

LOGIQ P9 R4.5 Product Spec Sheet (Global version)

DOC2728821

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General Specifications

Dimensions and Weight



Height	• Articulating monitor arm (standard) – Minimum: 1345 mm (53.0 inch) – Maximum: 1595 mm (62.8 inch)
Width	• Keyboard: 430 mm (16.9 inch) • Foot cover: 495 mm (19.5 inch) • Monitor: 545 mm (21.5 inch; 23.8 Bezel-less LCD)
Depth	• Foot cover: 685 mm (27.0 in) • Rear handle: 740 mm (29.1 in)
Weight (max. load)	• 83 kg/183 lbs
Weight (min. load)	• 67 kg/148 lbs

Electrical Power

Voltage: 100 – 240 Vac

Frequency: 50/60 Hz

Power consumption maximum of 500 VA with peripherals

Maximum thermal output: 700 BTU/hr

Console Design

4 active probe ports (3 x RS and 1 x DLP)

1 CW pencil probe port

Probe light

Integrated Solid State Drive (capacity: 500 GB)

Integrated DVD $\pm$ R/W multi drive (option)

On-board storage for B/W-printer

Integrated speakers

Wheels:

- Wheel diameter: 125 mm
- Locking mechanism that provides rolling lock and caster swivel lock

Probe holders, removable for cleaning and washing

Gel holder with integrated gel warmer (option), removable for cleaning and washing

Integrated cable management

Easily removable air filters

Front and rear handles (option)

User Interface

Operator Keyboard

Operating keyboard adjustable in two dimensions:

- Height: 810-910 mm
- Rotation: $\pm 30^\circ$

Digital TGC with 8 independent controls and digital A/N keyboard

Backlit alphanumeric keyboard (option), 16 mm spacing, integrated to the control panel with interface in local languages

Ergonomic hard key layout

Multigestational Touch control

Interactive back-lighting

Integrated recording keys for remote control of up to 8 peripheral devices or DICOM® devices

Touch Screen

10.4" wide LCD, high resolution, color touch screen

Interactive dynamic software menu

Brightness adjustment

User-configurable layout

Monitor

23.8inch Bezel-less LCD LED backlight monitor

Tilt/rotate/translate

- Tilt angle +15°/-90°
- Rotate angle $\pm 90^\circ$
- Translate horizontal 660 mm
- Translate vertical 150 mm

Display colors: 16.7M

Resolution: 1920 x 1080

Fold-down and lock mechanism for transportation

Brightness and contrast adjustment

Horizontal/vertical viewing angle of $\pm 178^\circ$

Articulating monitor arm

System Overview

Applications

Abdominal

Obstetrical

Gynecological

Breast

Small Parts

Musculoskeletal and Superficial

Vascular

Urological

Endocavitary

- Transvaginal
- Transrectal

Pediatric and Neonatal

Transcranial

Transesophageal

Cardiac

Intraoperative

Scanning Methods

Electronic sector

Electronic convex

Electronic micro convex

Electronic linear

Real-time 4D volume sweep

Transducer Types

Sector phased array

Convex array

Microconvex array

Linear array

Matrix array

Single CW (pencil) probes

Volume probes (4D)

Bi-plane array, one Linear and one Convex Transducers	
Operating Modes	
B-Mode	
Coded Harmonic Imaging	
M-Mode	
B/M-Mode	
Color Flow Mode (CFM)	
Coded Harmonic Imaging for B Mode/PW Doppler/Color Flow for variables as depth, resolution or Phase Inversion pulse	
Power Doppler Imaging (PDI) with directional map	
PW Doppler with high PRF	
M-Color Flow Mode	
Anatomical M-Mode	
Curved Anatomical M-Mode	
B-Flow™/B-Flow Color Mode (option)	
Extended Field of View (LOGIQView, option)	
B Steer+ (option)	
Coded Contrast Imaging (option)	
CW Doppler Mode (option)	
Tissue Velocity Imaging (TVI) Mode (option)	
Strain Elastography (option)	
SW DVR (option)	
Shear Wave Elastography (option)	
HD/live™ (option)	
UGAP (option)	
3D/4D Volume Modes:	• 3D static (option) • 4D real-time (option)
3D/4D Volumes/s:	• 3D and 4D maximum capacity of 109.2
System Standard Features	
SSD disk partition of 345 GB for image storage without compression	
Storage formats	• DICOM: compressed/uncompressed, single/multi-frame, with/without raw data • Export JPEG, WMV (MPEG 4), and AVI formats
Advanced user interface with high resolution 10.4" wide LCD touch panel	
Automatic optimization	• Auto tissue optimization • Auto spectral optimization • Auto TGC
CrossXBeam™ compounding	
Speckle Reduction Imaging (SRI-HD)	
Fine angle steer	
Coded Harmonic Imaging	
Virtual convex	
Easy 3D	
Anatomical M-Mode	
Patient information database	
Image archive on integrated CD/DVD (option) and SSD	
Easy backup to media for data security	

TruAccess, raw data processing and analysis
Real-time automatic doppler calcs
OB calcs
Fetal trending
Urological Calculation (Stepper Volume calculation prostate), joint use with Stepper-Grid system
Multi gestational calcs
Hip dysplasia calcs
Gynecological calcs
Vascular calcs
Cardiac calcs
Urological calcs
Renal calcs
InSite™ ExC capability, remote service
iLinq capability, remote service
On-board electronic documentation (PDF format)
MPEGVue
Key macro
Network storage
Quick save
Quick patient entry
Quick patient change
Probe Check
Start Assistant
TIC motion tracking
My Page
My Trainer+
Email to MMS
Reset
Tricefy™
Privacy and Security
Multigestational Touch control
IOTA (International Ovarian Tumor Analysis) LR2 worksheet

Note) IOTA is not available in USA, Japan and China.

Vnav Import
Doppler Assistant
MyPreset
SonoRenderLive
External USB printer connection
S-video
Composite output

System Options

Auto IMT
AutoEF
Strain Elastography
Elastography Quantification
Advanced 3D with 3D landscape
DICOM 3.0 connectivity
DICOM Viewer
LOGIQView
B-Flow/B-Flow Color

CF/PDI Quantification	
Measure assist breast	
Measure assist OB	
Breast productivity package	
Thyroid productivity package	
B Steer+	
Stress Echo	
Tissue Velocity Imaging (TVI) with Q-Analysis	
Scan assistant	
Compare assistant	
Cardiac Strain	
Report writer	
ECG	
ECG AHA cable	
ECG IEC cable	
CW Doppler	
Q-Path	
SW DVR Basic	
SW DVR	• Storage: CD/DVD media • Storage: USB memory stick
Real-time 4D	
4D TUI	
Static 3D	
VOCAL II	
VCI static	
STIC	
OmniView	
Offline scanning	
Shear Wave Elastography	
HD/live	
HRES CEUS	
LOGIQ P Apps (Software key only)	
AFI	
Coded Contrast (CEUS)	
Koios Breast Lesion Decision Support ⁴	
Koios Throid Lesion Decision Support ⁴	
UGAP	
Hepatic Assistant	
SonoAVC Renal	
SonoNT/SonoIT	
Digital Expert	
High cabinet	
Low cabinet	
Drawer	
Side tray	
Small probe adaptor	
Vertical endocavitary probe holder	
Probe cable hanger	
Cable hook rear	
Card reader mounting kit	

