



LOGIQ P9

Make it easy. Make it your own.

Product description

The LOGIQ™ P9 is a workhorse for the demanding physician. Its flagship imaging engine is the foundation for finding the root of the patient's problem, even in difficult patients. Buttons on the transducer turn three-handed procedures into two-handed procedures, giving the physician more control. It all adds up to a system that's walk-up easy-to-use on day one and for the most challenging procedures.



General Specification

Dimensions and Weight

Height	Articulating monitor arm 1320 mm ~ 1570 mm (52.0 in ~ 61.8 in)
Width	Keyboard: 430 mm (16.9 in) Foot cover: 495 mm (19.5 in) Monitor: 525 mm (20.7 in)
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)	68 kg/150 lbs

Electrical Power

Voltage	100 – 240 Vac
Frequency	50/60 Hz

Power consumption maximum of 500 VA with peripherals

Console Design

- 4 active probe ports
- Integrated solid state drive
- Integrated DVD multi-drive (option)
- On board storage for BW printer
- Integrated speakers
- Probe holders
- Front handle
- Gel warmer (option)
- Rear handle (option)
- Probe light

User Interface

Operator Keyboard

- Ergonomic full size keyboard
- Swivel-adjustable, height-adjustable
- Digital TGC and digital A/N keyboard
- Physical A/N keyboard (option)
- 10.4" LCD touch screen

Monitor

- 21.5" widescreen LCD with high resolution

System Overview

Applications

- Abdominal
- Obstetrical
- Gynecological
- Breast
- Small parts
- Musculoskeletal
- Vascular
- Urological
- Pediatric & neonatal
- Intraoperative
- Cardiac
- Transcranial
- Endocavitary (transvaginal, transrectal)
- Transesophageal

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)

Operating Modes

- B-Mode
- Coded harmonic imaging
- M-Mode
- Color Flow Mode (CFM)
- Power Doppler Imaging (PDI)

System Overview *(cont.)*

Operating Modes *(cont.)*

PW Doppler with high PRF

M-Color Flow Mode

Anatomical M-Mode

Curved anatomical M-Mode

B-Flow™/B-Flow color (option)

Extended Field of View (LOGIQView Option)

Coded Contrast Imaging² (option)

CW Doppler Mode (option)

TVI Mode (option)

Strain Elastography (option)

3D/4D Volume Modes (option)

Shear Wave Elastography (option)

HD*live*™ (option)

System Standard Features

Advanced user interface with high resolution 10.4" wide LCD touch screen

Automatic optimization

CrossXBeam™ compounding

Speckle Reduction Imaging (SRI-HD)

Fine angle steering

Coded harmonic imaging

Virtual convex

Advanced 3D (option)

Patient information database

Image archive on integrated CD/DVD (option) and SSD

Raw data analysis

Real-time automatic doppler calculations

OB calculations

Fetal trending

Email to MMS

Mytrainer+

Privacy and security

Qpath

Tricefy™

Multigestational Touch control

System Standard Features *(cont.)*

InSite™ capability

IOTA (International Ovarian Tumor Analysis) LR2 worksheet

Vnav Import

System Options

Auto IMT

Advanced 3D

Cable hook rear

Card reader mounting kit

Strain Elastography

Elastography Quantification³

DICOM® 3.0 connectivity

LOGIQView

B-Flow/B-Flow Color

CF/PDI quantification (FlowQA)

Breast productivity package

Thyroid productivity package

Measure assist OB

AutoEF

B Steer+

Stress echo

Tissue Velocity Imaging (TVI) with Q-Analysis

Scan assistant

Compare assistant

Report writer

Cardiac strain

STIC

OmniView

Shear Wave Elastography

LOGIQ P apps

HD*live*

Coded Contrast (CEUS)

HRES CEUS

System Overview *(cont.)*

Peripheral Options

Integrated options for	<ul style="list-style-type: none">• Digital BW thermal printer• HDMI output available for compatible devices• S-Video output available for compatible devices• Wireless LAN card for wireless data transfer• External USB printer connection• Power Assistant (battery or extended battery option) for offline scanning
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Digital color thermal printer

Foot switch with programmable functionality

Universal video converter

Barcode reader (for reading needle information)

LOGIQ P apps (Bluetooth)

