2P | NGB-022 |
| ➢ 3C5P | NGB-006 |
| ➢ V10-4BP | NGB-004 |
| ➢ 6C2P | NGB-005 |
| ➢ 7L4BP | NGB-007 |
| ➢ 7L4P | NGB-007 |
| ➢ 7L5P | NGB-007 |
| ➢ 6LE7P | NGB-009 |
| ➢ 7LT4P | NGB-010 |
| ➢ 2P2P | NGB-011 |
| ➢ L14-6P | NGB-016 |

System Configuration

Standard Configuration

- Display
 - 15-inch LCD, High-Resolution 1024 x 768
 - Contrast & Brightness adjustable
 - Screen Saver: Time and picture presettable
 - Angle adjustable: 60°
- Control Panel
 - Alphanumeric Keys
 - Function Keys
 - Knobs
 - User-defined Keys: function presettable
 - 8 segment TGC
 - Trackball: Color & Speed presettable
 - Key Backlight Brightness & Volume presettable
 - Integrated Speakers
- Indicators: Power/Battery/Standby/HDD status
- Handle
- Phase Shift harmonic imaging
- Steer scanning for linear probes (2D Steer)
- iBeam™
- iClear™ (Speckle Suppression Imaging)
- iTouch™
- ExFOV Imaging
- iStation™
- 500GB integrated hard disk
- I/O Interfaces
 - Transducer port: 2 or 3 (optional)
 - Power input port: 1 (Connect to the AC power supply)
 - USB port: 4
 - VGA OUT port: 1
 - Video OUT: 1

- S-Video OUT: 1 (Separate video output)
- Ethernet port: 1 (Connect to network)
- Remote control port: 1
- Equipotential terminal: 1
- Multi-language screen display and control panel overlay
- Application categories
 - Abdomen
 - Obstetrics
 - Gynecology
 - Cardiology
 - Small Parts
 - Urology
 - Vascular
 - Pediatric
 - Emergency
 - Nerve

Accessories

- Operator's manual
 - Basic Volume.
 - Advanced Volume
 - Acoustic Output Volume
 - Operation Note
- Gel
- Power cord
 - 3-Flat-Pin Power Cord
 - EU Power Cord
 - US Power Cord
 - UK Power Cord
- Probe holder
- Grounded Cable
- Video Printer Remote Cable

System Language

- Software display and keyboard input available: Chinese/English/Russian/Czech/Polish
- Software display available only German/Spanish/French/Italian/Portuguese/Icelandic/Norwegian/Swedish/Finnish/Turkish/Danish/Indonesian
- Control panel overlay available: Chinese/German/Spanish/French/Italian/Portuguese/Russian/Czech/Polish
- Operation manual available: Chinese/English/German/Spanish/French/Italian/Portuguese/Russian/Turkish

Options

- IMT (Auto Calculation of Intima-Media Thickness)
- HPRF
- PW mode
- CW mode
- iScape View
- Free Xros M
- Color/Power
- Smart 3D
- 4D module
- iLive
- Smart Face
- Smart OB
- Tissue Doppler Imaging
- Color M
- Natural Touch Elastography
- UWN Contrast Imaging
- iNeedle
- iWorks
- ECG module
- ECG lead
- DICOM basic
 - Task management
 - DICOM storage
 - DICOM print
 - DICOM storage commitment
 - DICOM media storage (including DICOM DIR)
- DICOM Worklist
- DICOM MPPS
- DICOM Query/Retrieve
- DICOM OB/GYN structured report
- DICOM vascular structured report
- DICOM cardiac structured report
- Keys for optional functions
- Battery Pack
- External USB DVD drive
- Footswitch:
 - 971-SWNOM (2-pedal or 3-pedal)
- Mobile trolley: UMT-150
 - Weight: 22 kg
 - Width: 445 mm
 - Depth: 535 mm
 - Height: selective (not available after installed):
810 mm, 870 mm, 2 levels
- Mobile trolley: UMT-160
 - Weight: 21 kg
 - Width: 616 mm

- Depth: 702 mm
- Height: selective (not available after installed):
1247 mm, 1147 mm, 2 levels

- Carrying Case
- Probes
- Needle-guided brackets

Peripherals Supported

- Black and White Video Printer
 - SONY UP-X898MD Analog
 - MITSUBISHI P93W-Z Analog
- Color Video Printer
- Graph / text printer
HP OFFICEJET PRO 8100
- LAN Accessory
LPA11