Paper tray	
OPIO tray	
Gel warmer	
Multipurpose holder	
Physical A/N keyboard	
Peripheral Options	
Integrated mounting kits and remote controls provided for B/W digital thermal printer	
Digital color A6 thermal printer	
Digital color A5 thermal printer	
Barcode reader (for reading needle information) (H43132LZ)	
Wireless LAN card for wireless data transfer	
LOGIQ P apps (Bluetooth)	
HDMI output available for compatible devices	
Foot switch, with programmable functionality, 3-pedal (H46732LF)	
Universal video converter	
- UVC S300 Global (H42832LJ)	
- UVC S300 Japan (H42832LK) with Destination set Japan (H46712LY) and UVC AC Adapter for JPN (Z72112FB)	
Power assistant (battery or extended battery option) for offline scanning	
- Extended battery option (H42902LM)	
- Battery option (H42832LG)	
Isolation transformer (H48671WN)	
Ethernet protection cable (H43272LJ)	
EMI filter, Power supply noise filter (H46162LH)	
UPS 120V, Powervar144k120v MG UPS (H4913UP)	
UPS 230V, Powervar144k 230V MG UPS (H4921UP)	
Display Modes	
Live and stored display format: full size and split screen – both with thumbnails. For still and CINE	
Review image format: 4x4, and “thumbnails.” For still and CINE	
Simultaneous capability	• B/PW • B/CFM or PDI • B/M • B + CFM/M • Real-time Triplex Mode (B + CFM or PDI/PW or CW) • B-Flow + PW • Dual B (B/B)
Selectable alternating modes	• B/M • B/PW • B + CFM/M • B + CFM (PDI)/PW (CW) • B-Flow + PW • 3D – Mode • 3D – Mode Color • B/CW • B + CFM (PDI)/CW
Multi-image split screen (quad screen)	• Live and/or frozen • B + B/CFM or PDI • PW/M
Independent CINE playback	

Zoom: write/read/pan	
Colorized image	• Colorized B • Colorized M • Colorized PW • Colorized CW • Colorized B-Flow
Time line display	
Independent dual B/PW display	
CW	
Display formats:	• Top/bottom selectable format (size: 1/2:1/2; 1/3:2/3; 2/3:1/3) • Side/side selectable format (size: 1/2:1/2; 1/3:2/3; 0:1) switchable after freeze
Timeline only	
Virtual convex	
CrossXBeam	
Tissue Velocity Imaging (TVI) Mode	
Elastography and simultaneous B/Elasto	
UGAP/SWE simultaneous	
Display Annotation	
Patient name: first, last and middle name each store 27 characters. Up to 64 total characters displayed	
Patient ID: 31 characters. Up to 27 characters displayed	
2nd patient ID	
Age, sex and date of birth	
Hospital name: 23 characters	
Date format: 3 types selectable	• MM/DD/YY • DD/MM/YY • YY/MM/DD
Time format: 2 types selectable	• 24 hours • 12 hours
Gestational age from LMP/EDD/GA/BBT	
Probe name	
Map names	
Probe orientation	
Depth scale marker	
Lateral scale marker	
Focal zone markers	
Image depth	
Zoom depth	
B-Mode	• Gain • Dynamic range • Imaging frequency • Edge enhance • Frame averaging • Gray map • ATO on/off • SRI-HD • CrossXBeam

M-Mode	• Gain • Dynamic range • Time scale
Doppler Mode	• Gain • Angle • Sample volume depth and width • Wall filter • Velocity and/or frequency scale • Spectrum inversion • Time scale • PRF • Doppler frequency
Color Flow Mode	• Line density • Frame averaging • Packet size • Color scale: 3 types – Power – Directional PDI – Symmetrical velocity imaging • Color velocity range and baseline • Color threshold marker • Color gain • PDI • Color scale inversion • Color doppler frequency
TGC curve	
Acoustic frame rate	
CINE gage, image number/frame number	
DVR counter and status	
Body pattern: multiple human and animal types	
Application name	
Measurement results	
Operator message	
Displayed acoustic output	• TIS: Thermal Index Soft Tissue • TIC: Thermal Index Cranial (Bone) • TIB: Thermal Index Bone • MI: Mechanical Index
% of power output	
Biopsy guide line and/or zone	
Heart rate	
General System Parameters	
System Setup	
8 pre-programmable categories	
User programmable preset capability, including assisted or user-configurable protocols to optimize workflow	
Factory default preset data	
Languages: English, French, German, Spanish, Italian, Portuguese, Russian, Greek, Swedish, Danish, Dutch, Finnish, Norwegian, Japanese (message only), Chinese (message only)	
OB report format: 5 types, Tokyo Univ., Osaka Univ., USA, Europe, and ASUM	

EFBW: 10 types, Japan, USA and Europe (Tokyo Uni., Osaka Univ., Tokyo Shinozuka, JSUM, German, Shepard, Merz, Hadlock/Shepard, Williams, Brenner)

Pre-defined annotations and user programmable

User defined libraries/annotations

Body patterns

Customized comment home position

Complete User Manual Available On Board Through Help

User manual and service manual are included in eDoc USB stick with each system. A printed manual is available upon request.

CINE Memory/Image Memory

CINE memory: 776 MB

Selectable CINE sequence for CINE review

Prospective CINE mark

Measurements/calculations and annotations on CINE playback

Scrolling timeline memory

CINE capture function

Digital continuous CINE capture

Dual image CINE display

Quad image CINE display

CINE gauge and CINE image number display

CINE review loop

CINE review speed: 10 steps (11, 13, 14, 17, 22, 25, 31, 100, 200, 400%)

Image Storage

On-board database of patient information from past exams

Storage formats:

- DICOM: compressed/ uncompressed, single/multi-frame, with/without Raw Data

Storage formats: (cont.)