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 or CrossXBeam/PW

B or CrossXBeam/CFM or PDI

B/M

B/CrossXBeam

Real-time Triplex Mode (B or CrossXBeam + CFM or PDI/PW or CW (option))

Selectable alternating modes

B or CrossXBeam/PW

B or CrossXBeam + CFM (PDI)/PW(CW (option))

B/CW (option)

Multi-image (split/quad screen)

Live and/or frozen

B or CrossXBeam + B or CrossXBeam/CFM or PDI

Independent Cine playback

Timeline display

Independent dual B or CrossXBeam/PW display

CW

Display formats	<ul style="list-style-type: none">• Top/bottom selectable format• Side/side selectable format
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Display Modes *(cont.)*

Virtual convex

Timeline only

Display Annotation

Patient name: first, last and middle

Patient ID

Alternate patient ID

Age, sex and birth date

Hospital name

Date format: 3 types selectable	<ul style="list-style-type: none">• MM/DD/YY• DD/MM/YY• YY/MM/DD
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Time format: 2 types selectable	<ul style="list-style-type: none">• 24 hours• 12 hours
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Gestational age from	<ul style="list-style-type: none">• LMP• EDD	<ul style="list-style-type: none">• GA• BBT
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Displayed acoustic output	<ul style="list-style-type: none">• TIS: Thermal Index Soft Tissue• TIC: Thermal Index Cranial (Bone)• TIB: Thermal Index Bone• MI: Mechanical Index
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% of maximum power output

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

Frame averaging

Acoustic frame rate

Gray map

SRI-HD

M-Mode

System Overview *(cont.)*

Display Annotation *(cont.)*

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

Inversion

Doppler frequency

TGC curve

Cine gage, image number/frame number

Body pattern: multiple human and animal types

Application name

Measurement results

Operator message

Biopsy guide line and zone

Heart rate

General System Parameters

System Setup

Pre-programmable categories

User programmable preset capability

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 formats including Tokyo Univ., Osaka Univ., USA, Europe, and ASUM

User defined annotations

Body patterns

Customized comment home position

Reset

Complete User Manual Available On-Board Through Help (F1)

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

CINE Memory/Image Memory

776 MB of Cine memory

Selectable cine sequence for Cine review

Prospective Cine mark

Measurements/calculations and annotations on Cine playback

Scrolling timeline memory

Dual image Cine display

Quad image Cine display

Cine gauge and Cine image number display

Cine review loop

Cine review speed

Image Storage

On-board database of patient information from past exams

Storage formats

- DICOM – compressed/uncompressed, single/multiframe, with/without raw data
- Export JPEG, JPEG2000, WMV, MPEG 4 and AVI formats

Storage devices

- USB memory Stick: 64 MB to 4 GB (for exporting individual images/clips)
- CD-R storage: 700 MB
- DVD storage: -R (4.7 GB)
- Solid state drive image storage: ~345 GB

General System Parameters *(cont.)*

Image Storage *(cont.)*

Compare old images with current exam

Reload of archived data sets

Connectivity & DICOM

Ethernet network connection

DICOM 3.0 (option)

Wireless LAN (option)

Verify

Print

Store

Modality worklist

Storage commitment

Modality Performed Procedure Step (MPPS)

Media exchange

Off network/mobile storage queue

Query/retrieve

Public SR template	<ul style="list-style-type: none">• Structured reporting – compatible with vascular and OB standard• Direct export DICOM SR and XML
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Remote capability InSite™ ExC

DICOM directory import

LOGIQ P apps

Physiological Input Panel (Option)

Physiological input

ECG, 2 lead

Dual R-Trigger

Pre-settable ECG R delay time

Pre-settable ECG position

Adjustable ECG gain control

Automatic heart rate display

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

Report Writer (Option) *(cont.)*

Exam result reports can include patient info, exam info, measurements, calculations, images, comments and physician diagnosis

Standard templates provided

Customizable templates

Thyroid reporting template

Scanning Parameters

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)

Continuous dynamic receive focus/continuous dynamic

Receive aperture

Adjustable dynamic range

Adjustable Field of View (FOV)

Image reverse: right/left

Image rotation of 0°, 90°, 180°, 270°

Digital B-Mode

Adjustable	<ul style="list-style-type: none">• Acoustic power• Dynamic range• Gray scale map• Line density• B colorization• Reject• Suppression• SRI-HD• Edge enhance	<ul style="list-style-type: none">• Gain• Frame averaging• Frequency• Scanning size (FOV or angle – depending on the probe, see probe specifications)
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Digital M-Mode

