GE Healthcare
LOGIQ
ADM
C1-6
Abdomen
LOGIQ

Digitally signed by Chicu Natalia
Date: 2023.03.10 00:06:20 EET
Reason: MoldSign Signature
Location: Moldova

LOGIQ™ P9 XDclear™ | *Performance Series*

MAKE IT EASY. MAKE IT YOUR OWN.

LOGIQ is a trademark of GE.

Challenging ultrasound environment

Time & quality challenges

- Growing patient volume
- Need for fast, accurate diagnosis

Operator essentials

- User-friendly equipment
- Avoid work related injuries

Economic pressures

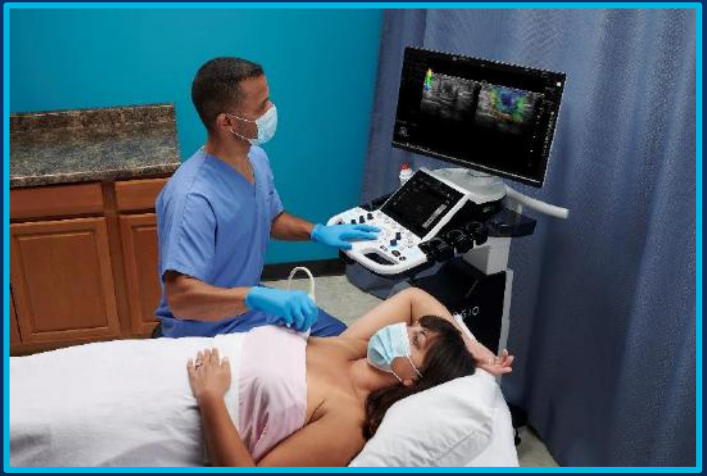
- Budget constraints
- Declining reimbursement
- ROI and life cycle costs

Physical environment

- Easily disinfected and cleanable
- Cramped exam rooms
- Increasing need for portable exams

Patient expectations

- Well-informed patients
- Comfort and safety



GE ultrasound innovation

Designed with your patients in mind

RADIOLOGY/ VASCULAR

LOGIQ™ Family

CARDIOVASCULAR

Vivid™ Family

WOMEN'S HEALTH

Voluson™ Family

BREAST SCREENING

Invenia™ ABUS 2.0

POINT OF CARE

Venue™ Family

HAND-HELD

Vscan™ Family

LOGIQ, Vivid, Voluson, Invenia, Venue, and Vscan are trademarks of GE.

GI ultrasound

Continued innovation

LOGIQ™ P10 XDclear/
P9 XDclear/P8

LOGIQ S7
XDclear™ 2.0

LOGIQ S8
XDclear 2.0+

LOGIQ E10s

LOGIQ E10

LOGIQ and XDclear are trademarks of GE.

LOGIQ™ P9 XDclear™

Make it easy. Make it your own.

PERSONALIZED workflow tools and automation…for efficiency

The new LOGIQ P9 XDclear ultrasound system brings you advanced ways to increase everyday efficiency — tools and functions you can customize to your own preferences, so exams flow easily, your way.

Expanded PATIENT-CENTRIC diagnostic capabilities…for flexibility

Equipped with a robust set of advanced features, the LOGIQ P9 XDclear system gives you the flexibility to manage simple to complex cases.

POWERFUL support… for long-term value

The LOGIQ P9 XDclear system gives you access to industry-leading security, data management, and educational resources to help you optimize system uptime and utilization, while enhancing user skills.

Advanced features. Everyday affordability.

LOGIQ and XDclear are trademarks of GE.

Organizing Schema for LOGIQ™ P9 XDclear (R4)

Make it easy. Make it your own.

PERSONALIZED workflow tools and automation…for efficiency

- Touch Control, UI – Joystick, LOGIQ brand usability
- Ergonomics, Transportable, Button Probe
- LOGIQ Apps: Photo Assistant & Remote Control
- My Page, Start Assistant, My Preset
- Power Assistant
- Vnav Import
- Auto Tools: Auto TGC, AutoEF, Auto IMT, Measure Assistant, Compare Assistant, Scan Assistant, Measurement enhancements
- CTO
- SonoNT, SonoIT
- AI tools: Auto Lesion Segmentation, OB Measurement Assistant, Auto Doppler Assistant, Breast Assistant, powered by Koios DS™

Expanded PATIENT-CENTRIC diagnostic capabilities…for flexibility

- Excellent IQ, LCD display
- Advanced features: SWE enhancements & Strain, Raw Data, CEUS, B-Flow, B-Flow Color, HD Color, HD*live*™, Stress Echo, STIC/Omniview, TVI/TVD, Cardiac Strain, B-Steer +, urology dual display, UGAP, SRI, 3D/4D enhancements with SonoRender*live*
- XDclear™ probes
- Sono AVC
- Urology enhancement
- CF/PW Enhancement
- Multi-purpose – Abdomen, Liver, Cardiac, OB/GYN, Vascular, Breast, Thyroid, MSK, Urology, Pediatrics

POWERFUL support… for long-term value

- My Trainer
- Data Management
- Tricefy™
- SonoDefense enhancements
- Life Cycle Solutions

LOGIQ, B-Flow, HD*live*, and XDclear are trademarks of GE. Tricefy trademarks are registered trademarks of Trice Imaging, Inc. Koios DS is trademark of Koios Medical. Not all features are available in all geographies. Check with your local GE Healthcare representative for availability in your country.

Personalized Workflow

LOGIQ™ P9 XDclear™

Personalized workflow tools and automation for efficiency

Personalized Set-up Tools

- Users can customize their own workflow preferences and launch in seconds
  - Start Assistant
  - My Page
  - My Preset

Automated Scanning Tools

- Help reduce exam time and increase user efficiency
  - Continuous Tissue Optimization (CTO)
  - Auto IMT
  - AutoEF
  - Measure Assistant
  - Compare Assistant
  - Scan Assistant

AI-based Tools

- Harnesses artificial intelligence for imaging standardization and speed
  - Auto Lesion Segmentation
  - OB Measurement Assistant
  - Auto Doppler Assistant
  - Breast Assistant powered by Koios DS™*

LOGIQ Brand Usability

- Redesigned user interface — with customizable keys — offers the simplicity and ease of operation you've come to expect

*Not all products or features are available in all geographies. Check with your local GE Healthcare representative for availability in your country.

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Patient-Centric Diagnosis

LOGIQ
LOGIQ

LOGIQ™ P9 XDclear™

Helps you improve patient care

Superb image quality with XDclear probes

- Powerful high fidelity and broad bandwidth produce high resolution images
- Scan superficial or deep targets – or any point in between.
- New probes include C2-7-D, 10C-D, C1-6-D

Advanced imaging and visualization tools[1]

- 2D Shear Wave Elastography with Quality Indicator and Anatomical Site Reporting
- 3D/4D with SonoRender*live*

Multi-purpose capabilities for a diverse caseload

- Including liver, cardiac, OB/GYN, breast, thyroid, musculoskeletal, urologic, vascular and pediatric studies.

