GE Healthcare

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 1,345mm~1,595mm (53.0 in ~ 62.8 in)
Width	Keyboard: 430 mm (16.9 in) Foot cover: 495 mm (19.5 in) Monitor: 545mm [23.8inch 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

Console design

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

- 23.8inch Bezel-less LCD LED backlight monitor

System Overview

Applications

- Abdominal
- Obstetrical
- Gynecological
- Breast
- Small parts
- Musculoskeletal
- Vascular
- Urological
- Pediatric & Neonatal
- Intraoperative[4]
- 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)
- 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 Imaging[2] (option)
- CW Doppler Mode (option)
- TVI Mode (option)
- Strain Elastography (option)
- Shear Wave Elastography (option)
- 3D/4D Volume Modes (option)
- HD*live*™ (option)
- Offline Scanning Mode (option)
- B-Steer + (option)
- UGAP (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
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
InSite™ Capability
IOTA (International Ovarian Tumor Analysis) LR2 worksheet[4]
Vnav Import
Doppler Assistant
MyPreset
SonoRenderLive

System Options

Auto IMT
Advanced 3D
Cable hook rear
Card reader mounting kit
Strain Elastography
Elastography Quantification[3]
DICOM (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[4]
LOGIQ P Apps
HD*live*™
Coded Contrast (CEUS)
HRES CEUS
Koios Breast Lesion Decision Support[4]
Koios Thyroid Lesion Decision Support[4]
Hepatic Assistant[4]
Digital Expert[4]
UGAP
Software DVR Basic
Software DVR
SonoAVC
SonoNT/SonoIT
Start Assistant

Peripheral Options

Integrated options for	• 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

Digital color thermal printer
Foot switch with programmable functionality
Universal video converter
Barcode reader[4]
LOGIQ P Apps (Bluetooth)
Ethernet protection cable[4]

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	• Top/bottom selectable format • Side/side selectable format

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	• MM/DD/YY • DD/MM/YY • YY/MM/DD
Time format: 2 types selectable	• 24 hours • 12 hours
Gestational age from	• LMP • GA • EDD • BBT
Displayed acoustic output	• TIS: Thermal Index Soft Tissue • TIC: Thermal Index Cranial (Bone) • TIB: Thermal Index Bone • MI: Mechanical Index
% 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	
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:~345GB
Compare old images with current exam	
Reload of archived data sets	

Connectivity & DICOM

Ethernet network connection
DICOM 3.0 (option)
Wireless LAN[4] (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	• Structured reporting – compatible with vascular and OB standard • Direct export DICOM SR and XML

Remote capability InSite™ ExC
DICOM directory import
LOGIQ P Apps (Option)

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
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:	• Acoustic power • Gain • Dynamic range • Frame averaging • Gray scale map • Frequency • Line density • Scanning size (FOV or angle – depending on the probe, see probe specifications) • B colorization • Reject • Suppression • SRI-HD • Edge enhance

Digital M-Mode

Adjustable:	• Acoustic power • Gain • Dynamic range • Gray scale map • Frequency • Sweep speed • M colorization • M display format • Rejection

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

Digital Spectral Doppler Mode

Adjustable:	• Acoustic power • Gain • Dynamic range • Gray scale map • Transmit frequency • Wall filter • PW colorization • Velocity scale range • Sweep speed • Sample volume length • Angle correction • Steered linear • Spectrum inversion • Trace method • Baseline shift • Doppler auto trace • Time resolution • Compression • Trace direction • Trace sensitivity

Digital Color Flow Mode

Adjustable:	• Acoustic power • Color maps, including velocity-variance maps • Gain • Velocity scale range • Wall filter • Packet size • Line density • Spatial filter • Steering angle • Baseline shift • Frame average • Threshold • Accumulation mode • Sample volume control • Flash suppression • Quantification (option)

Digital Power Doppler Imaging

Adjustable:	• Acoustic power • Color maps including velocity-variance maps • Gain • Velocity scale range • Wall filter • Packet size • Line density • Spatial filter • Steering angle • Frame average • Threshold • Accumulation mode • Sample volume control • Flash suppression

Continuous Wave Doppler (Option)