Adjustable	<ul style="list-style-type: none">• Acoustic power• Dynamic range• Frequency• M colorization• Rejection	<ul style="list-style-type: none">• Gain• Gray scale map• Sweep speed• M display format
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Anatomical M-Mode

M-Mode cursor adjustable at any plane

Can be activated from a Cine loop from a live or stored image

M and A capability

Available with Color Flow Mode

Curved Anatomical M-Mode

General System Parameters *(cont.)*

Digital Spectral Doppler Mode

Adjustable	<ul style="list-style-type: none"> Acoustic power Dynamic range Transmit frequency PW colorization Sweep speed Sample volume length Spectrum inversion Baseline shift Time resolution Compression Trace sensitivity 	<ul style="list-style-type: none"> Gain Gray scale map Wall filter Velocity scale range Angle correction Steered linear Trace method Doppler auto trace Trace direction
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Digital Color Flow Mode

Adjustable	<ul style="list-style-type: none"> Acoustic power Gain Velocity scale range Wall filter Packet size Spatial filter Baseline shift Threshold Sample volume control Flash suppression 	<ul style="list-style-type: none"> Color maps, including velocity-variance maps Line density Steering angle Frame average Accumulation mode Quantification (option)
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Digital Power Doppler Imaging

Adjustable	<ul style="list-style-type: none"> Acoustic power Gain Velocity scale range Wall filter Packet size Spatial filter Frame average Accumulation mode Flash suppression 	<ul style="list-style-type: none"> Color maps including velocity-variance maps Line density Steering angle Threshold Sample volume control
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Continuous Wave Doppler (Option)

Adjustable	<ul style="list-style-type: none"> Acoustic power Dynamic range Transmit frequency CW colorization Sweep speed Angle correction Trace method Baseline shift Compression Trace direction 	<ul style="list-style-type: none"> Gain Gray scale map Wall filter Velocity scale range Spectrum inversion Doppler auto trace Trace sensitivity
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Available on the following probes: 3Sc-RS, 6S-RS, 12S-RS, 6Tc-RS, P2D, P6D and P8D

Automatic Optimization

Optimize B-Mode image to improve contrast resolution

Selectable amount of contrast resolution improvement (low, medium, high)

Auto TGC

Auto-spectral optimize adjusts	<ul style="list-style-type: none"> Baseline PRF (on live image) 	<ul style="list-style-type: none"> Invert Angle correction
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Coded Harmonic Imaging

Available on all 2D and 4D probes

B-Flow/B-Flow Color (Option)

Available on C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L8-18i-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, E8CS-RS, BE9CS-RS, L3-12-RS and IC9-RS probes

Background: on/off

Sensitivity/PRI

Line density

Edge enhance

Frame average

Gray scale map

Tint map

Dynamic range

Rejection

Gain

Hybrid B-Flow	<ul style="list-style-type: none"> Supported on C1-5-RS, 12L-RS, 9L-RS, ML6-15-RS, L4-12t-RS and L3-12-RS B & B-Flow simultaneous dual display B & B-Flow overlay display
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B-Flow Color (BFC)

B-Flow High Definition Color (HD Color)	Supported on C1-5-RS, 12L-RS, ML6-15-RS, L4-12t-RS and L3-12-RS
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Accumulation

Coded Contrast Imaging (Option)

Available on C1-5-RS, 9L-RS, 3Sc-RS, IC9-RS and BE9CS-RS probes

2 contrast timers

Timed updates: 0.05 – 10 seconds

Accumulation mode, six levels

Maximum Enhance Mode

General System Parameters *(cont.)*

Coded Contrast Imaging (Option) *(cont.)*

Flash

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.