- Export JPEG, JPEG2000, WMV (MPEG 4), and AVI formats

DICOM still image storage size: ~2.1 MB

Gray image: ~1.3 to ~3.5 MB

Color image: ~1.8 to ~5.0 MB

Display format: full size, 4x4 and "thumbnails"

Storage devices:

- Internal Solid-State Drive partition of 345 GB for image storage
- External USB 2.0 hard drive support for import, export, DICOM read, SaveAs and MPEGVue
- USB memory stick support for SaveAs and MPEGVue (64 MB to 4 GB)
- CD-R storage: 700 MB
- DVD storage: -R (4.7 GB)

Conversion to formats: JPEG, AVI, WMV

Live image and stored image side-by-side display

Compare old images with current exam

Reload of archived date sets

Network storage support for import, export, DICOM read, SaveAs, MPEGVue

Connectivity & DICOM

Privacy and Security	• Password Policies • Provides the ability to specify password policies for user accounts • Session Management • Lock screen after minutes (configurable) • Hard Disk Encryption • Encrypts patient data archive partition • Provides whitelisting type malware protection • TPM Support for security
DICOM 3.0 (option)	• Verify • Print • Store • Modality worklist • Storage commitment • Modality Performed Procedure Step (MPPS) • Media exchange • Off network/mobile storage queue • Query/retrieve • Structured reporting • Public SR template • Structured reporting – compatible with vascular and OB standard • Direct export DICOM SR and XML • Media store of SR • InSite ExC capability
Ethernet network connection	
Wireless LAN (option)	
LOGIQ P Apps	
Physiological Input Panel	
Physiological input	
ECG, 2 lead	
Dual R trigger	
Pre-settable ECG R delay time	
Re-settable ECG position	
Adjustable ECG gain control	
Automatic heart rate display	
Scanning Parameters	
Digital P-Agile beamformer architecture	
1,068,646 system processing channels	
Max. frame rate up to 3229 F/s	
Displayed imaging depth: 0 – 48 cm	
Minimum Depth of Field: 0 – 1 cm (zoom, probe dependent)	
Maximum Depth of Field: 0 – 48 cm (probe dependent)	
Transmission focus: 1 – 8 focal points selectable (probe and application dependent)	
Quad beamforming	
Continuous dynamic receive focus/aperture	
Multi-frequency/wideband technology	
Frequency range: 2 – 22 MHz, probe independent, system bandwidth 1 - 25 MHz	

256 shades of gray
 Dynamic range > 400dB in system level (composite dynamic level)
 Adjustable dynamic range
 Adjustable Field Of View (FOV): Up to 168 degree (depending on probe)
 Image Reverse: right/left
 Image rotation: 4 steps of 0°, 90°, 180°, 270°

Digital B-Mode

Acoustic power output: 0 – 100%, 25 steps
 Gain: from 0 – 90 dB, 1 dB step
 Dynamic range: 36 – 96 dB, 3 dB or 6 dB steps
 Frame averaging: 8 steps
 Gray scale map: 7 types
 Tint map: 9 types
 Frequency: up to 5 selectable (depending on probe)
 Speed of sound (probe, application dependent)
 Line density: 5 steps
 Line density zoom: 5 steps
 Thermal index: TIC, TIS, TIB
 Image reverse: on/off
 Focus number: 8 steps
 Focus width: 3 types
 Suppression: 6 steps
 Edge enhance: 7 steps
 Rejection: 6 steps
 Steered linear: $\pm 12^\circ$
 Scanning size (FOV or angle – depending on the probe)
 SRI-HD: up to 6 levels selectable
 CrossXBeam: up to 9 angles selectable
 Depth: 1 – 48 cm, 1 cm step, probe dependent

Digital M-Mode

B/M-Mode frame rate: 1000 fps
 Gain: -20 – 20 dB, 1 dB step
 Compression: 0.5 – 2.4, 13 steps
 Sweep speed: 0 – 7, 8 steps
 Frame averaging
 Gray scale map: 7 types
 M colorization: 9 types
 Frequency
 Line density
 Scanning size (FOV or angle – depending on probe, see probe specifications)
 Rejection: 6 steps
 M/PW display format: V-1/3B, V-1/2B, V-2/3B, H-1/2B, H-1/4B, timeline only

Anatomical M-Mode

M-Mode cursor adjustable at any plane
 Can be activated from a CINE loop, from a live or stored image
 M & A capability
 Available with Color Flow Mode
 Curved Anatomical M-Mode

Digital Spectral Doppler Mode

Adjustable:	• Acoustic power: 0 – 100, 25 steps • Gain: 0 – 85, 86 steps • Gray scale map: 8 types • Transmit frequency: up to 5 steps, depends on probe • Wall filter: 5.5 – 5000 Hz, 27 steps • PW colorization: 6 types • Velocity scale range: 8 steps • Sweep speed: 8 steps • Sample volume length: 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16 mm • Angle correction: $\pm 90^\circ$, 1° step • Steered linear: 7 steps • Spectrum inversion: on/off • Trace method: 3 steps • Baseline shift: 5 to 95%, 11 steps • Doppler auto trace: 3 steps • Compression: 12 steps • Trace direction: 3 steps • Trace sensitivity: 21 steps
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Digital Color Flow Mode

Color Flow Mode (CFM) frame rate: 578 fps

Baseline: 0 – 100%, 11 steps

Invert: on/off

CF/PDI focus depth: default pre-settable for 10 – 100% of ROI in depth, 6 steps

CF/PDI flash suppression: 5 steps

CF/PDI angle steer: 0, $\pm 20^\circ$

Packet size: 8 – 24, dependent on probe and application

Line density: 5 steps

Line density zoom: 5 steps

Frame average: 7 steps

PRF: 0.1 – 23.5 kHz/20 steps

Spatial filter: 6 steps

Gain: 0 – 40 dB, 0.5 dB steps

Composite dynamic range: 174 – 270 dB, 3 dB or 6 dB steps

Wall filter: 4 steps, dependent on probe and application

Scanning size (FOV or angle): probe dependent

CF/PDI vertical size (mm) of ROI: default pre-settable

CF/PDI center depth (mm) of ROI: default pre-settable

CF/PDI frequency: up to 5, depending on probe

Color maps, including velocity-variance maps: 20 types depending on application

Transparent: 5 steps

Color threshold: 0 – 100%, 11 steps

Arbitration threshold: 15 steps pre-settable

Auto line density: on/off pre-settable

PW/CF ratio: 1, 2, 4

Accumulation: 8 steps

Quantification

Digital Power Doppler Imaging

PDI map: 16 types

CF/PDI focus depth: default pre-settable for 10 – 100% of ROI in depth, 6 steps

CF/PDI acoustic output: 0 – 100%, 10% steps

CF/PDI angle steer: 0, $\pm 20^\circ$

Packet size: 8 – 24, dependent on probe and application

Spatial filter: 6 steps

Frame average: 7 steps

PRF: 0.1 – 23.5 kHz/20 steps

Power threshold: 0 – 100%, 11 steps

Arbitration threshold: 15 steps pre-settable

Gain: 0 – 40 dB, 0.5 dB steps

Wall filter: 4 steps depending on probe and application

CF/PDI frequency: up to 5 steps, depending on probe

Auto line density: on/off pre-settable

Transparent: 5 steps

Invert: on/off

Accumulation: 8 steps

Flash suppression

PW/CW Wave Doppler

Velocity scale:

- Max. 10.34 m/s
- Min. 0.06 m/s

Gray scale map: 8 types

Baseline: 5 – 95%, 11 steps

SV gate: 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16 mm

Angle correct: $\pm 90^\circ$, 1° step

Spectral color: 6 types

PW sweep speed: 8 steps

Invert: on/off

M/PW display format: V-1/3B, V-1/2B, V-2/3B, H-1/2B, H-1/4B, timeline only

Duplex: on/off (PW only)