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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

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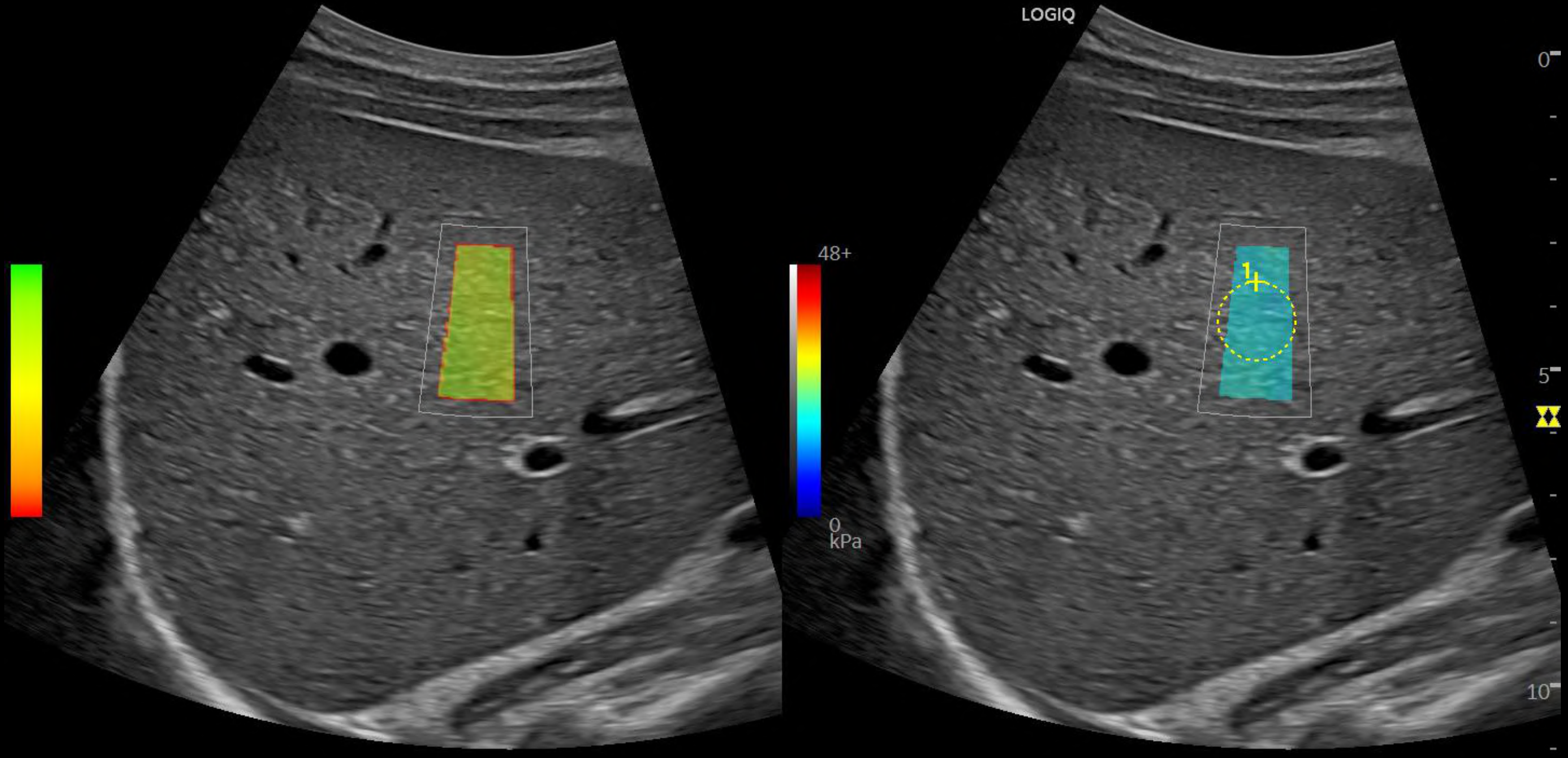
SPOTLIGHT ON LIVER

2D Shear Wave Elastography with Quality Indicator, C1-6-D

LOGIQ P9

Quantitative measurement of tissue elasticity displayed in color-coded elastograms. Useful in liver, breast and small parts applications.

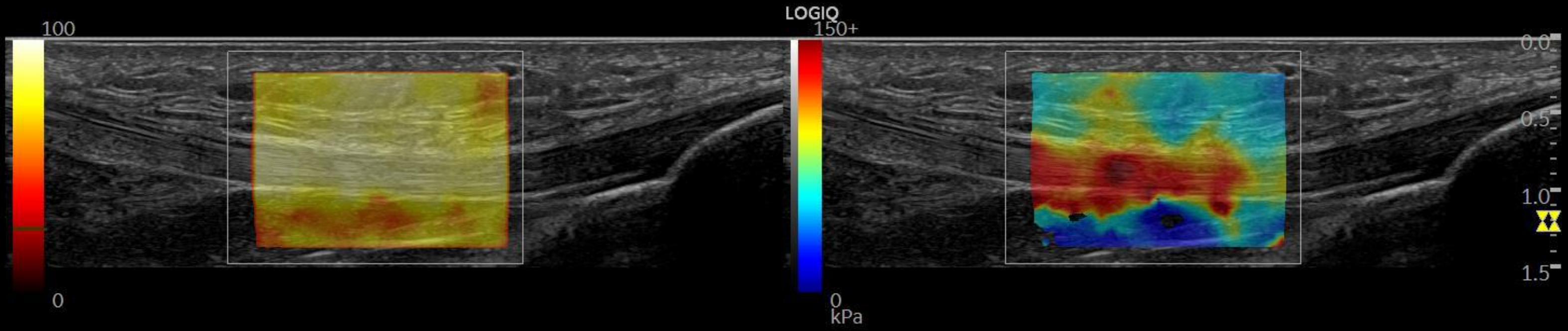


SPOTLIGHT ON MSK

LOGIQ P9

2D Shear Wave Elastography with Quality Indicator, Patellar Tendon, ML6-15-RS

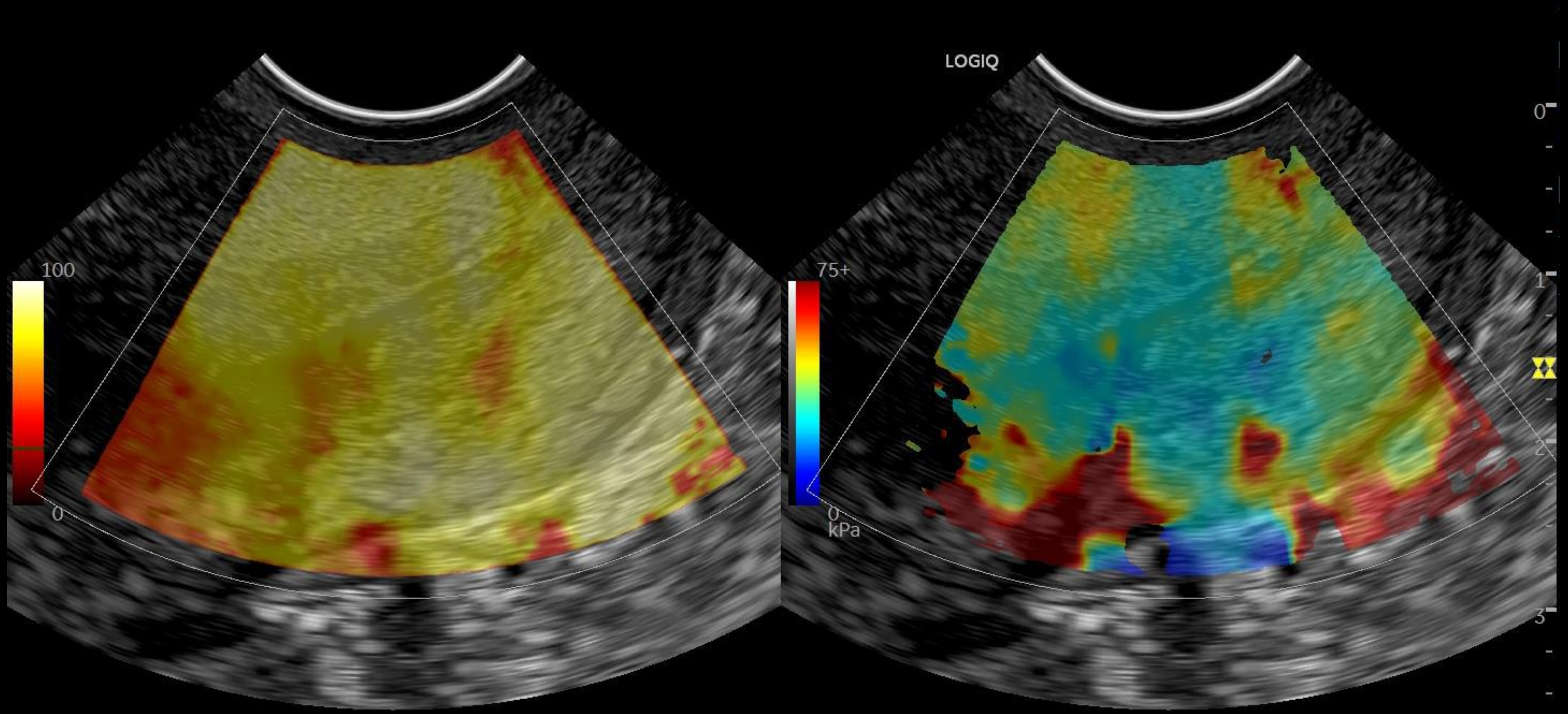
Quantitative measurement of tissue elasticity displayed in color-coded elastograms. Useful in liver, breast and small parts applications.