LOGIQ View (Option)

Extended Field of View imaging

Available on the following probes: C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L8-18i-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, E8C-RS, E8CS-RS, IC9-RS, BE9CS-RS, RIC5-9A, 6Tc-RS, RAB2-6-RS, 3SC-RS, 6S-RS, 12S-RS

For use in B-Mode

CrossXBeam is available on linear probes

Auto detection of scan direction

Pre or post-process zoom

Rotation

Auto fit on monitor

Measurements in B-Mode

3D

Allows unlimited rotation and planar translations

3D reconstruction from Cine sweep

Advanced 3D (Option)

Acquisition of color data

Automatic rendering

3D landscape technology

3D movie

Real-time 4D (Option)

Acquisition modes	<ul style="list-style-type: none">• Real-time 4D• Static 3D
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Real-time 4D (Option) *(cont.)*

Visualization modes	<ul style="list-style-type: none">• 3D rendering (diverse surface and intensity projection modes)• Sectional planes (three section planes perpendicular to each other)• Volume contrast imaging-static (option)• Tomographic ultrasound imaging (option)
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Render mode	Surface texture, surface smooth, max-, min- and X-ray (average intensity projection), mix mode of two render modes
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Curved 3 point render start

3D movie

Scalpel: 3D cut tool

Display format	<ul style="list-style-type: none">• Quad: A-/B-/C-Plane/3D• Dual: A-Plane/3D• Single: 3D or A- or B- or C-Plane
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Automated Volume Calculation – VOCAL II (option)

Betaview

Auto sweep

STIC (option)

HDLive (option)

Omniview (option)	VCI OmniView
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Scan Assistant (Option)

Factory programs

User defined programs

Steps include image annotations, mode transitions, basic imaging controls and measurement initiation

Shear Wave Elastography (Option)

Available on the following probes: C1-5-RS, L3-12-RS

User programmable measurement display in kPa and meters per sec.

Single and dual view display

B Steer+ (Option)

Available on the following probes: C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS, RAB2-6-RS

General System Parameters *(cont.)*

Strain Elastography (Option)

Available on C1-5-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L4-12t-RS, E8CS-RS, BE9CS-RS, L3-12-RS and IC9-RS probes

Semi-Quantification²

TVI (Option)

Myocardial doppler imaging with color overlay on tissue image

Available on the 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 creation of new templates

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

Baseline level/previous level selectable

Raw data continuous capture

Over 100 sec. available

Wall motion scoring (bulls-eye and segmental)

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

Scan Assistant (Option)

Factory programs

User-defined programs

Steps include image annotations, mode transitions, basic imaging controls and measurement initiation

Compare Assistant (Option)

Allows side-by-side comparison of previous ultrasound and other modality exams during live scanning

Power Assistant (Option)

Allows moving the system without a complete system shutdown and boot-up power cycle

Extended battery for off line scanning (option) provides battery powered live scanning

Breast Productivity Package (Option)

Worksheet summary includes measurements and locations for nodule, parathyroid and lymph node

Feature assessment

BI-RADS[®] assessment

User editable

Thyroid Productivity Package (Option)

Worksheet summary includes measurements and locations for nodule, parathyroid and lymph node

Feature assessment

User editable

Auto EF (Option)

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

User editable

Cardiac Strain (Cardiac AFI) (Option)

Allows assessing the left ventricle with all segments at a glance by combining three longitudinal views into one comprehensive bulls-eye view

2D strain based data moves into clinical practice

Virtual Convex

Provides a convex Field of View

Compatible with CrossXBeam

Available on all linear and sector transducers

SRI-HD

Speckle Reduction Imaging

Provides multiple 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 imaging

General System Parameters *(cont.)*

CrossXBeam

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

Live side-by-side DualView display

Compatible with	<ul style="list-style-type: none">• Color Mode• SRI-HD• Virtual convex	<ul style="list-style-type: none">• PW• Coded harmonic imaging
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Available on C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L8-18i-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, E8C-RS, E8CS-RS, BE9CS-RS, RIC5-9A-RS, IC9-RS, L3-12-RS and RAB2-6-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	<ul style="list-style-type: none">• Length• Depth
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Velocity scale

Color Flow Mode

CFM gain

CFM velocity range

Acoustic output

Controls Available While “Live” *(cont.)*

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 8x: 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

General System Parameters *(cont.)*

Controls Available on “Freeze” or Recall *(cont.)*

Color flow

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

Measurements/Calculations

General B-Mode

Depth and 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 (PS/ED ratio)

ED/PS (ED/PS ratio)

AT (Acceleration Time)

General Doppler Measurements/Calculations *(cont.)*

ACCEL (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 (PS/ED ratio)

