

System Description

The diagnostic ultrasound system 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 intended for use in Gynecology, Obstetrics, Abdominal, Cardiac, Pediatric, Vascular, Cephalic, Musculo-skeletal, Orthopedics, Nerve, Transcranial, Small organ and Urology exams.
- FDA Region: It is applicable for adult, pregnant woman, pediatric and neonate. It is intended for use in Fetal, Abdominal, Pediatric, Musculo-skeletal (conventional, superficial), Peripheral Vascular, Trans-rectal, Trans-vaginal, Small organ (breast, thyroid and testes), Cephalic (neonatal and adult), Cardiac (adult and pediatric) and Urology exams.

General Specification

Dimensions and Weight

- Size: 147±5mm×361±5mm×358±5mm (Depth×Width×Height)
- Net Weight: 8.1±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: > 120 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

Scanning Methods

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

Probe Model

> 35C50EA	Convex
> 65EC10EA	Convex
> 75L38EA	Linear
> 65C15EA	Convex
> 35C20EA	Convex
> 10L24EA	Linear
> 35C50EB	Convex
> 75L38EB	Linear
> 65EC10EB	Convex
> D6-2EA	Convex

Available Needle-guided Bracket for Probe:

> 35C50EA	NGB-001
> 35C50EB	NGB-001
> 75L38EA	NGB-002
> 75L38EB	NGB-002
> 35C20EA	NGB-003
> 65EC10EA	NGB-004
> 65EC10EB	NGB-004
> 65C15EA	NGB-005

- > Obstetrics
- > Gynecology
- > Cardiology
- > Small Parts
- > Urology
- > Vascular
- > Pediatric
- > Emergency
- > Nerve

System Configuration

Standard Configuration

- Display
 - > 15-inch LCD, LED backlight, 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™
- 1TB 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

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: 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/Spanish/French/Portuguese/Russian/Turkish

Options

- Color/Power
- PW
- Smart 3D
- iLive
- 4D module
- IMT (Auto Calculation of Intima-Media Thickness)

- iScape View
- HPRF
- 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
- iWorks
- Smart Face
- Smart OB
- Keys for optional functions
- Battery Pack
- External USB DVD-RW
- Footswitch:
 - 971-SWNOM (2-pedal or 3-pedal)
 - FS-81-SP-2 (1-pedal)
- Mobile trolley: UMT-150
 - Weight: 21.7±1 kg
 - Width: 494±10 mm
 - Depth: 670±10 mm
 - Height: selective (not available after installed): 1173±10 mm, 1233±10 mm, 2 levels
- Mobile trolley: UMT-160
 - Weight: 27±1 kg
 - Width: 616±10 mm
 - Depth: 702±10 mm
 - Height: selective (not available after installed): 1247±10 mm, 1147±10 mm, 2 levels
- Mobile trolley: UMT-170
 - Weight: 12.5±1 kg (standard configuration); 14.5±1 kg (full configuration)
 - Width: 505±20 mm
 - Depth: 536±20 mm
 - Height: selective (not available after installed): 775±20 mm, 863±20 mm, 915±20 mm, 3 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
 - Kidney
 - Prostate
 - Carotid
 - IMT (Intima-Media Thickness)
 - Upper Ext Artery
 - Lower Ext Artery
 - Upper Ext Vein
 - Lower Ext Vein
 - Thyroid
 - Breast
 - Testicle
 - MSK (Musculoskeletal)
 - General Nerve
 - Superficial
 - Orthopedic
 - Adult Cardiac
 - EM ABD
 - EM FAST
 - EM OB
 - EM Vascular
 - EM Superficial
 - Fetal Cardiac
- ## **Imaging Mode**
- B-Mode
 - Tissue Harmonic Imaging
 - Phase Shift Harmonic Imaging
 - Slant scanning for linear probes (B, color/power,