Exam Mode

- Adult ABD (Adult Abdomen)
- ABD-Difficult (Abdomen-Difficult)
- Ped-ABD
- GYN (Gynecology)
- OB1
- OB2/3
- Fetal Cardiac
- Kidney
- Urology
- Prostate
- Carotid
- IMT (Intima-Media Thickness)
- Upper Ext Artery
- Lower Ext Artery
- Upper Ext Vein
- Lower Ext Vein
- Thyroid
- Breast
- Testicle
- MSK (Musculoskeletal)
- Nerve
- Superficial
- Orthopedic
- Adult Cardiac
- CAR-Difficult
- TCI
- Ped-cardiac
- Neonatal Head

- Neonatal Cardiac
- EM ABD
- EM FAST
- EM OB
- EM Vascular
- EM Superficial
- CVC (Central Venous Catheterization)
- Vascular Access

Imaging Mode

- B-Mode
 - Tissue Harmonic Imaging
 - Phase Shift Harmonic Imaging
- Slant scanning for linear probes (B, color/power, PW/CW independent)
- ExFOV Imaging for Convex Probe (trapezoid imaging for linear probe)
- M Mode
- Color Mode
- Power Mode
- PW (Pulse Wave Doppler)
- HPRF (High Pulse Repeat Frequency)
- CW (Continuous Wave Doppler)
- Color M Mode (CM)
- Free Xros M Mode
- TDI (Tissue Doppler imaging)
 - TVI (Tissue Velocity Imaging)
 - TEI (Tissue Energy Imaging)
 - TVD (Tissue Velocity Doppler Imaging)
 - TVM (Tissue Doppler Velocity M Mode)
- iScape™ (iScape View)
- 3D/4D
- Natural Touch Elastography
- Contrast Imaging
- Display Mode:
 - Single window
 - B/C/D triplex mode
 - Dual live: B/C, B/TDI, B/Contrast
 - Adjustable time line display format (V1:1, V1:2, V2:1, Full)
 - Dual-split: B/C, B/TDI, B/M, B/PW, B/Free Xros M
 - Quad-split

Imaging Features

- iBeam™ (Spatial Compounding Imaging for Linear

and Convex Probe)

- iScape™
- Multi-frequency probes for 2D imaging modes
- iClear™ (adaptive speckle suppression imaging for all probes)
- iTouch™ (B/PW): Auto Optimization
- TSI (Tissue Specific Imaging)
- iZoom™
- Spot Zoom and Pan Zoom

B Mode

- Display Depth
- Adjustable focus number
- Adjustable focus positions
- Magnification factor:
 - Spot Zoom
 - Pan Zoom
- iZoom
- System dynamic range
- Gain
- TGC
- Colorize
- Tint map
- Gray map
- FOV
- ExFOV
- Persistence
- Rotation
- R/L, U/D Flip
- Line Density
- iTouch Bright
- A.power
- TSI
- Steer
- HScale
- Middle line
- iClear
- iBeam
- Gray Invert
- Auto Merge

M Mode

- Speed
- Edge Enhance
- M Soften

Color Mode

- Gain
- Baseline

- Scale
- Persistence
- Smooth
- ROI adjustment
- Color Map
- Priority
- WF
- Line Density
- Dual Live
- Invert
- B/C Align
- Packet Size

Power Mode

- Dynamic Range
- Power Map

PW/CW Mode

- Gain
- Baseline
- PRF/Scale
- Audio volume
- Angle
- Quick Angle
- SVD (CW focus depth)
- Speed
- iTouch (PW)
- SV
- Dynamic range
- Gray map
- Colorize
- Tint map
- WF
- Duplex/Triplex
- HPRF
- T/F Res
- Auto Calc
- Auto Calc Cycle
- Auto Calc Param
- Trace Area

Tissue Velocity/Energy Imaging (included in TDI option)

- Available on phased array transducer
- Dual live
- Acoustic output power
- Gain
- Dynamic range
- ROI size/position

- Scale
- Baseline
- Wall filter
- Packet size
- Smooth
- B/C Align
- Priority
- Map
- Invert
- Persistence
- Line density

Tissue Velocity Doppler (included in TDI option)

- Available on phased array transducer
- Display formats
- Duplex/Triplex
- Sample gate depth
- Scale
- Baseline
- Audio
- Gain
- Dynamic range
- Speed
- Wall filter
- Invert
- Angle
- Quick angle
- Gray map
- Tint map
- Time/frequency resolution

Free Xros M Mode

- Tint map
- Gray map
- Display format

4D

- Available on volume transducer
- Static 3D and 4D
- Display formats
- Reset
- Quick Rotation
- Render type
- Accept VOI
- VOI
- Render mode
- Direct
- Threshold
- Opacity