SPOTLIGHT ON GYN

2D Shear Wave Elastography with Quality Indicator, Cervix, IC9-RS

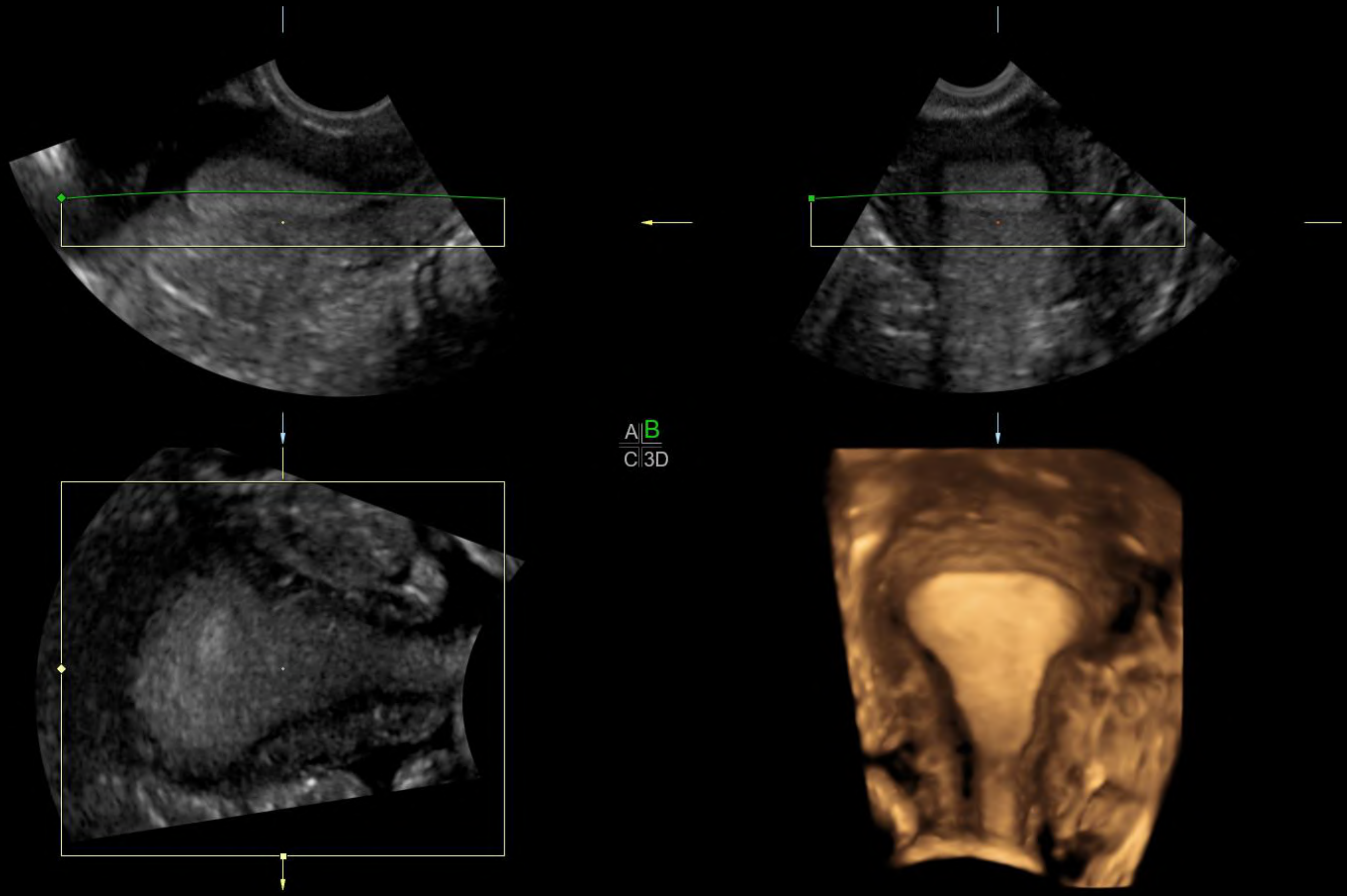
Quantitative measurement of tissue elasticity displayed in color-coded elastograms.