PW/CF ratio: 1, 2, 4

Gain: 0 – 85 dB, 1 dB steps

Wall filter: 5.5 – 5000 Hz, 27 steps, dependent on probe and application

PW angle steer: 0, $\pm 10^\circ$, 15° , 20°

PRF: 0.5 – 26.7 kHz with PW, 0.4 – 49.0 kHz with CW

Sample volume depth: 30 steps default pre-settable

CW-Mode is available on the following probes:

- 3Sc-RS
- 6S-RS
- 12S-RS
- P2D
- P8D
- P6D

Steerable CW Mode includes

Transmit frequency

CW colorization

Velocity scale range

Spectrum inversion

Trace method

Doppler auto trace

Trace direction

Trace sensitivity

Automatic Optimization

Optimize B-Mode, B-Flow image to improve contrast resolution. Selectable amount of contrast resolution improvement (low, medium, high) pressing one button

Auto TGC

CTO

Auto-spectral optimize adjustable by pressing one button

- Baseline
- Invert
- PRF (on live image)
- Angle correction

Coded Harmonic Imaging

Available on all imaging probes

Line density: 5 steps

Line density zoom 5 steps

Suppression: 6 steps

Edge enhance: 7 steps

Gray scale map: 7 types

Tint map: 9 types

Gain: 0 – 90 dB, 1 dB step

Dynamic range: 36 – 96 dB, 3 dB or 6 dB steps

Rejection: 6 steps

Frequency: up to 4 steps, probe depended

B-Flow/B-Flow color (option)

Available on C1-5-RS, C1-6-D, C2-7-D, 10C-D, 9L-RS, 12L-RS, ML6-15-RS, L8-18i-RS, 8C-RS, L6-12-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, E8CS-RS, BE9CS-RS, L3-12-RS, IC9-RS, **E7C8L-RS** probes

Hybrid B-Flow: Available on C1-5-RS, 12L-RS, 9L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS, C1-6-D, C2-7-D and 10C-D

B & B-Flow simultaneous dual display

B & B-Flow overlay display

B-Flow High Definition Color (HD Color): Available on C1-5-RS, 12L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS and C1-6-D probes

Background: on/off

Sensitivity/PRI: 17 steps

Line density: 5 steps

Edge enhance: 7 steps

Frame average: 8 steps

Gray scale map: 8 types

Tint map: 9 types

Dynamic range: 36 – 96 dB, 3 dB or 6 dB steps

Rejection: 6 steps

Gain: 0 – 90 dB, 1 dB step

Dual Beam: on/off pre-settable

B-Flow Color: 8 color maps and 6 directional maps

Accumulation: 8 steps

Coded Contrast Imaging (option.)

AM mode : Available on C1-6-D, C2-7-D, C1-5-RS, 9L-RS, 3Sc-RS, BE9CS-RS, IC9-RS, **E7C8L-RS**

HRes mode : Available on C1-6-D, C2-7-D, C1-5-RS, 9L-RS, 3Sc-RS

AM mode frequency : General, Resolution and Penetration

HRes mode frequency : General

Tissue background selection: 4 steps

Display tissue image and contrast enhanced image simultaneously in split screen

2 separate contrast timers
Timed updates: 0.05 – 10 seconds
Accumulation mode: 6 steps
Max Enhancement Mode: on/off
Gray scale map: 21 types
Colorization: on/off
Time trigger scan: 0.3 & 0.5 – 10 sec, 0.5 sec step
Flash/Burst Mode
Time Intensity Curve (TIC) analysis
Auto MI control

The LOGIQ P9 is designed for compatibility with commercially available ultrasound contrast agents. Because the availability of these agents is subject to government regulation and approval, product features intended for use with these agents may not be commercially marketed nor made available before the contrast agent is cleared for use. Contrast related product features are enabled only on systems for delivery to an authorized country or region of use.

LOGIQView (option)

Extended Field of View imaging
Available on all imaging probes
For use in B-Mode
CrossXBeam is available on linear probes
Auto detection of scan direction
Pre or post-process zoom up to 10x
Rotation
Auto best fit on monitor
Measurements in B-Mode
Up to 60 cm scan length

Easy 3D (available on all imaging probes)

Colorize image
Threshold (opacity)
Render
Texture
Gray surface
Scalpel
Auto movie
Undo
Reset
Allows unlimited rotation and planar translation
3D reconstruction from CINE sweep

Advanced 3D (Available On All Imaging Probes) (option)

Acquisition of color data
Automatic rendering
3D landscape technology
3D movie
Main Mode

Real-time 4D (option)

Acquisition modes:	• Real-time 4D mode • Static 3D mode
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Visualization modes:	• 3D rendering (diverse surface and intensity projection modes) • Sectional planes (3 section planes perpendicular to each other) • Volume contrast imaging-static • Tomographic ultrasound imaging
Render mode:	• Surface texture, surface smooth, max-, min- and X-ray (average intensity projection), mix mode of two render modes
Curved 3 point Render start	
3D Movie	
Scalpel: 3D Cut tool	
Display format:	• Quad: A-/B-/C-Plane/3D • -Dual: A-Plane/3D • Single: 3D or A- or B- or C-Plane
Automated Volume Calculation - VOCAL II (option)	• Betaview • Auto sweep
STIC (option)	
HDlive™ (option)	
VCI Static (option)	
Omniview (option)	VCI OmniView
Scan Assistant (option)	
Workflow enhancement tool for standardized and repetitive exams	
Include factory programs	
User-defined programs and import functionality	
Steps include image annotations, mode transitions, basic imaging controls and measurement initiation	
Compare Assistant (Option)	
Side-by-side comparison of previous ultrasound and other modality exams during live scanning	
Report Writer (option)	
On-board reporting package automates report writing	
Formats various exam results into a report suitable for printing or reviewing on a standard PC	
Exam results include patient info, exam info, measurements, calculations, images, comments and diagnosis	
Standard templates provided	
Customizable templates	
Thyroid reporting template	
Vascular, GYN, pediatric, OB, abdominal, fetal echo, MSK, small parts	
Elastography (option)	
Available on C1-6-D, C1-5-RS, ML6-15-RS, 9L-RS, 12L-RS, L6-12-RS, L4-12t-RS, E8CS-RS, BE9CS-RS, L3-12-RS, IC9-RS probes	
Elastography for applications such as breast, abdomen, musculoskeletal, thyroid etc.	
E index: 8 maximum	
E ratio: 7 maximum	
B Steer+ (option)	

Available on C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS, RAB2-6-RS, C1-6-D, C2-7-D, **E7C8L-RS (only E7C8L Linear transducer)** and 10C-D probes

TVI (option)

Myocardial Doppler Imaging with color overlay on tissue image

Available on all sector probes

Tissue color overlay can be removed to show just the 2D image, still retaining the tissue velocity information

Curved Anatomical M-Mode: free (curved) drawing of M-Mode generated from the cursor independent from the axial plane

Q-Analysis: Multiple time-motion trace display from selected points in the myocardium

Stress Echo (option)

Advanced and flexible stress-echo examination capabilities

Provides exercise and pharmacological protocol templates

8 default templates

Template editor for user configuration of existing templates or creating new templates

Reference scan display during acquisition for stress level comparison (dual screen)

Baseline level/previous level selectable

Raw data continuous capture (over 180 sec available)

Wall motion scoring (bulls-eye and segmental)

Smart stress: automatically set up various scanning parameters (e.g. geometry, frequency, gain, etc.) according to same projection on previous level

Shear Wave Elastography (Option)

Available on C1-5-RS, L3-12-RS, IC9-RS, ML6-15-RS, C1-6-D and 12L-RS probes

User programmable measurement display in kPa and meters per sec.