- Smooth
- Bright
- Contrast
- Tint: off
- Current window
- MPR/VR
- iClear
- Face+

iPage

- Slices number
- Spacing
- Ref. Plane
- Display format
- Adjust Slice
- Slice Position
- Reset Orientation

iLive

- Light Position
- Render Modes

Edit

- Rotation control
- Tool
- Other operations

Smart Face

- Face Contact
- Quick Rotation

Natural Touch Elastography Mode

- Opacity
- Single E
- Map
- Smooth
- Invert

UWN Contrast Imaging

- Timer 1
- Timer 2
- Mix Map
- Dual live
- Destruct
- Image position
- iTouch
- iClear

Display Annotations

- Manufacturer logo
- Hospital name
- Exam date

- Exam time
- Acoustic output indices
- Freeze icon
- Gender
- Age
- ID
- Other ID
- Name
- Probe model
- Current exam mode
- Accession#
- Operator
- Menu
- Image
- Probe orientation mark
- Time line
- Coordinate axis, including depth, time, frequency
- TGC curve
- Focus
- Comment
- Body Mark
- Measure caliper
- Gray/color scale bar
- Thumbnail
- Help information
- Status icons
- Biopsy guideline
- Measure result window (up to 8 results can be displayed)
- Image parameters

Comments and Body Mark

Comment

Text comment

- Comment text for all exam modes
- Custom: add/delete/edit comment units in current menu.

Arrow

- Arrow size
- Arrow position
- Arrow orientation

Body Mark

Application package

- Body marks for all exam modes:
- Custom: import/delete body marks

Storage/ Connection

- 500G integrated hard disk
- External DVD-R/W
- 4 USB ports
- Image archive on hard disk, DVD, Medsight, network storage (iStorage) or temporary saving in cine memory
- Clipboard
- Thumbnail
- Single-frame image formats: BMP, JPG, TIFF, DCM, FRM (supports off-line analysis)
- Multi-frame images formats: AVI, DCM, CIN, (supports off-line analysis)
- Storage area:
 - Image area: 640*522
 - Standard area: 800*600
 - Full-screen: 1024*768
- iVision: Demo player
- Cine review: Auto, Manual (auto review segment can be set), supports linked cine review for 2D, M/D images.
- Cine memory capacity (Max.)
 - Clip length presettable: 1-60s
 - B mode: 6197 frames
 - M mode: 90.5 s
 - PW/CW: 84.8 s
 - Color: 1744 frames
- Max. frames in HDD (B mode)
 - BMP: 197887
 - FRM: 57847
- iStorage
- DICOM:
 - DICOM Basic
 - Task management
 - DICOM storage
 - DICOM print
 - DICOM storage commitment
 - DICOM media storage (including DICOM DIR)
 - DICOM Worklist
 - Query/ Retrieve
 - Structured Report (SR)
 - MPPS
- 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 Android powered system.

iStation™

Intelligent patient data management system

- Integrated search engine for patient data
- Detailed patient information view
- Intelligent data backup/ restore
- Patient data/ image sending
- Patient data deleting
- Exam managing: create new exam, activate exam and continue exam
- Recycle Bin
- Task manager

Measure/Calc/Study

Caliper

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

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

Doppler mode

PS/ED

Vel

HR

Time

Acceleration

D Trace

Volume Flow

Vas Area

TAMEAN

TAMAX

Application

Abdomen

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

Obstetrics

B-Mode
GS
YS
CRL
NT
BPD
OFD
HC
AC
FL
TAD
APAD
TCD
CM
LVW
HW
OOD
IOD
HUM
Una
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 Simp)
 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) | AV HR(Qp/Qs) |
| Cube(2D) | PV Diam(Qp/Qs) |
| LVIDd(Cube-2D) | PV VTI(Qp/Qs) |
| LVIDs(Cube-2D) | PV HR(Qp/Qs) |
| HR(Cube 2D) | PISA MR |
| Teichholz(2D) | MR Rad |
| LVIDd(Teich-2D) | MR Als Vel |
| LVIDs(Teich-2D) | MR VTI(PISA MR) |
| HR(Teich 2D) | PISA AR |
| Gibson(2D) | AR Rad |
| LVIDd(Gibson-2D) | AR Als Vel |
| LVIDs(Gibson-2D) | AR VTI(PISA AR) |
| HR(Gibson 2D) | PISA TR |
| LA Vol(A-L) | TR Rad |
| LA Diam(LA Vol A-L) | TR Als Vel |
| LAA(A2C) | TR VTI(PISA TR) |
| LAA(A4C) | PISA PR |
| LA Vol(Simp) | PR Rad |
| LA Vol(A2C) | PR Als Vel |
| LA Vol(A4C) | PR VTI(PISA PR) |
| RA Vol(Simp) | |
| RA Vol(A4C) | M-Mode |
| LV Mass(Cube-2D) | LA Diam(M) |
| IVSd(LV Mass Cube-2D) | LVIDd(M) |
| LVIDd(LV Mass Cube-2D) | LVIDs(M) |
| LVPWd(LV Mass Cube-2D) | LVIDd(Teich-M) |
| LV Mass(T-E) | LVIDs(Teich-M) |
| LVAd sax Epi(LV Mass T-E) | LVIDd(Cube-M) |
| LVAd sax Endo(LV Mass T-E) | LVIDs(Cube-M) |
| a | LVIDd(Gibson-M) |
| d | LVIDs(Gibson-M) |
| LV Mass(A-L) | RVDd(M) |
| LVAd sax Epi(LV Mass A-L) | RVDs(M) |
| LVAd sax Endo(LV Mass A-L) | LVPWd(M) |
| LVLd apical(LV Mass A-L) | LVPWs(M) |
| MVA(VTI) | RVAWd(M) |
| LVOT Diam(MVA VTI) | RVAWs(M) |
| LVOT VTI(MVA VTI) | IVSd(M) |
| MV VTI(MVA VTI) | IVSs(M) |
| AVA(VTI) | Ao Diam(M) |
| LVOT Diam(AVA VTI) | Ao Arch Diam(M) |
| LVOT VTI(AVA VTI) | Ao Asc Diam(M) |
| AV VTI(AVA VTI) | Ao Desc Diam(M) |
| Qp/Qs | Ao Isthmus(M) |
| AV Diam(Qp/Qs) | Ao st junct(M) |
| AV VTI(Qp/Qs) | 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)