SPOTLIGHT ON 3D RENDERING

Gynecological Assessment Tools

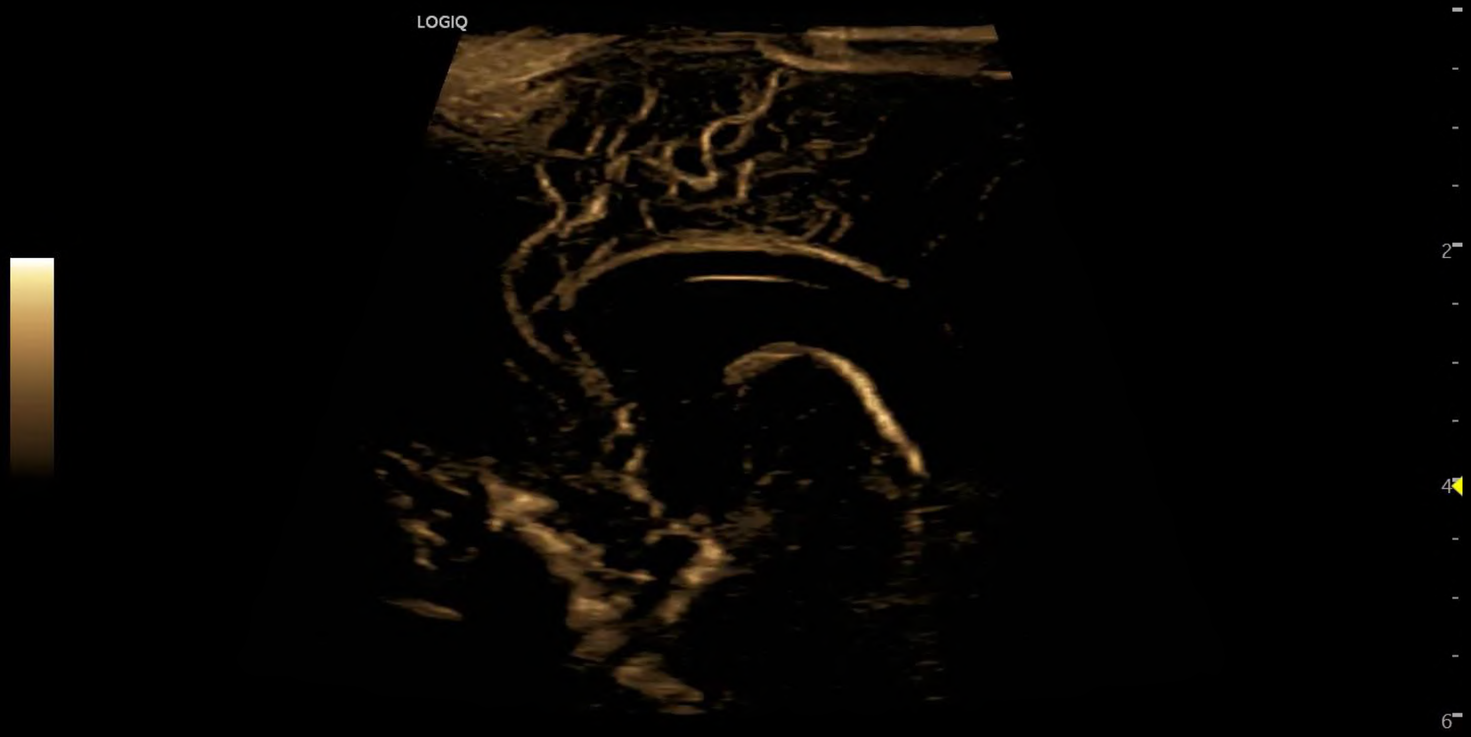
Advanced Volume Contrast Imaging (VCI) with OmniView – Diagnostic confidence in sonography requires the ability to differentiate irregular shapes with precision. This tool can help improve contrast resolution and visualization of the rendered anatomy with clarity in any image plane.



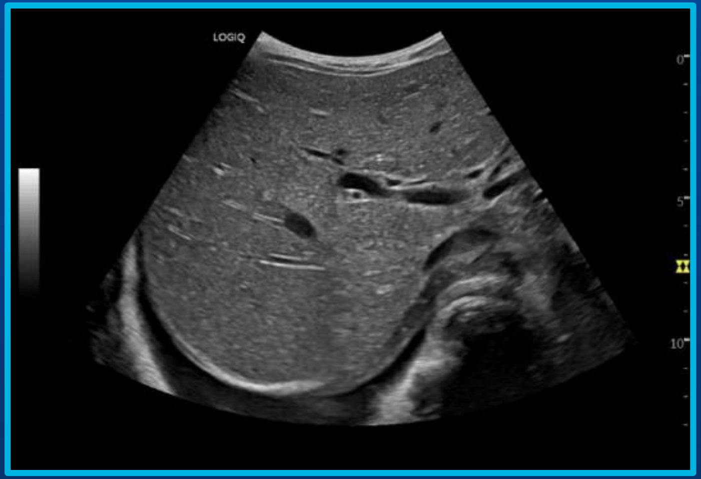
SPOTLIGHT ON PEDIATRICS

Neonatal head with B-Flow technology, 9L-RS

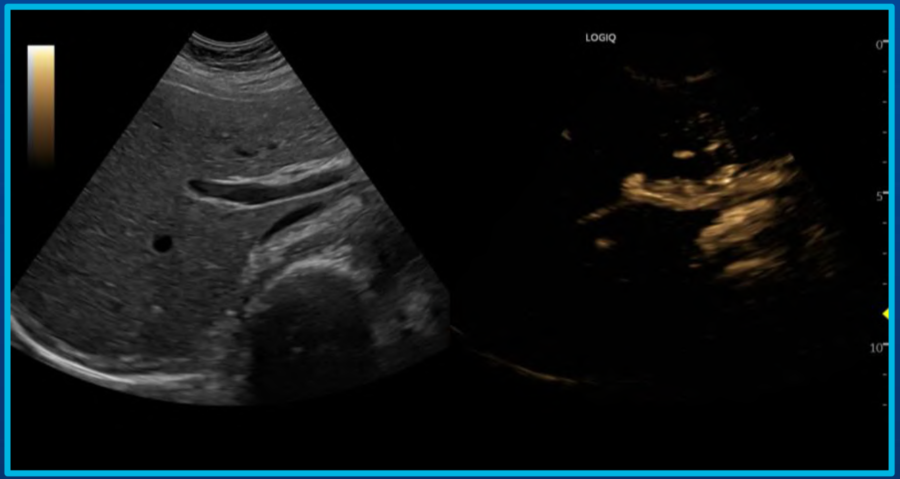
Superb image quality and transducer technology combine to help clinicians quickly diagnose a wide range of pediatric conditions.