- PW independent)
- ExFOV Imaging for Convex Probe (trapezoid imaging for linear probe)
- M Mode
- Color
- Power
- PW (Pulse Wave Doppler)
- HPRF (High Pulse Repeat Frequency)
- iScape
- Display Mode:
 - Single window
 - B/C/D triplex mode
 - Dual live: B/C
 - Adjustable time line display format (V1:2,V2:1,V1:1, Full)
 - Dual-split: B/C, B/M, B/PW
 - Quad-split

Ricardo Lopez Quito N7
Leonel Melo Latacunga DC-40

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
 - Minimum: 0.9 cm
 - Maximum: 38.8 cm
- Frame rate (Max.):
 - B mode: 400 fps (65C15EA)
- Adjustable focus number: 4
- Adjustable focus positions (Max.): 16
- Magnification factor:
 - Spot Zoom: continuously adjustable
 - Pan Zoom: 80%-1000%
- iZoom: instant full screen view, two levels
- System dynamic range: 30~220, 5/step
- Gain: 0~100dB, 2/step
- TGC: 8
- Colorize: on/off

- Colorize Map : on/off, 1~25
- Gray map: 1~25, 1/step
- FOV: on/ off, continuously adjustable
- ExFOV: on/ off (Trapezoid imaging for linear probe)
- Persistence: 0~7
- R/L, U/D Flip
- Line Density: L, M, H, UH
- iTouch Bright: -12~12dB, 3db/step
- A.power: 32steps
- TSI: General, Fat, Fluid, Muscle
- Steer: 3 levels, linear probe only
- HScale: on/ off
- Middle Line : on/ off
- iClear: on/off, 1~4
- iBeam: on/off
- Gray Invert: on/ off
- Auto Merge: on/ off, linear probe, Dual display mode
- Rotation: 0°/90°/180°/270°

M Mode

- Speed: 1~6
- Edge Enhance: 0~14
- M Soften: 0~14

Color Mode

- Frame rate (Max.): 260 fps (35C50EA)
- PFR (kHz): 0.3 (35C50EA)~ 15.5 (10L24EA)
- Flow velocities (cm/s, probe dependent): 5.0 (35C50EA)~ 100 (10L24EA)
- Gain: 0~100, 2/step
- Baseline: -8~8
- Persistence: 0~4
- Smooth: 0~4
- ROI adjustment: continuously
- Color Map: V0~V10; VV0~ VV9
- Priority: 0%~100%, 11 levels
- WF: 0~7
- Line Density: L, M, H, UH
- Dual Live: on/ off
- Invert: on/ off
- B/C Align: on/ off
- Packet Size: 0~3

Power Mode

- Dynamic Range: 10~70, 5/step
- Power Map: P0~P3; dP0~dP3

PW Mode

- PRF (kHz)
 - PW: 0.7 (10L24EA)~ 24.0 (35C50EA)

- Flow velocities (cm/s, probe dependent):
 - PW: 4.1 (10L24EA)~ 369.6 (35C50EA)
- Gain: 0~100, 2/step
- Baseline: -4~4
- Audio volume: 0~100%, 2%/step
- Angle: -89°~89°
- Quick Angle: -60, 0, 60
- Speed: 1~6
- iTouch: on/off
- SV:
 - 0.5~3 mm, 0.5 mm/step
 - 3~5 mm, 1 mm/step
 - 5~10 mm, 2.5 mm/step
 - 10~20 mm, 5 mm/step
- Dynamic range: 24~72, 2/step
- WF: 0~6
- Duplex/Triplex: on/ off
- HPRF: on/ off
- T/F Res: 0~4
- Auto Calc: on/ off
- Auto Calc Cycle: 1~5
- Auto Calc Param: setting auto spectrum calculation results
- Trace Area: Above/ Below/ All

