LOGIQ P10 R4.5 (LP10 *XDclear*)
Product Spec Sheet (Global version)

DOC2728824

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General Specifications

Dimensions and Weight

Height	• Articulating monitor arm (standard) – Minimum: 1390 mm (54.7 inch) – Maximum: 1640 mm (64.5 inch)
Width	• Keyboard: 430 mm (16.9 inch) • Foot cover: 495 mm (19.5 inch) • Monitor: 565 mm (22.2 inch; 23.8 inch HDU Display)
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)	• 69 kg/152 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 ± 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: ±30°

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 HDU Display

Tilt/rotate/translate	• Tilt angle +15°/-90°
	• Rotate angle ±90°
	• Translate horizontal 660 mm
	• Translate vertical 150 mm

Display colors: 16.7M

Resolution: 1920 x 1080

Contrast Ratio: >200,000:1

Fold-down and lock mechanism for transportation

Brightness and contrast adjustment

Horizontal/vertical viewing angle of ±178°

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

DICOM Viewer
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: ±12°
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: ±90°, 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

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, ±20°

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, ±20°
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	
Angel correct: ± 90°, 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, ±10, 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 C1-6-D, C2-7-D, C3-10-D, 10C-D, 9L-RS, 12L-RS, ML6-15-RS, L8-18i-RS, C1-5-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, C3-10-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 dnhance: 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, M5Sc-RS, C1-5-RS, 9L-RS, 3Sc-RS, BE9CS-RS, IC9-RS, E7C8L-RS
HRes mode   : Available on C1-6-D, C2-7-D, M5Sc-RS, 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 P10 (LOGIQ P10 *XDclear*) 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 |

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, abdomninal, 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, C3-10-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, C3-10-D, 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

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

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, C3-10-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, M5Sc-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)

C3-10-D Convex Probe

Applications: Neonatal, Pediatric, Vascular

Probe band width: 2 - 11 MHz

Number of element: 192

Convex radius: 15 mmR

FoV (max): 99°

Physical foot print: 25.9 x 4.9 mm

B-Mode frequency: 4, 6, 8 MHz

Harmonic frequency: 6, 8, 10 MHz

Doppler frequency: 3.6, 4.2, 5.0, 6.3, 7.7, 8.3 MHz

Biopsy guide: none

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)

M5Sc-RS Phased Array Sector Probe
Applications: Cardiac, Transcranial, Stress
Probe band width: 1 - 5 MHz

Number of element: 80 x 3

FoV (max): 120°

Physical foot print: 27.5 x 18.1 mm

B-Mode frequency: 2, 3, 4 MHz

Harmonic frequency: 3, 3.2, 3.3, 3.7, 4.5, 4.6 MHz

Doppler frequency: 1.6, 1.8, 2.1, 2.5, 3.1 MHz

Biopsy guide: multi-angle, reusable bracket (H45561FC)

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 P10 (LOGIQ P10 *XDclear*) 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 Medial 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.

◎ Medical Device Good Manufacturing Practice Manual issued by the FDA (Food and Drug Administration, Department of Health, USA).