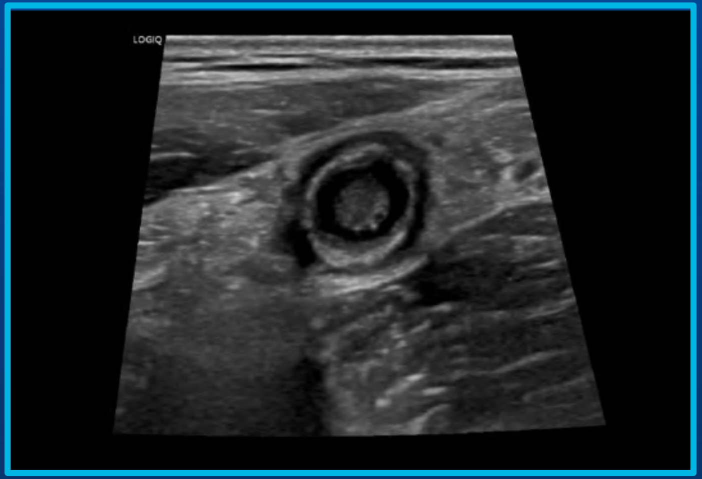
Abdominal



Liver B-Mode, C1-5-RS

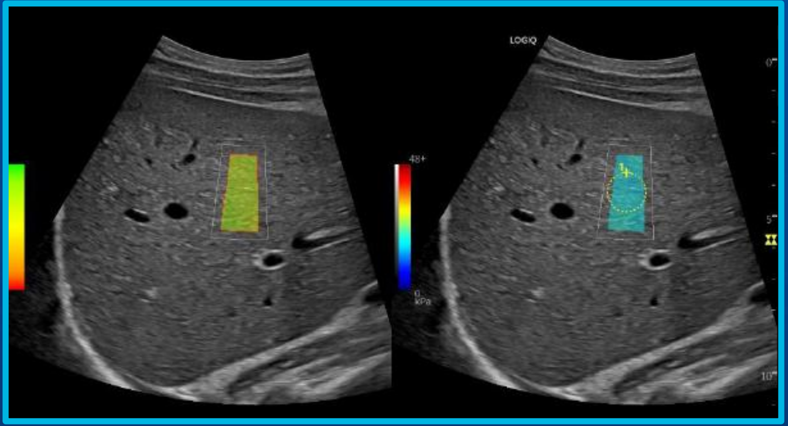


B-Flow Dual Liver, C2-7-D

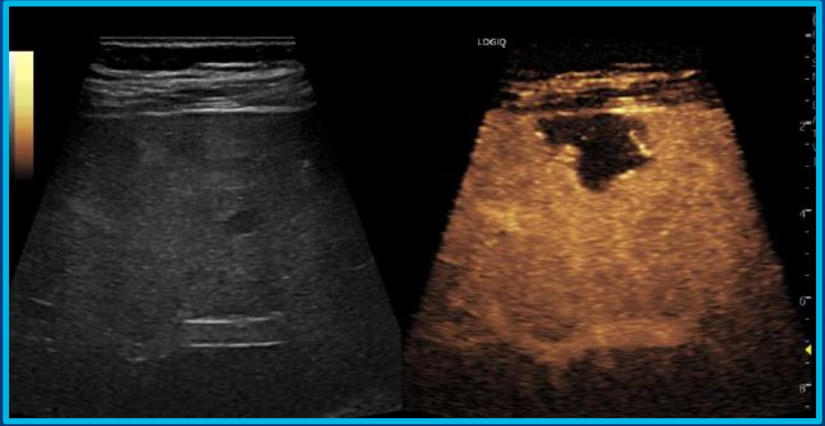


Appendix, L3-12-RS

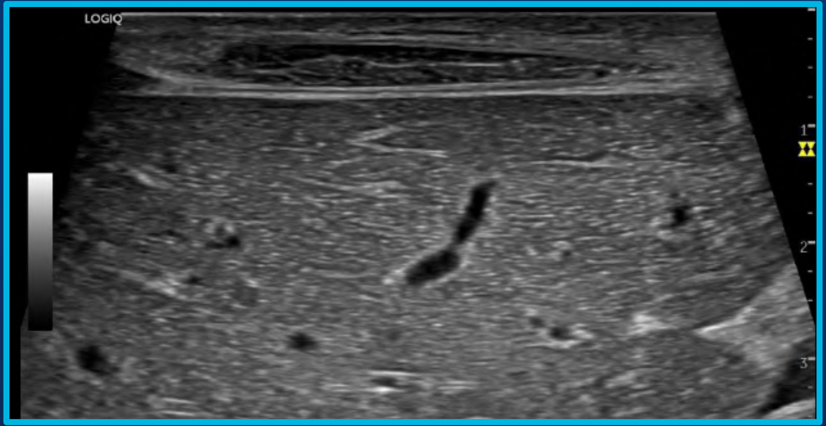
Liver


LOGIQ
48+
kPa

Liver SWE with Quality Indicator, C1-6 -D

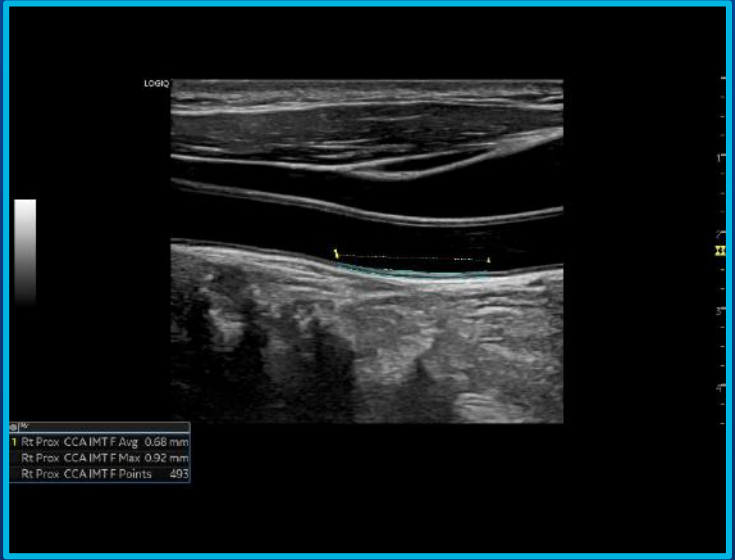


Liver CEUS, 9L-RS



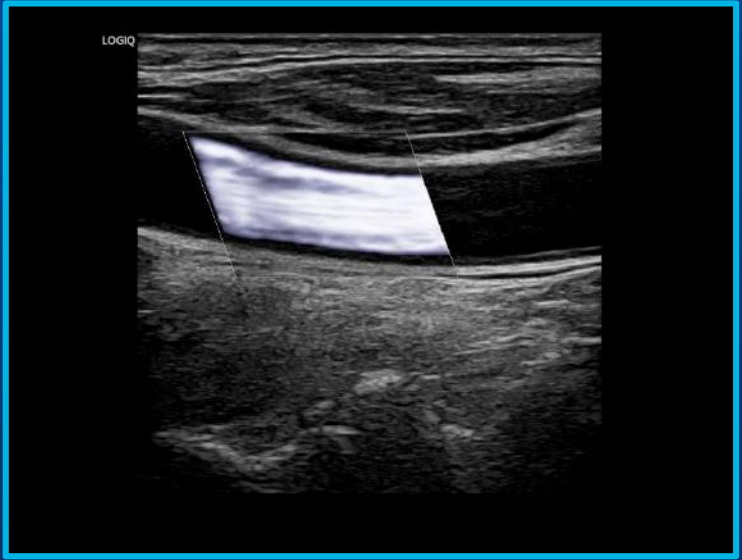
Liver contour using Virtual Convex, L3-12-RS