4D

- Available on volume transducer
- Static 3D and 4D
- 4D frame rate: max. 31.1 vps
- Display formats: Single, Dual, Quad, A4:1
- Reset: Reset ALL, Reset curve, Reset orientation
- Quick Rotation: 0°, 90°, 180°, 270°
- Render type: Gray, Invert
- Accept VOI: on/off
- VOI: on/off
- Render mode: 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
- Bright: 0%-100%, 2%/step
- Contrast: 0%-100%, 2%/step
- Tint: off; 25 types
- Current window: VR, A, B, C
- MPR/VR: MPR, VR
- iClear: Off; On, 1-4 steps

- Face+: 0-3
- iPage
- Slices number: 3-25
 - Spacing: 0.5-10mm
 - Ref. Plane: A, B, C
 - Display format: 2×2, 3×3, 4×4, 5×5
 - Adjust Slice
 - Slice Position
 - Reset Orientation

iLive

- Light Position: 6
- Render Modes: iLive

Edit

- Rotation control: X, Y, Z axis
- Tool: inside contour, outside contour; inside rect, outside rect
- Other operations: undo, undo all

Smart Face

- Face Contact: -15 – 15
- Quick Rotation: 0°, 90°, 180°, 270°

Display Annotations

- Manufacturer logo
- Hospital name: up to 64 characters can be displayed
- Exam date: 3 types selectable, YY/MM/DD, MM/DD/YY, DD/MM/YY
- Exam time: 2 formats
- Acoustic output indices: MI, TIC, TIS, TIB
- Freeze icon
- Gender
- Age
- ID: up to 64 characters can be displayed
- Other ID: up to 64 characters can be displayed
- Name: up to 64 characters can be displayed
- Probe model
- Current exam mode
- Accession#
- Operator: up to 64 characters can be displayed
- 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

- 1TB integrated hard disk
- External DVD-R/W
- 4 USB ports
- Image archive on hard disk, DVD, 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: 8632 frames
 - M mode: 90.5 s
 - PW: 84.8 s
 - Color: 1894 frames
- Max. frames in HDD (B mode)
 - BMP: > 406000
 - FRM: > 118000
- 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

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	Acceleration
Trace Len	D Trace
Trace Len(Spline)	-----
Parallel	Volume Flow
B-Profile	Vas Area
B-Hist(Ellipse)	TAMEAN
B-Hist(Trace)	TAMAX
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	
	<i>Application</i>
	<i>Abdomen</i>
	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	OFD
Renal L	HC
Renal H	AC
Renal W	FL
Cortex	TAD
Bladder	APAD
Pre-BL L	TCD
Pre-BL W	CM
Pre-BL H	LVW
Post-BL L	HW
Post-BL W	OOD
Post-BL H	IOD
Adrenal	HUM
Adrenal L	Ulna
Adrenal W	RAD
Adrenal H	Tibia
D-Mode	FIB
Ren A Org	CLAV
Arcuate A	Vertebrae
Segment A	MP
Interlobar A	Foot
Renal A	Ear
M Renal A	APTD
Renal V	TTD
Aorta	FTA
Celiac Axis	THD
SMA	HrtC
C Hepatic A	TC
Hepatic A	Umb VD
Splenic A	F-kidney
IVC	Mat Kidney
Portal V	Cervix L
M Portal V	AF
Hepatic V	NF
Lt Hepatic V	Orbit
Rt Hepatic V	PL Thickness
M Hepatic V	Sac Diam1
Splenic V	Sac Diam2
SMV	Sac Diam3
Obstetrics	AF1
B-Mode	AF2
GS	AF3
YS	AF4
CRL	LVIDd
NT	LVIDs
BPD	LV Diam