Adjustable:	• Acoustic power • Gain • Dynamic range • Gray scale map • Transmit frequency • Wall filter • CW colorization • Velocity scale range • Sweep speed • Angle correction • Spectrum inversion • Trace method • Baseline shift • Doppler auto trace • Compression • Trace direction • Trace sensitivity

Available on 3Sc-RS, 6S-RS, 12S-RS, 6Tc-RS, P2D, P6D and P8D probes

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

Coded Harmonic Imaging

Available on all 2D probes 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, L3-12-RS, E8CS-RS, IC9-RS, BE9CS-RS, C1-6-D, C2-7-D and 10C-D probes

Background: on/off

Sensitivity/PRI

Line density

Edge enhance

Frame average

Gray scale map

Tint map

Dynamic range

Rejection

Gain

Hybrid B-Flow	• Supported 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 probes

	• B & B-Flow simultaneous dual display • B & B-Flow overlay display
B-Flow Color (BFC)	
B-Flow High Definition Color (HD Color)	Supported on C1-5-RS, 12L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS and C1-6-D probes
Accumulation	

Coded Contrast Imaging (Option)

Available on C1-5-RS, 3Sc-RS, IC9-RS, BE9CS-RS, 9L-RS, C1-6-D and C2-7-D probes
2 contrast timers
Timed updates: 0.05 – 10 seconds
Accumulation mode, six levels
Maximum Enhance Mode
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 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, L3-12-RS, E8C-RS, E8CS-RS, IC9-RS, BE9CS-RS, RIC5-9A, 6Tc-RS, RAB2-6-RS, 3SC-RS,6S-RS,12S-RS, C1-6-D, C2-7-D and 10C-D probes
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	· Real-time 4D · Static 3D
Visualization modes	· 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)
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)	
HD*live*™ (option)	
VCI Static (option)	
Omniview (option)	VCI OmniView

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, IC9-RS, ML6-15-RS, C1-6-D and 12L-RS probes
User programmable measurement display in kPa and meters per sec
Single and dual view display

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 and 10C-D probes

Strain Elastography (Option)

Available on C1-5-RS, L6-12-RS, 12L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS, IC9-RS, E8CS-RS, BE9CS-RS, 9L-RS and C1-6-D probes

Semi-Quantification[3]

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

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

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

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, L3-12-RS, E8C-RS, E8CS-RS, BE9CS-RS, IC9-RS, RIC5-9A-RS, RAB2-6-RS, C1-6-D, C2-7-D and 10C-D 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: 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
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)
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)
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) • 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
Uterine RI
Follicular measurements
Summary reports
IOTA (International Ovarian Tumor Analysis) LR2 worksheet[4]

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 Report

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, IC9-RS, BE9CS-RS, ML6-15-RS, L3-12-RS, L4-12t-RS, 12L-RS, L6-12-RS, 9L-RS, L10-22-RS, L8-18i-RS, 3Sc-RS, 6S-RS, 12S-RS, RAB2-6-RS, RIC5-9A-RS, P8D, P6D, P2D, L3-9i-RS,6Tc-RS, C1-6-D, C2-7-D and 10C-D probes

C1-5-RS	
Convex probe	
Applications	Abdomen (incl. Pleural), Vascular (No transcranial), OB/GYN, Urology
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LE)

8C -RS	
Micro convex probe	
Applications	Pediatrics, Neonatal
Biopsy guide	N/A

E8C-RS	
Endocavitory micro convex probe	
Applications	OB/GYN (Transvaginal), Urology (Transrectal)
Biopsy guide	Single-angle, disposable with a disposable bracket (E8385MJ, E8333JB), single-angle, reusable bracket (H40412LN)

E8CS-RS	
Endocavitory micro convex probe	
Applications	OB/GYN (Transvaginal), Urology (Transrectal)
Biopsy guide	Single-angle, disposable with a disposable bracket (E8385MJ, E8333JB), single-angle, reusable bracket (H40412LN)

IC9-RS	
Endocavitory 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	
Endocavitory micro convex probe	
Applications	Urology (Transrectal)
Biopsy guide	Single-angle, disposable with a disposable bracket (E8387M, H42742LH, H42742LJ), single-angle, reusable bracket (E8387MA)