Vascular

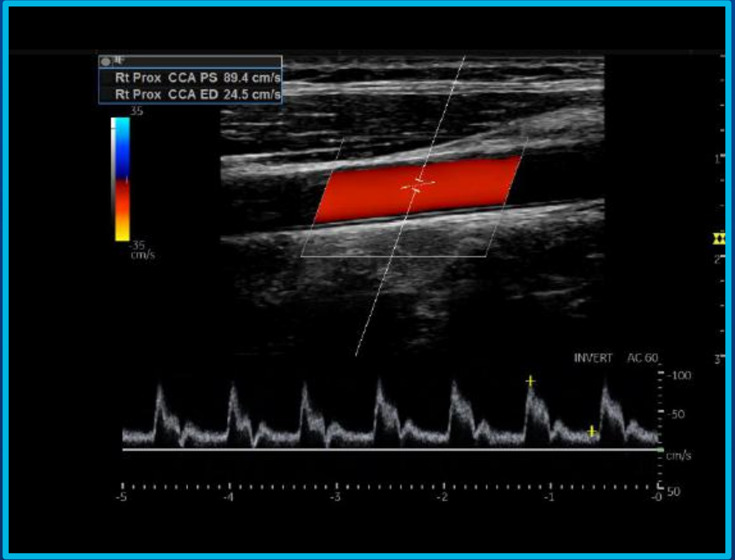


1 Rt Prox CCA IMT F Avg 0.68 mm
Rt Prox CCA IMT F Max 0.92 mm
Rt Prox CCA IMT F Points 493

Auto IMT measurement of CCA using L3-12-RS



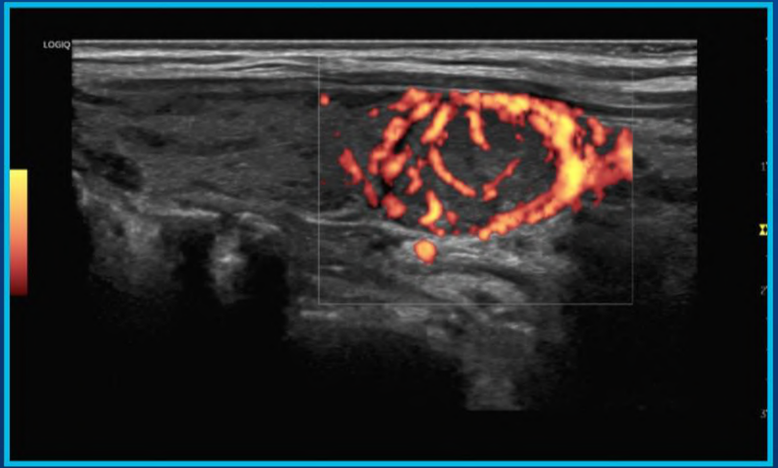
Carotid B-Flow HD Color, 12L-RS

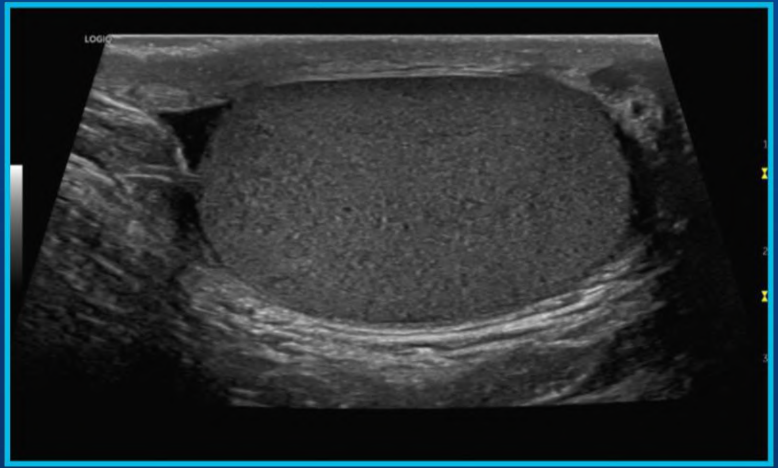

Rt Prox CCA PS 89.4 cm/s
Rt Prox CCA ED 24.5 cm/s

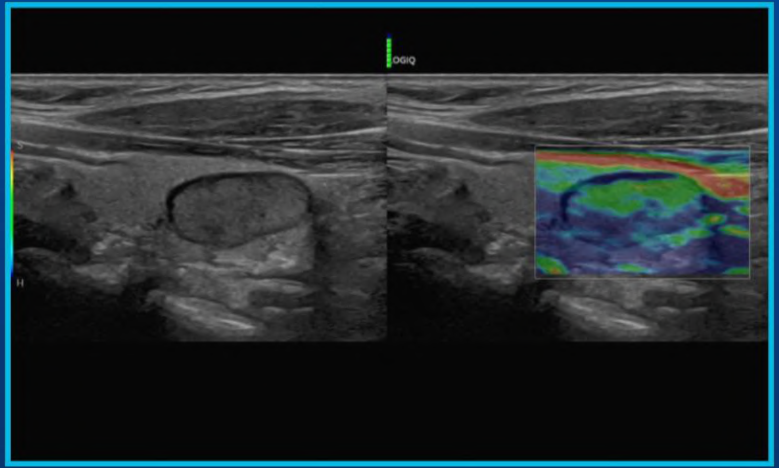
35
-35
cm/s
INVERT
AC 60
-100
-50
cm/s
50
-5
-4
-3
-2
-1
-0