ED/PS (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)
- FTA (Fetal Trunk cross-sectional Area)
- BD (Binocular Distance)
- HL (Humerus Length)
- 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)

Measurements/Calculations *(cont.)*

OB Measurements/Calculations *(cont.)*

Estimated fetal weight (EFW) by

- AC, BPD
- AC, BPD, FL, HC
- AC, FL, HC
- BPD, APTD, TTD, FL
- AC, BPD, FL
- AC, FL
- AC, HC
- 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)
- MCA PS (Middle Cerebral Artery Peak Systolic Velocity)
- MCA CP (Middle Cerebral Artery Pulsatility Index Over Umbilical Artery Pulsatility Index Ratio)
- MCA PI (Middle Cerebral PI)
- MCA RI (Middle Cerebral RI)
- UmbArt PI (Umbilical artery PI)
- UmbArt RI (Umbilical artery RI)
- UtArt PI (Uterine artery PI)
- UtArt RI (Uterine artery RI)

Measurements/calculations by: ASUM, ASUM 2001, Berkowitz, Bertagnoli, Brenner, Campbell, CFEF, Chitty, Eik-Nes, Ericksen, Goldstein, Hadlock, Hansmann, Hellman, Hill, Hohler, Jeanty, JSUM, Kurtz, Mayden, Mercer, Merz, Moore, Nelson, Osaka University, Paris, Rempen, Robinson, Shepard, Shepard/Warsoff, Tokyo University, Tokyo/Shinozuka, 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 calculations

Expanded worksheets

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

GYN Measurements/Calculations *(cont.)*

Uterine RI

Follicular measurements

Summary reports

IOTA (International Ovarian Tumor Analysis) LR2 worksheet

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)

Automatic IMT

Summary Reports

Urological Calculations

Bladder volume

Prostate volume

Left/right renal volume

Generic volume

Post-void bladder volume

Probes

LOGIQ P9

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, P2D

C1-5-RS

Convex probe

Applications	Abdomen, Vascular, OB/GYN, Urology
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LE)

8C-RS

Micro convex probe

Applications	Neonatal, Pediatrics
Biopsy guide	No

E8C-RS

Endocavitary micro convex probe

Applications	OB/GYN, Urology, Transvaginal, Transrectal
Biopsy guide	Single-angle, disposable with a disposable bracket (E8385MJ, E8333JB), single-angle, reusable bracket (H40412LN)

E8CS-RS

Endocavitary micro convex probe

Applications	OB/GYN, Urology, Transvaginal, Transrectal
Biopsy guide	Single-angle, disposable with a disposable bracket (E8385MJ, E8333JB), single-angle, reusable bracket (H40412LN)

IC9-RS

Endocavitary micro convex probe

Applications	OB/GYN, Urology, Transvaginal, Transrectal
Biopsy Guide	Single-angle, disposable with a disposable bracket (H48691YW), single-angle, reusable bracket (H48701MN)

BE9CS-RS

Endocavitary micro convex probe

Applications	Urology, Transrectal
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BE9CS-RS (cont.)

Biopsy guide	Single-angle, disposable with a disposable bracket (E8387M, H42742LH, H42742LJ), single-angle, reusable bracket (E8387MA)
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RAB2-6-RS

Convex volume probe

Applications	Abdomen, OB/GYN, Urology
Biopsy guide	Multi-angle, disposable with reusable bracket (H48681ML)

RIC5-9A-RS

Endocavitary micro convex volume probe

Applications	OB/GYN, Urology, Transvaginal, Transrectal
Biopsy guide	Single-angle, disposable with a disposable bracket (H48681GF), single-angle, reusable bracket (H46721R)

9L-RS

Linear probe

Applications	Vascular, Small Parts, Pediatric, Abdomen
Biopsy guide	Multi-angle, disposable with a reusable bracket (H4906BK)

12L-RS

Linear probe

Applications	Vascular, Small Parts, Neonatal, Pediatrics, Musculoskeletal
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LC)

L8-18i-RS

Linear probe

Applications	Vascular, Small Parts, Neonatal, Pediatrics, Intraoperative
Biopsy guide	No

L6-12-RS

Linear probe

Applications	Abdomen, Vascular, Small Parts, Pediatrics, Neonatal, Musculoskeletal
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LC)