 LVIDd(Cube-M)

 LVIDs(Cube-M)

 HR(Cube M)

Teichholz(M)

 LVIDd(Teich-M)

 LVIDs(Teich-M)

 HR(Teich M)

Gibson(M)

 LVIDd(Gibson-M)

LVIDs(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

AAo Vmax

DAo 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

 MV E/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)
 LV Tei Index(Doppler)
 MV C-O dur(Doppler)
 LVET(LV Tei Index-Doppler)
 RVSP
 TR Vmax(RVSP)
 RAP
 PAEDP
 PR Ved(PAEDP)
 RAP
 RV Tei 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)

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

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

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
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

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 | B-mode |
| Thyroid Mass2 d1 | HIP |
| Thyroid Mass2 d2 | HIP-Graf |
| Thyroid Mass2 d3 | HIP(α) |
| Thyroid Mass3 d1 | HIP(β) |
| Thyroid Mass3 d2 | d/D |
| Thyroid Mass3 d3 | Emergency |
| ----- | B-Mode |
| Thyroid Vol | Renal L |
| ----- | Renal H |
| Thyroid | Renal W |
| Thyroid L | CBD |
| Thyroid W | Portal V Diam |
| Thyroid H | CHD |
| Testis | GB wall th |
| Testicular L | Aorta Diam |
| Testicular W | Aorta Bif |
| Testicular H | Ureter |
| Breast Mass1 | Pre-BL L |
| Breast Mass1 d1 | Pre-BL H |
| Breast Mass1 d2 | Pre-BL W |
| Breast Mass1 d3 | Post-BL L |
| Breast Mass2 | Post-BL H |
| Breast Mass2 d1 | Post-BL W |
| Breast Mass2 d2 | GS |
| Breast Mass2 d3 | YS |
| Breast Mass3 | CRL |
| Breast Mass3 d1 | BPD |
| Breast Mass3 d2 | UT L |
| Breast Mass3 d3 | UT H |
| Thyroid Mass1 | UT W |
| Thyroid Mass1 d1 | Endo |
| Thyroid Mass1 d2 | Ovary L |
| Thyroid Mass1 d3 | Ovary H |
| Thyroid Mass2 | Ovary W |
| Thyroid Mass2 d1 | ----- |
| Thyroid Mass2 d2 | Renal Vol |
| Thyroid Mass2 d3 | Pre-BL Vol |
| Thyroid Mass3 | Post-BL Vol |
| Thyroid Mass3 d1 | Mictur.Vol |
| Thyroid Mass3 d2 | Ovary Vol |
| Thyroid Mass3 d3 | UT Vol |
| D-Mode | UT SUM |
| STA | ----- |
| ITA | Uterus |
| Orthopedics | 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

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

Diagnostic Report

- View/add images
- Data edit
- Print
- Save/ load comment
- export (to PDF/RTF file)
- View history report
- Obstetric analysis
- Fetal growth curve

Safety & Conformance

Quality Standards

- ISO 9001:2008
- ISO 13485:2003

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 62304 and IEC 62304
- EN ISO 17664
- EN 1041
- EN 980
- IEC 60878

CE Declaration

The ultrasound 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 number of the EU-notified body that certified meeting the requirements of the Directive.

Not all features or specifications described in this document may be available in all probes and/or modes.

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