Carotid hemodynamics with PW using L4-12t-RS

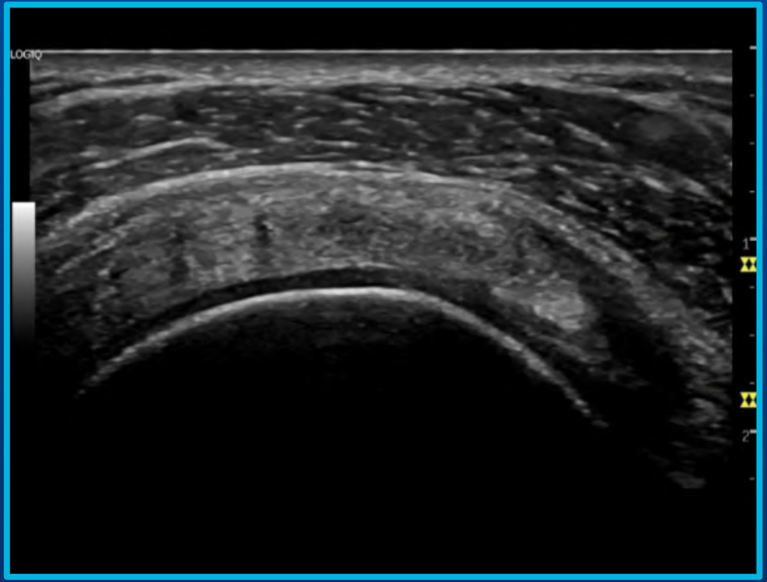
Small Parts


Thyroid PDI, ML6-15-RS

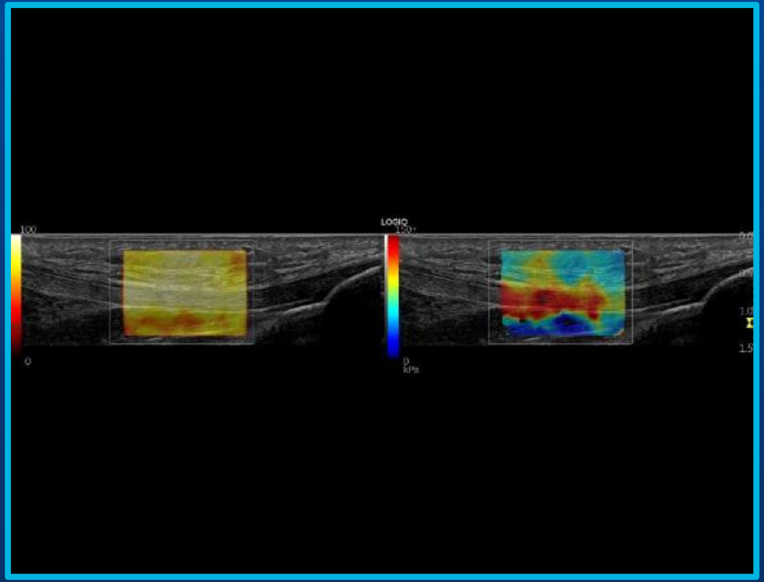

Testis Virtual Convex, L3-12-RS


Thyroid Strain Elasto, L3-12-RS

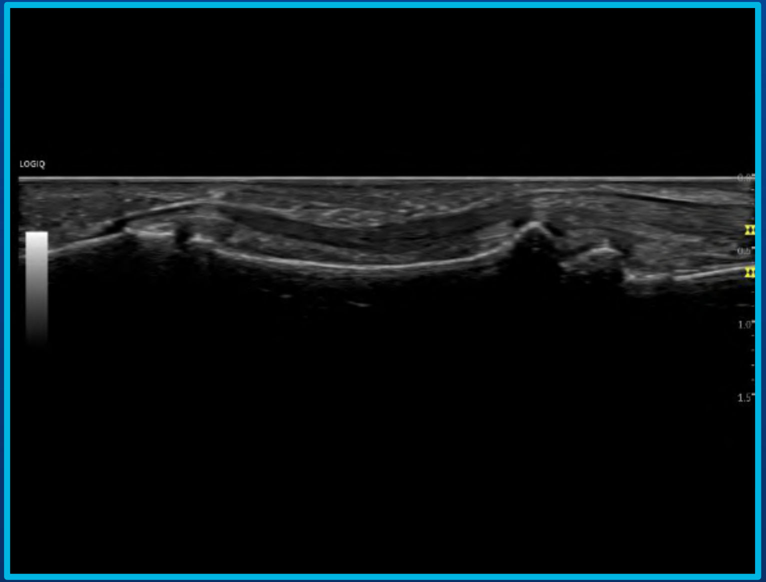
Musculoskeletal



Supraspinatus tendon, ML6-15-RS

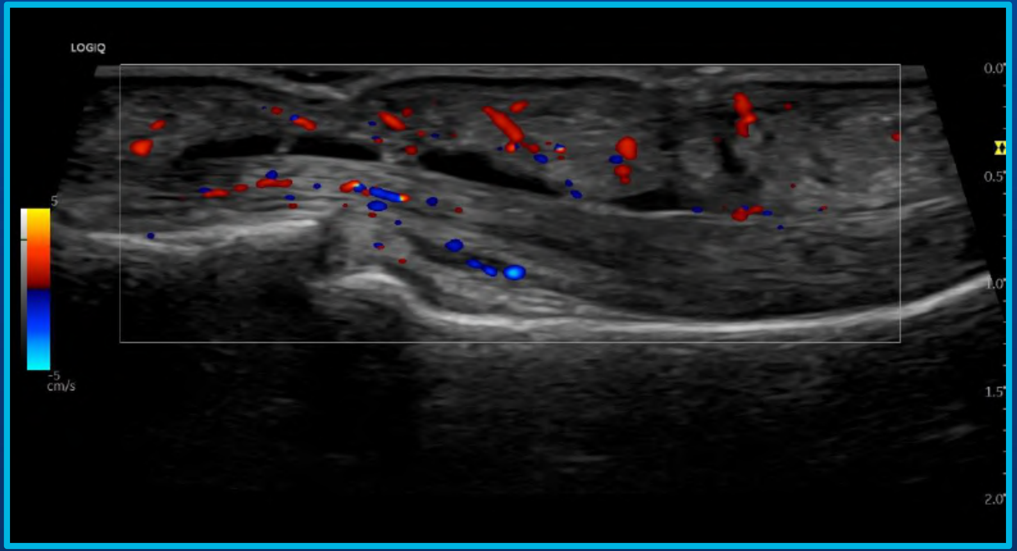


2D Shear Wave Elastography with Quality Indicator, patellar tendon, ML6-15-RS

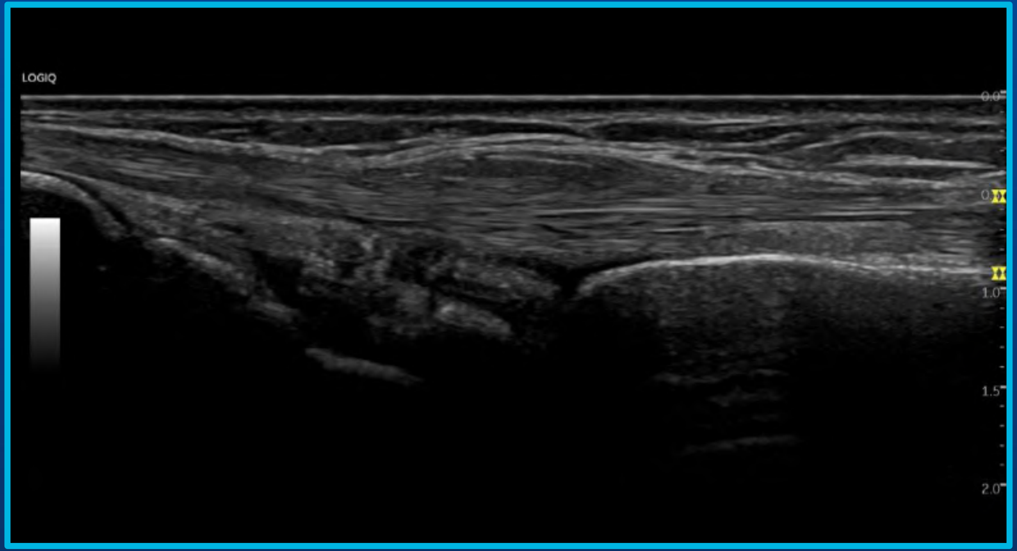


Flexor tendon of finger, ML6-15-RS

Musculoskeletal

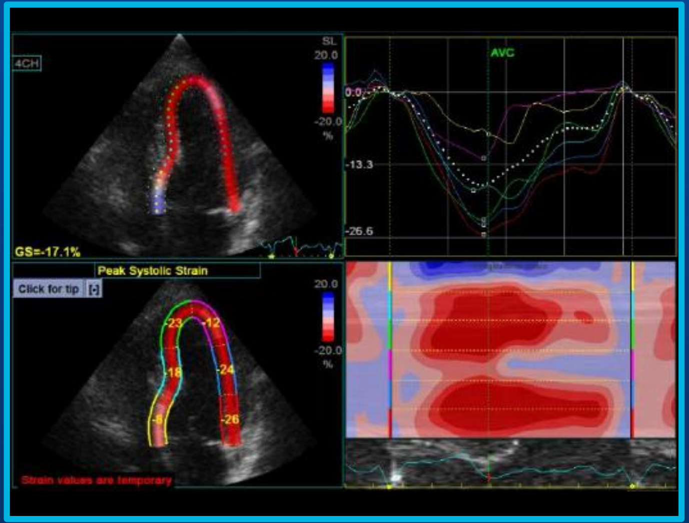

LOGIQ
0.0
0.5
1.0
1.5
2.0
5
-5
cm/s

CF of wrist with Virtual Convex, 12L-RS

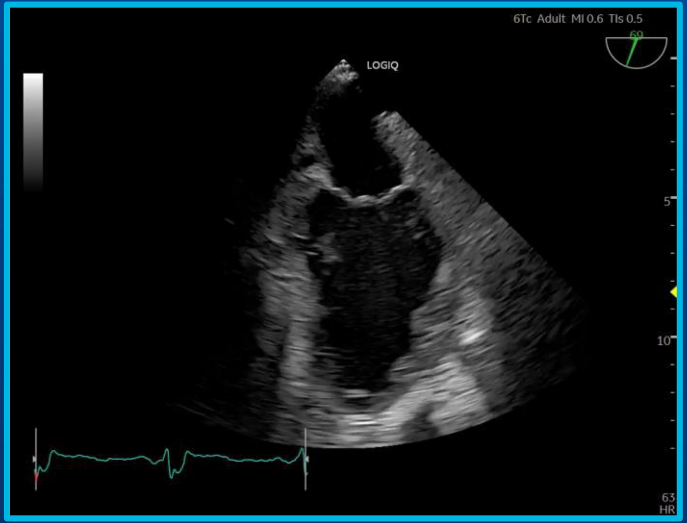

LOGIQ
0.0
0
1.0
1.5
2.0