Measurement range in m/s (Min. – Max.) : 0-10 m/s

Measurement range in kPa (Min. – Max.) : 0-300 kPa

Single and dual view display

Auto EF (Option)

Allows semi-automatic measurement of the global EF (Ejection Fraction)

User editable

Virtual Convex

Provides a convex Field of View

Compatible with CrossXBeam

Available on all linear and sector transducers

SRI-HD

High definition speckle reduction imaging in real time and post-processing

Provides multiple (6) levels of speckle reduction

Compatible with side-by-side DualView display

Compatible with all linear, convex and sector transducers

Compatible with B-Mode, color, contrast agent and 3D/4D imaging

Pre and post processing

CrossXBeam

Provides 3, 5, 7 or 9 angles of spatial compounding

Live side-by-side DualView display

Compatible with

- Color Mode
- PW
- SRI-HD
- Coded Harmonic Imaging
- Virtual convex on linear probes

Available on C1-5-RS, 8C-RS, E8C-RS, 9L-RS, 12L-RS, ML6-15-RS, L8-18i-RS, RAB2-6-RS, L6-12-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, E8CS-RS, BE9CS-RS, RIC5-9A-RS, L3-12-RS, IC9-RS, **E7C8L-RS** probes

Controls Available While "Live"

Write zoom

B/M/CrossXBeam-Mode

- Gain
- TGC
- Dynamic range
- Acoustic output
- Transmission focus position
- Transmission focus number
- Line density control
- Sweep speed for M-Mode
- Number of angles for CrossXBeam

PW-Mode

- Gain
- Dynamic range
- Acoustic output
- Transmission frequency
- PRF
- Wall filter
- Spectral averaging
- Sample volume gate
 - Length
 - Depth
- Velocity scale

Color Flow-Mode

- CFM gain
- CFM velocity range
- Acoustic output
- Wall echo filter
- Packet size
- Frame rate control
- CFM spatial filter
- CFM frame averaging
- CFM line resolution
- Frequency/velocity baseline shift

Controls Available on "Freeze" or Recall

Automatic optimization

SRI-HD

CrossXBeam – display non-compounded and compounded image simultaneously in split screen

3D reconstruction from a stored CINE loop

B/M/CrossXBeam-Mode

- Gray map optimization
- TGC
- Colorized B and M
- Frame average (loops only)
- Dynamic range

Anatomical M-Mode

Max. read zoom to 20x in real time

Baseline shift

Sweep speed

PW-Mode	• Gray map • Post gain • Baseline shift • Sweep speed • Invert spectral wave form • Compression • Rejection • Colorized spectrum • Display format • Doppler audio • Angle correct • Quick angle correct • Auto angle correct
Color Flow-Mode	• Overall gain (loops and stills) • Color map • Transparency map • Frame averaging (loops only) • Flash suppression • CFM display threshold • Spectral invert for Color/Doppler
Anatomical M-Mode on CINE loop	
4D	• Gray map, colorize • Post gain • Change display – single, dual, quad sectional or rendered

Measurements/Calculations

Available Applications

Abdominal, Cardiac, Vascular, Small Parts, OB & GYN, Urology, Pediatrics, Fetal Echo, Musculoskeletal etc.

General B-Mode

Depth & distance

Circumference (ellipse/trace)

Area (ellipse/trace)

Volume (ellipsoid)

% Stenosis (area or diameter)

Angle between two lines

General M-Mode

M-Depth

Distance

Time

Slope

Heart rate

General Doppler Measurements/Calculations

Velocity

Time

A/B ratio (Velocities/Frequency ratio)

PS (Peak Systole)

ED (End Diastole)

PS/ED ratio

ED/PS ratio

AT (Acceleration Time)	
ACC (Acceleration)	
TAMAX (Time Averaged Maximum velocity)	
Volume flow (TAMEAN and vessel area)	
Heart rate	
PI (Pulsatility Index)	
RI (Resistivity Index)	
Real-time Doppler Auto Measurements/Calculations	
PS (Peak Systole)	
ED (End Diastole)	
MD (Minimum Diastole)	
PI (Pulsatility Index)	
RI (Resistivity Index)	
AT (Acceleration Time)	
ACC (Acceleration)	
PS/ED ratio	
ED/PS ratio	
HR (Heart Rate)	
TAMAX (Time Averaged Maximum velocity)	
PVAL (Peak Velocity value)	
Volume flow (TAMEAN and vessel area)	
OB Measurements/Calculations	
Gestational age by:	• GS (Gestational Sac) • CRL (Crown Rump Length) • FL (Femur Length) • BPD (Biparietal Diameter) • AC (Abdominal Circumference) • HC (Head Circumference) • APTD x TTD (Anterior/ Posterior Trunk Diameter by Transverse Trunk Diameter) • LV (Length of Vertebra) • FTA (Fetal Trunk Cross-sectional Area) • HL (Humerus Length) • BD (Binocular Distance) • FT (Foot Length) • OFD (Occipital Frontal Diameter) • TAD (Transverse Abdominal Diameter) • TCD (Transverse Cerebellum Diameter) • THD (Thorax Transverse Diameter) • TIB (Tibia Length) • ULNA (Ulna Length)
Estimated Fetal Weight (EFW) by:	• AC, BPD • AC, BPD, FL • AC, BPD, FL, HC • AC, FL • AC, FL, HC • AC, HC • BPD, APTD, TTD, FL • BPD, APTD, TTD, SL