Probes *(cont.)*

L4-12t-RS

Linear probe

Applications	Small Parts, Vascular, Pediatrics, Neonatal, Musculoskeletal
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LC). Single-angle, disposable with a reusable bracket (H48392LT: free hand, H48392LL: transverse)

L10-22-RS

Linear probe

Applications	Small Parts, Musculoskeletal, Neonatal
Biopsy guide	N/A

L3-9i-RS

Linear probe

Applications	Small Parts, Vascular, Musculoskeletal, Intraoperative
Biopsy guide	N/A

ML6-15-RS

Matrix array linear probe

Applications	Small Parts, Vascular, Neonatal, Pediatrics, Musculoskeletal
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LJ)

L3-12-RS

Linear Probe

Applications	Vascular, Small Parts, Neonatal, Pediatrics, Abdomen
Biopsy Guide	Multi-angle, disposable with a reusable bracket (H48302AA)

3Sc-RS

Phased array sector probe

Applications	Cardiac, Transcranial, Abdomen
Biopsy guide	Multi-angle, disposable with a reusable bracket (H46222LC)

6S-RS

Phased array sector probe

Applications	Cardiac Neonatal, Pediatrics
Biopsy guide	No

12S-RS

Phased array sector probe

Applications	Pediatrics, Neonatal
Biopsy guide	N/A

6Tc-RS

TEE Sector (Trans-esophageal) Probe

Applications	Cardiac (Transesophageal)
Biopsy Guide	None

P6D

CW split crystal probe

Applications	Cardiac, Vascular
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P8D

CW split crystal probe

Applications	Cardiac, Vascular
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P2D

CW Split Crystal Probe

Applications	Cardiac, Vascular
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Inputs and Outputs

HDMI out

Ethernet network (RJ45)

S-video out

Composite video out

USB (2x in front (USB 3.0), 3x in rear, 2x monitor)

AC power input

Safety Conformance

Classified to ANSI/AAMI ES60601-1 2005 R1 2012 Medical Electrical Equipment, Part 1: General Requirements for Safety by a Nationally Recognized Test Lab

Certified to CSA CAN/CSA-C22.2 NO. 60601-1:14 General requirements for safety

CE Marked to Council Directive 93/42/EEC on Medical Devices Conforms to the following standards for safety:

IEC/EN 60601-1 2nd Edition Medical electrical equipment – Part 1: General requirements for safety

IEC/EN 60601-1 3.1 Edition. Medical electrical equipment – Part 1: General requirements for basic safety and essential performance

IEC/EN 60601-1-1 Medical electrical equipment – Part 1-1: General requirements for safety – Collateral Standard: Safety requirements for medical electrical systems

IEC/EN 60601-1-2 Medical electrical equipment – Part 1-2: General requirements for safety – Collateral Standard: Electromagnetic compatibility – requirements and tests

IEC/EN 60601-1-4 Medical electrical equipment Part 1- 4: General requirements for safety – Collateral Standard: programmable electrical medical systems

IEC/EN 60601-1-6 Medical electrical equipment Part 1 -6: General requirements for basic safety and essential performance – Collateral Standard: Usability

IEC/EN 60601-2-18 Medical electrical equipment – Part 2-18: Particular requirements for the basic safety and essential performance of endoscopic equipment

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 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

NEMA UD2 Acoustic output measurement standard for diagnostic ultrasound equipment

NEMA UD3 Standard for real time display of thermal and mechanical acoustic output indices on diagnostic ultrasound equipment (MI, TIS, TIB, TIC)

EMC Emissions Group 1, Class B device requirements as per Sub clause 4.2 of CISPR 11

WEEE (Waste Electrical and Electronic Equipment)

ROHS according to 2011/65/EU Including national deviations

1. The LOGIQ P9 is a highly mobile and easy to use, performance multi-purpose color Doppler imaging system, designed for Abdominal, Small Parts, Musculoskeletal, Breast, Vascular, Cardiology, Transcranial, Urology, Pediatric, Neonatal, Obstetrics and Gynecology applications.
2. Contrast Enhanced Ultrasound is available in the U.S. for characterization of focal liver lesions and left ventricle opacity only.
3. Elastography with semi-Quantification (Elastography Quantification) described in this material has not been cleared by the U.S. FDA and is not available for promotion or sale in the United States.

Imagination at work

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