LA Diam	FL/HC(Hadlock)
RVIDd	HC(c)
RVIDs	HrtC/TC
RV Diam	TCD/AC
RA Diam	LVW/HW
IVSd	LVD/RVD
IVSs	LAD/RAD
IVS	AoD/MPAD
LV Area	LAD/AoD
LA Area	MAD
RV Area	-----
RA Area	AFI
Ao Diam	AF1
MPA Diam	AF2
LVOT Diam	AF3
RVOT Diam	AF4
Facial Angle	
HrtA	M-Mode
MV Diam(Z-Score)	FHR
PV Diam(Z-Score)	LVIDd
Ao Asc Diam(Z-Score)	LVIDs
Ao Desc Diam(Z-Score)	RVIDd
Duct Art Diam(Z-Score)	RVIDs
TV Diam(Z-Score)	IVSd
LPA Diam(Z-Score)	IVSs
RPA Diam(Z-Score)	RVIDd(Z-Score)
IVC Diam(Z-Score)	LVIDd(Z-Score)
AV Diam(Z-Score)	
MPA Diam(Z-Score)	D-Mode
RV Diam(Z-Score)	Umb A
LV Diam(Z-Score)	Duct Veno
RV Area(Z-Score)	Placenta A
LV Area(Z-Score)	MCA
RVIDd(Z-Score)	Fetal Ao
LVIDd(Z-Score)	Desc Aorta
AC(c)	Ut A
-----	Ovarian A
Mean Sac Diam	FHR
AFI	Cardiology
EFW	B-Mode
EFW2	LA Diam(2D)
HC/AC(Campbell)	LA Major
FL/AC	LA Minor
FL/BPD	RA Major
AXT	RA Minor
CI	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)
 Cube(2D)
 LVIDd(Cube-2D)
 LVIDs(Cube-2D)
 HR(Cube 2D)
 Teichholz(2D)
 LVIDd(Teich-2D)
 LVIDs(Teich-2D)
 HR(Teich 2D)
 Gibson(2D)
 LVIDd(Gibson-2D)
 LVIDs(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 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)

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)
 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
 DAAo 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)	Follicle1 L
LVET(LV Tei Index-Doppler)	Follicle1 W
RVSP	Follicle1 H
TR Vmax(RVSP)	Follicle2 L
RAP	Follicle2 W
PAEDP	Follicle2 H
PR Ved(PAEDP)	Follicle3 L
RAP	Follicle3 W
RV Tei Index	Follicle3 H
TV C-O dur	Follicle4 L
RVET(RV Tei Index)	Follicle4 W
Qp/Qs	Follicle4 H
AV Diam(Qp/Qs)	Follicle5 L
AV VTI(Qp/Qs)	Follicle5 W
AV HR(Qp/Qs)	Follicle5 H
PV Diam(Qp/Qs)	Follicle6 L
PV VTI(Qp/Qs)	Follicle6 W
PV HR(Qp/Qs)	Follicle6 H
PISA MR	Follicle7 L
MR Rad	Follicle7 W
MR Als Vel	Follicle7 H
MR VTI(PISA MR)	Follicle8 L
PISA AR	Follicle8 W
AR Rad	Follicle8 H
AR Als Vel	Follicle9 L
AR VTI(PISA AR)	Follicle9 W
PISA TR	Follicle9 H
TR Rad	Follicle10 L
TR Als Vel	Follicle10 W
TR VTI(PISA TR)	Follicle10 H
PISA PR	Follicle11 L
PR Rad	Follicle11 W
PR Als Vel	Follicle11 H
PR VTI(PISA PR)	Follicle12 L
Gynecology	Follicle12 W
B-Mode	Follicle12 H
UT L	Follicle13 L
UT H	Follicle13 W
UT W	Follicle13 H
Cervix L	Follicle14 L
Cervix H	Follicle14 W
Cervix W	Follicle14 H
Endo	Follicle15 L
Ovary L	Follicle15 W
Ovary H	Follicle15 H
Ovary W	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
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Follicle9
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Follicle10
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Follicle11
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 Follicle11 H
Follicle12
 Follicle12 L
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 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

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

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
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

B-mode

HIP
HIP-Graf
HIP(α)
HIP(β)
d/D

Emergency

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
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 ISO 15223-1
- 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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