Calculations and ratios	• FL/BPD • FL/AC • FL/HC • HC/AC • CI (Cephalic Index) • AFI (Amniotic Fluid Index) • CTAR (Cardio-Thoracic Area Ratio)
Measurements/calculations by: ASUM, ASUM 2001, Bahlmann, Baschat, Berkowitz, Bertagnoli, Brenner, Campbell, CFEF, Chitty, Ebbing, Eik-Nes, Ericksen, Goldstein, Hadlock, Hansmann, Hellman, Hill, Hohler, Jeanty, JSUM, Kurmanavicius, Kurtz, Mari, Mayden, Mercer, Merz, Moore, Nelson, Osaka Univ., Paris, Rempen, Robinson, Shepard, Shepard/Warsoff, Tokyo Univ., Tokyo/Shinozuka, WHO, Yarkoni	
Fetal graphical trending	
Growth percentiles	
Multi-gestational calculations (4)	
Fetal qualitative description (anatomical survey)	
Fetal environmental description (biophysical profile)	
Programmable OB tables	
Over 20 selectable OB calcs	
Expanded worksheets	
Growth percentiles: Hadlock, Brenner, Williams, Kramer (f), Kramer (m)	
Measure Assistant Breast (Option)	
Allows automatic contour and measurement of breast lesions in a user selected ROI	
Feature assessment	
BI-RADS® assessment	
User editable	
Measure Assistant OB (Option)	
Allows automatic measurement of BPD, HC, FL and AC	
User editable	
GYN Measurements/Calculations	
Right ovary length, width, height	
Left ovary length, width, height	
Uterus length, width, height	
Cervix length, trace	
Ovarian volume	
ENDO (Endometrial thickness)	
Ovarian RI	
Uterine RI	
Follicular measurements	
IOTA (International Ovarian Tumor Analysis) LR2 worksheet	
<i>Note) IOTA is not available in USA, Japan and China.</i>	
Summary reports	
Vascular Measurements/Calculations	
SYS DCCA (Systolic Distal Common Carotid Artery)	
DIAS DCCA (Diastolic Distal Common Carotid Artery)	
SYS MCCA (Systolic Mid Common Carotid Artery)	
DIAS MCCA (Diastolic Mid Common Carotid Artery)	
SYS PCCA (Systolic Proximal Common Carotid Artery)	
DIAS PCCA (Diastolic Proximal Common Carotid Artery)	

SYS DICA (Systolic Distal Internal Carotid Artery)
DIAS DICA (Systolic Distal Internal Carotid Artery)
SYS MICA (Systolic Mid Internal Carotid Artery)
DIAS MICA (Diastolic Mid Internal Carotid Artery)
SYS PICA (Systolic Proximal Internal Carotid Artery)
DIAS PICA (Diastolic Proximal Internal Carotid Artery)
SYS DECA (Systolic Distal External Carotid Artery)
DIAS DECA (Diastolic Distal External Carotid Artery)
SYS PECA (Systolic Proximal External Carotid Artery)
DIAS PECA (Diastolic Proximal External Carotid Artery)
VERT (Systolic Vertebral Velocity)
SUBCLAV (Systolic Subclavian Velocity)
Auto IMT
Summary reports
Urological Measurements/Calculations
Bladder volume
Prostate volume
Stepper volume
Left/right renal volume
Generic volume
Post-void bladder volume
Cardiac Measurements/Calculations
Cardiac calculation package including extensive measurements and display of multiple repeated measurements
Parameter annotation follow ASE standard
My Trainer+
An electric manual for first time user for the system
Available self-setup system
System setup
Maintenance
Ergonomics
Basic operation (button/layout/touch panel layout/monitor layout/basic workflow)
My Page
Collection of user's favorite parameters from measurement/comments/body patterns
Programmable buttons
Measurement for B/M/Doppler
User defined annotation for selected exam category
Body pattern for the selected exam category
Function Available Arrow; Create Macro, Eject, Grab Last, Help, Home, My Trainer, Set Home. Spooler, Text Overlay, Word Delete
Offline Scanning
Normal scanning with battery
Indication/message
Battery capacity
Battery operation
Power assistant in low battery
Probes
Probes
C1-6-D, C2-7-D, 10C-D, C1-5-RS, 8C-RS, E8C-RS, E8CS-RS, BE9CS-RS, 9L-RS, 12L-RS, L8-18i-RS, L6-12-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, ML6-15-RS, 3Sc-RS, 6S-RS, 12S-RS, RAB2-6-RS, RIC5-9A-RS, P6D, P8D, L3-12-RS, IC9-RS, 6Tc-RS, E7C8L-RS, P2D

C1-5-RS Convex Probe

Applications: Abdomen, Vascular, OB/GYN, Urology

Probe band width: 1 - 6 MHz

Number of element: 192

Convex radius: 55 mmR

FoV (max): 70°

Physical foot print: 67 x 11.5 mm

B-Mode frequency: 2, 3, 4 MHz

Harmonic frequency: 3, 4, 5 MHz

Doppler frequency: 1.9, 2.1, 2.5, 3.6 MHz

Biopsy guide: multi-angle, disposable with a reusable bracket (40432LE)

C1-6-D Convex Probe

Applications: Abdomen, OB, Gynecology, Vascular, Urology

Probe band width: 1 - 6 MHz

Number of element: 192

Convex radius: 55 mmR

FoV (max): 70°

Physical foot print: 67.2 x 11.5 mm

B-Mode frequency: 2, 3, 4, 5, 6 MHz

Harmonic frequency: 1.5, 2.5, 2.8, 3, 4, 5, 6 MHz

Doppler frequency: 1.7, 1.9, 2.1, 2.5, 3.1, 3.6 MHz

Biopsy guide: multi-angle, disposable with a reusable bracket (H4913BB)

C2-7-D Convex Probe

Applications: Abdomen

Probe band width: 1 - 6 MHz

Number of element: 144

Convex radius: 19.74 mmR

FoV (max): 110°

Physical foot print: 29.7 x 10.5 mm

B-Mode frequency: 2.5, 4, 5, 6 MHz

Harmonic frequency: 3, 4, 5, 6 MHz

Doppler frequency: 2.1, 2.5, 3.6, 4.2 MHz

Biopsy guide: multi-angle, disposable with a reusable bracket (H40482LK) or a reusable stainless bracket (H40482LK)

10C-D Convex Probe

Applications: Neonatal, Pediatrics, Vascular

Probe band width: 4 - 12 MHz

Number of element: 128

Convex radius: 10 mmR

FoV (max): 102°

Physical foot print: 17.9 x 4.8 mm

B-Mode frequency: 4, 6, 8, 10 MHz

Harmonic frequency: 7, 8, 9, 10 MHz

Doppler frequency: 4.2, 5.0, 6.3, 7.4, 8.3 MHz

Biopsy guide: none

8C-RS Micro Convex Probe

Applications: Neonatal, Pediatrics

Probe band width: 3 - 11 MHz

Number of element: 128

Convex radius: 10.7 mmR

FoV (max): 132°

Physical foot print: 24.7 x 5 mm

B-Mode imaging frequency: 6.0, 7.0, 8.0 MHz

Harmonic frequency: 8.0, 9.0, 10.0 MHz

Doppler frequency: 3.6, 4.2, 5.0, 6.3 MHz

Biopsy guide: none

E8C-RS Endo Micro Convex Probe

Applications: OB/GYN, Urology, Transvaginal, Transrectal

Probe band width: 3 - 11 MHz

Number of element: 128

Convex radius: 10.7 mmR

FoV (max): 132°

Physical foot print: 24.7 x 5 mm

B-Mode frequency: 6, 7, 8 MHz

Harmonic frequency: 8, 9, 10 MHz

Doppler frequency: 3.6, 4.2, 5.0, 6.3 MHz

Biopsy guide: single-angle, disposable with a disposable bracket (E8385MJ, E8333JB), single-angle, reusable bracket (H40412LN)