ML6-15-RS	
Matrix array linear probe	
Applications	Small Parts, Vascular Vascular (No transcranial), Pediatric, Neonatal, Musculoskeletal
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LJ)

L3-12-RS	
Linear probe	
Applications	Abdomen (incl. Pleural), Vascular (No transcranial), Small Parts,

	Pediatric, Neonatal, Breast
Biopsy guide	Multi-Angle, disposable with a reusable bracket (H48302AA)

L4-12t-RS

Linear probe

Applications	Abdomen (incl. Pleural), Small Parts, Vascular (No transcranial), Pediatric, Neonatal, Musculoskeletal, Breast
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LC) single-angle, disposable with a reusable bracket (H48392LT: free hand, H48392LL: transverse)

12L-RS

Linear probe

Applications	Small Parts, Vascular (No transcranial), Pediatric, Neonatal, Musculoskeletal
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LC)

L6-12-RS

Linear probe

Applications	Abdomen (incl. Pleural), Vascular (No transcranial), Small Parts, Pediatric, Neonatal
Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LC)

9L-RS

Linear probe

Applications	Abdomen (incl. Pleural), Small Parts, Vascular (No transcranial), Pediatric
Biopsy guide	Multi-angle, disposable with a reusable bracket (H4906BK)

L10-22-RS

Linear probe

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

L8-18i-RS

Linear probe

Applications	Small Parts, Vascular (No transcranial), Neonatal, Pediatrics, Intraoperative[4], Musculoskeletal, Peripheral Vascular
Biopsy guide	N/A

3Sc-RS

Phased array sector probe

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

6S -RS

Phased array sector probe

Applications	Cardiac, Pediatrics, Neonatal
Biopsy guide	N/A

12S -RS

Phased array sector probe

Applications	Pediatrics, Neonatal
Biopsy guide	N/A

RAB2-6-RS

Convex volume probe

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

RIC5-9A-RS

Endocavitory micro convex volume probe

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

P8D

CW split crystal probe

Applications	Cardiac, Vascular (No transcranial)

P6D

CW split crystal probe

Applications	Cardiac, Vascular (No transcranial)

P2D	
CW split crystal probe	
Applications	Cardiac, Vascular (No transcranial)

L3-9i-RS	
Linear probe	
Applications	Small Parts, Vascular, Musculoskeletal, Intraoperative[4]
Biopsy guide	N/A

6Tc-RS	
TEE Sector (Trans-esophageal) Probe	
Applications	Cardiac (Transesophageal)
Biopsy guide	N/A

C1-6-D	
Convex probe	
Applications	Abdomen (incl. Pleural), Vascular (No transcranial), OB/GYN, Urology
Biopsy guide	Multi-angle, disposable with a reusable bracket (H4913BB)

C2-7-D	
Convex probe	
Applications	Abdomen (incl. Pleural)
Biopsy guide	Multi Angle, disposable with a reusable bracket (H40482LK), Multi Angle, reusable bracket (H404822LL)

10C-D	
Micro Convex probe	
Applications	Pediatric, Neonatal, Vascular (No transcranial)
Biopsy guide	N/A

Inputs and Outputs
HDMI out
Ethernet network (RJ45)
S-video out
Composite video out
USB (2x in front (USB 3.0), 3x in rear
AC power input

Safety Conformance

The LOGIQ P9 is:
Conforms to the following standards for safety:
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
• IEC/EN 60601-1 3.1 Edition. 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 60601-2-37 Medical electrical equipment – Part 2-37: Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment
• IEC 61157 (Standard means for the reporting of the acoustic output of medical diagnostic ultrasonic 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
• ISO14971:2012(Medical devices - Application of risk management to medical devices)
• EMC Emissions Group 1, class A, 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
• 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).

1. The LOGIQ P10 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 Transesophageal 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.
4. Available on region regulatory clearance

Imagination at work

Product may not be available in all countries and regions. Full product technical specification is available upon request. Contact a GE Healthcare Representative for more information. Please visit www.gehealthcare.com/promotional-locations

Data subject to change.

Nothing in this material should be used to diagnose or treat any disease or condition. Readers must consult a healthcare professional.

February

2021

DOC2463985