E8CS-RS Endo Micro Convex Probe

Applications: OB/GYN (Transvaginal), Urology (Transrectal)

Probe band width: 3 - 11 MHz

Number of element: 128

Convex radius: 8.7 mmR

FoV (max): 168°

Active area: 25.6 x 4.3 mm

B-Mode frequency: 6, 7, 8 MHz

Harmonic frequency: 7, 8, 9, 10 MHz

Doppler frequency: 3.6, 4.2, 5.0, 6.3 MHz

Biopsy guide: single-angle, disposable with a disposable bracket (E8385MJ, E8333JB), single-angle, reusable bracket (H40412LN)

IC9-RS Endo Micro Convex Probe

Applications : OB/GYN, Urology, (Transvaginal, Transrectal)

Probe band width: 2 - 11 MHz

Number of element: 192

Convex radius: 9.24 mmR

FoV (max): 168°

Physical foot print: 24.2 x 6 mm

B-Mode frequency: 6, 7, 8 MHz

Harmonic frequency: 7, 8, 9 MHz

Doppler frequency: 3.6, 4.2, 5.0, 6.3 MHz

Biopsy guide: single-angle, disposable with a disposable bracket (H48691YW), single-angle, reusable bracket (H48701MN)

BE9CS-RS Biplane Micro Convex Probe

Applications: Urology, Transrectal

Probe band width: 3 - 12 MHz

Number of element: 96 x 2

Convex radius: 9 mmR

FoV (max): 127°

Active area: 20.8 x 5 mm

B-Mode frequency: 6, 8, 10 MHz

Harmonic frequency: 8, 9, 10 MHz

Doppler frequency: 4.2, 5.0, 6.3 MHz

Biopsy guide: single-angle, reuseable (E8387MA), disposable (E8387M), disposable starter kit (H42742LH), disposable starter kit (H42742LJ)

RAB2-6-RS Convex Volume Probe

Applications: Abdomen, OB/GYN, Urology

Probe band width: 1 - 5 MHz

Number of element: 128

Convex radius: 47 mmR

FoV (max): 66°, volume angle: 85°

Physical foot print: 53.8 x 13 mm

B-Mode frequency: 3, 4, 5 MHz

Harmonic frequency: 4, 5, 6 MHz

Doppler frequency: 1.9, 2.5, 3.1, 3.6 MHz

Biopsy guide: multi-angle, disposal with reusable bracket (H48681ML)

RIC5-9A-RS Convex Volume Probe

Applications: OB/GYN, Urology, Endocavity

Probe band width: 3 - 10 MHz

Number of element: 192

Convex radius: 10.1 mmR

FoV (max): 146°, volume angle: 120°

Active area: 26.5 x 6 mm

B-Mode frequency: 5, 7, 9 MHz

Harmonic frequency: 7, 8, 9 MHz

Doppler frequency: 3.6, 4.2, 5.0, 6.3 MHz

Biopsy guide: single-angle, reusable bracket (H46721R), single-angle, disposable (H48681GF)

ML6-15-RS Matrix Array Linear Probe

Applications: Small Parts, Vascular, Pediatric, Neonatal, Musculoskeletal

Probe band width: 4 - 15 MHz

Number of element: >1000

FoV (max): 50.4 mm

Physical foot print: 50.4 x 6 mm

B-Mode frequency: 9, 11, 13, 15 MHz

Harmonic frequency: 8, 10, 12, 15 MHz

Doppler frequency: 5, 6.3, 8.3 MHz

Biopsy guide: multi-angle, disposable with a reusable bracket (H40432LJ)

12L-RS Linear Probe

Applications: Small Parts, Vascular, Pediatric, Neonatal, Musculoskeletal

Probe band width: 3 - 12 MHz

Number of element: 192

FoV (max): 38.4 mm

Physical foot print: 38.4 x 4 mm

B-Mode frequency: 7, 9, 11 MHz

Harmonic frequency: 9, 11, 12 MHz

Doppler frequency: 4.2, 5, 6.3, 8.3 MHz

Biopsy guide: Multi-angle, disposable with a reusable bracket (H40432LC)

9L-RS Linear Probe

Applications: Vascular, Small Parts, Pediatric, Abdomen

Probe band width: 2 - 8 MHz

Number of element: 192

FoV (max): 44.2 mm
 Physical foot print: 44.2 x 6 mm
 B-Mode frequency: 5, 7, 9 MHz
 Harmonic frequency: 8, 9, 10 MHz
 Doppler frequency: 3.1, 3.6, 4.2, 5 MHz
 Biopsy guide: multi-angle, disposable with a reusable bracket (H4906BK)

L6-12-RS Linear Probe

Applications: Small Parts, Vascular, Pediatric, Neonatal, Abdomen, Musculoskeletal
 Probe band width: 5 - 11 MHz
 Number of element: 128
 FoV (max): 38.4 mm
 Physical foot print: 38.4 x 4 mm
 B-Mode frequency: 7, 9, 11 MHz
 Harmonic frequency: 9, 11, 12 MHz
 Doppler frequency: 4.2, 5, 6.3, 8.3 MHz
 Biopsy guide: multi-angle, disposable with a reusable bracket (H40432LC)

L8-18i-RS Linear Probe

Applications: Small Parts, Vascular, Pediatric, Neonatal, Intraoperative(Not for China), Musculoskeletal
 Probe band width: 4 - 15 MHz
 Number of element: 168
 FoV (max): 25.2 mm
 Physical foot print: 25.2 x 4 mm
 B-Mode frequency: 8, 9, 12, 15, 18 MHz
 Harmonic frequency: 9, 15, 18 MHz
 Doppler frequency: 5, 6.3, 8.3 MHz
 Biopsy guide: none

L4-12t-RS Linear Probe

Applications: Small Parts, Vascular, Pediatric, Neonatal, Musculoskeletal
 Probe band width: 3 - 12 MHz
 Number of element: 192
 FoV (max): 38.4 mm
 Active area: 38.4 x 4 mm
 B-Mode frequency: 7, 9, 11 MHz
 Harmonic frequency: 9, 11, 12 MHz
 Doppler frequency: 4.2, 5, 6.3, 8.3 MHz
 Biopsy guide: multi-angle, disposable with a reusable bracket (H40432LC), multi-angle, disposable with a reusable bracket (H48392LL), multi-angle, disposable with a reusable bracket (H48392LT)

L10-22-RS Linear Probe

Applications: Small Parts, Neonatal, Musculoskeletal
 Probe band width: 7 - 20 MHz
 Number of element: 128
 FoV (max): 12.8 mm
 Active area: 12.8 x 1.5 mm
 B-Mode frequency: 10, 12, 16, 20 MHz
 Harmonic frequency: 16, 19, 22 MHz
 Doppler frequency: 11.1, 12.5, 14.3 MHz
 Biopsy guide: none

L3-9i-RS Linear Probe

Applications: Small Parts, Vascular, Neonatal, Musculoskeletal, Intraoperative (Not for China)
 Probe band width: 2 - 9 MHz

Number of element: 192

FoV (max): 38.4 mm

Active area: 38.4 x 4 mm

B-Mode frequency: 5, 7, 9 MHz

Harmonic frequency: 7, 8, 9, 10 MHz

Doppler frequency: 3.6, 4.2, 5 MHz

Biopsy guide: none

L3-12-RS Linear Probe

Applications: Vascular, Small Parts, Neonatal, Pediatrics, Abdomen

Probe band width: 2 - 11 MHz

Number of element: 256

FoV (Max): 51.2 mm

Physical foot print: 51.2 x 5 mm

B-Mode frequency: 5.0, 7.0, 9.0, 11.0 MHz

Harmonic frequency: 8, 10, 12 MHz

Doppler frequency: 3.6, 4.2, 5, 6.3, 8.3 MHz

Biopsy guide: multi-angle, disposable with a reusable bracket (H48302AA)

3Sc-RS Phased Array Sector Probe

Applications: Cardiac, Transcranial, Abdomen

Probe band width: 1 - 5 MHz

Number of element: 64

FoV (max): 120°

Physical foot print: 15 x 14 mm

B-Mode frequency: 2, 3, 4 MHz

Harmonic frequency: 3, 3.5, 4.0, 5.0 MHz

Doppler frequency: 1.7, 2.1, 2.5, 3.1, 3.6 MHz

Biopsy guide: multi-angle, reusable bracket (H46222LC)

6S-RS Phased Array Sector Probe

Applications: Cardiac Neonatal, Pediatric

Probe band width: 2 - 8 MHz

Number of element: 64

FoV (max): 90°

Physical foot print: 10.2 x 5.5 mm

B-Mode frequency: 4, 5, 6.5, 8 MHz

Harmonic frequency: 4.8, 5.4, 6.2 MHz

Doppler frequency: 2.8, 3.1, 3.6, 4.2, 5.0 MHz

Biopsy guide: none

12S-RS Phased Array Sector Probe

Applications: Pediatric, Neonatal

Probe band width: 4 - 12 MHz

Number of element: 96

FoV (max): 90°

Active area: 9.3 x 5.5 mm

B-Mode frequency: 7, 8, 9 MHz

Harmonic frequency: 7, 8, 9 MHz

Doppler frequency: 5.0, 6.3 MHz

Biopsy guide: none

P8D CW Split Crystal Probe

Applications: Cardiac, Vascular

P6D CW Split Crystal Probe

Applications: Cardiac, Vascular

P2D CW Split Crystal Probe

Applications: Cardiac, Vascular

6Tc-RS TEE Sector (Trans-esophageal) Probe

Applications : Cardiac (Transesophageal)

Probe band width: 2 - 8 MHz

Number of element: 64

FoV (Max): 90°

Physical foot print: 14 x 12 mm

B-Mode frequency: 6.0, 7.0, 8.0 MHz

Harmonic frequency: 6 MHz

Doppler frequency: 2.8, 3.1, 3.6, 4.2, 5 MHz

Biopsy guide: none

E7C8L-C-RS Biplane Convex Probe

Applications: Urology (Transrectal)

Convex Probe band width: 4 - 11 MHz

Number of element: 128

Convex radius: 8 mmR

Convex FoV (max): 136°

Convex foot print: 17.2 x 10.3 mm

B-Mode frequency: 5, 6, 7 MHz

Harmonic frequency: 6, 8, 10 MHz

Doppler frequency: 4.2, 5.0, 6.3, 8.3 MHz

Biopsy Biopsy attachment : Ladder (H40202E),

AccuCARE Disposable Template Grids (17GA) 610-905

AccuCARE Disposable Template Grids (18GA) 610-906

E7C8L-L-RS Biplane Linear Probe

Applications: Urology (Transrectal)

Linear Probe band width: 3 - 11 MHz

Number of element: 128

Linear foot print: 57.6 x 9.1 mm

B-Mode frequency: 6, 7, 8 MHz

Harmonic frequency: 7, 9, 11 MHz

Doppler frequency: 4.2, 5.0, 6.3, 8.3 MHz

Biopsy Biopsy attachment : Ladder (H40202E),

AccuCARE Disposable Template Grids (17GA) 610-905

AccuCARE Disposable Template Grids (18GA) 610-906

Inputs and Outputs

HDMI out

Ethernet network (RJ45)

External audio out

USB ports

- OPIO Ext USB3.0 x 2 pcs
- Monitor USB2.0 x 2 pcs
- Rear USB2.0 x 3 pcs

AC power input

Probe connectors

Regulatory and Standard

Safety Conformance

The LOGIQ P9 is:

© Classified to ANSI/AAMI ES60601-1 Medical Electrical Equipment, Part 1: General Requirements for Safety by a Nationally Recognized Test Lab

© Certified to CSA CAN/CSA-C22.2 NO. 60601-1 General requirements for safety

© CE Marked to Regulation (EU) 2017/745 on Medical Devices Conforms to the following standards for safety:

- IEC/EN 60601-1 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
- IEC/EN 60601-1-2 Medical electrical equipment – Part 1-2: General requirements for safety – Collateral Standard: Electromagnetic compatibility – requirements and tests
- IEC/EN 60601-1-6 Medical electrical equipment Part 1 -6: General requirements for basic safety and essential performance – Collateral Standard: Usability
- IEC/EN 60601-1-9 Medical electrical equipment Part 1 -9: General requirements for basic safety and essential performance –Collateral Standard: Requirements for environmentally conscious design
- IEC/EN 60601-2-37 Medical electrical equipment – Part 2-37: Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment
- IEC/EN 62366-1 Application of usability engineering to medical devices
- IEC/EN 62304 Software Life Cycle Processes
- IEC/EN 62359 Ultrasonic - Field characterization - Test methods for the determination of thermal and mechanical indices related to medical diagnostic ultrasonic fields
- EN ISO 15223-1: Symbols to be used with medical device labels, labelling and information to be supplied
- ISO 10993-1 Biological evaluation of medical devices – Part 1 Evaluation and testing
- ISO 17664-2: Processing of health care products — Information to be provided by the medical device manufacturer for the processing of medical devices
- ISO14971 (Medical devices - Application of risk management to medical devices)
- EMC Emissions Group 1, class A device requirements as per Sub clause 4.2 of CISPR 11
- WEEE (Waste Electrical and Electronic Equipment)
- RoHS according to 2011/65 EU, EU Directive 2015/863 Including national deviations
- Wireless equipment shall be certified to FCC, RED and Japan Radio Law.

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