Extensor tendon of wrist, ML6-15-RS

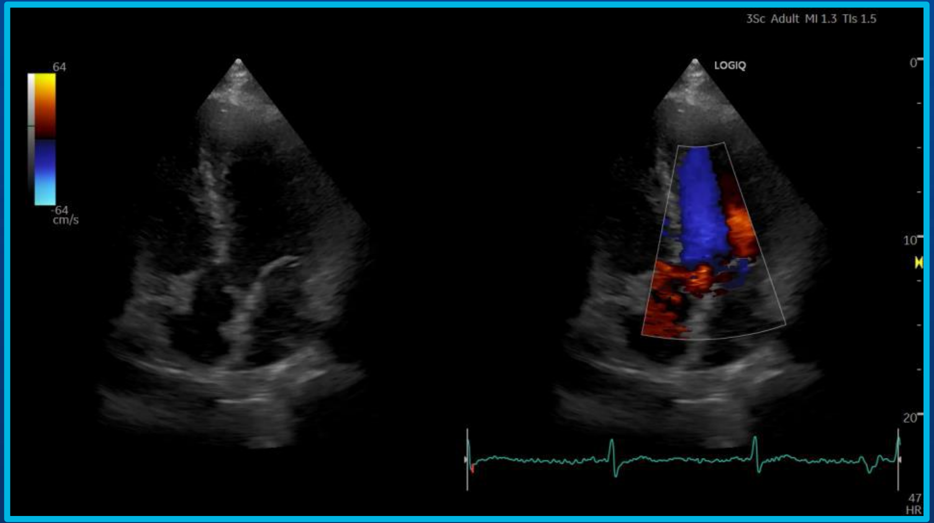
Cardiology


4CH
SL
20.0
-20.0
%
AVC
0.0
-13.3
-26.6
GS=-17.1%
Peak Systolic Strain
Click for tip
-23
-12
-18
-24
-26
Strain values are temporary

Strain image of 4CH, 3Sc-RS

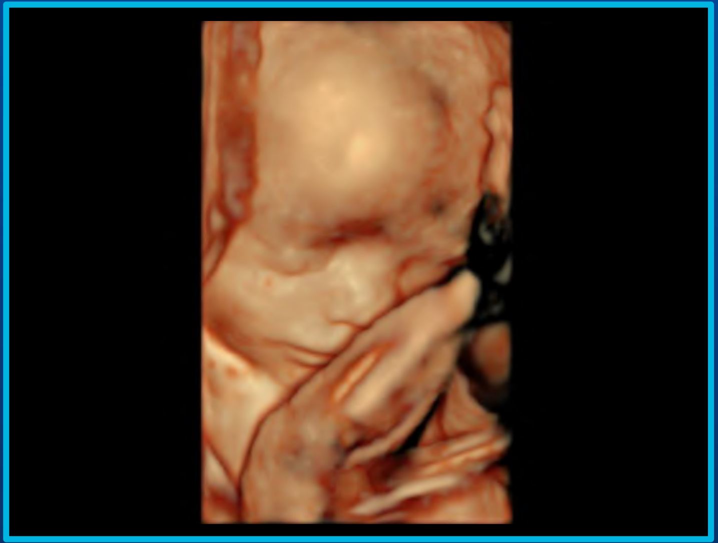

6Tc Adult MI 0.6 TIs 0.5
LOGIQ
60
5
10
63
HR

Mitral valve, 6Tc-RS

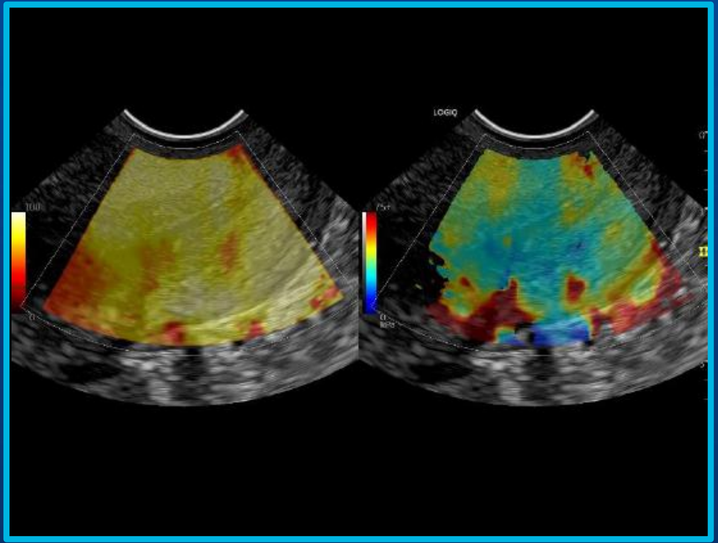

3Sc Adult MI 1.3 TIs 1.5
64
-64
cm/s
LOGIQ
0
10
20
47
HR

Aortic insufficiency, 3Sc-RS

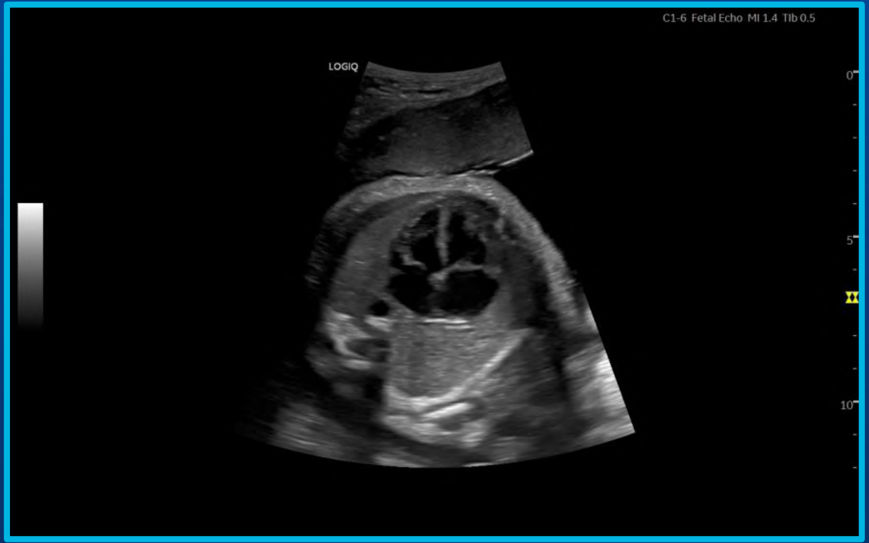
OB/GYN



3D HD*live*™ imaging of the fetus with RAB2-6-RS



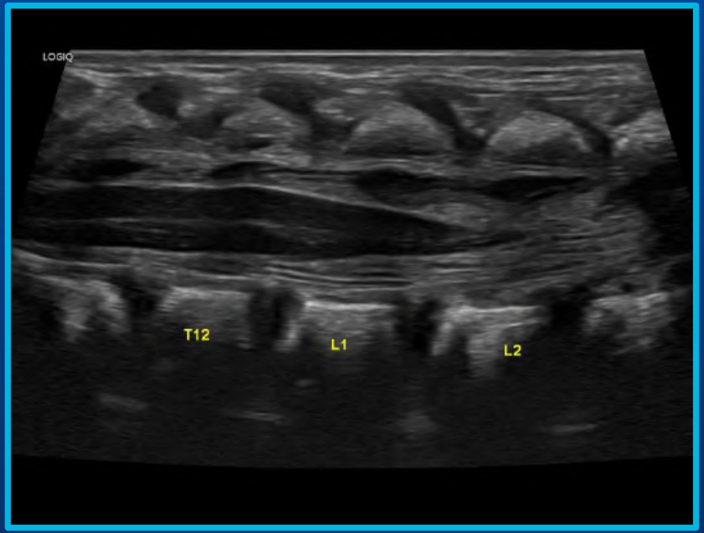
2D Shear Wave Elastography with Quality Indicator, Cervix, IC9-RS


C1-6 Fetal Echo MI 1.4 TIb 0.5
LOGIQ
0
5
10

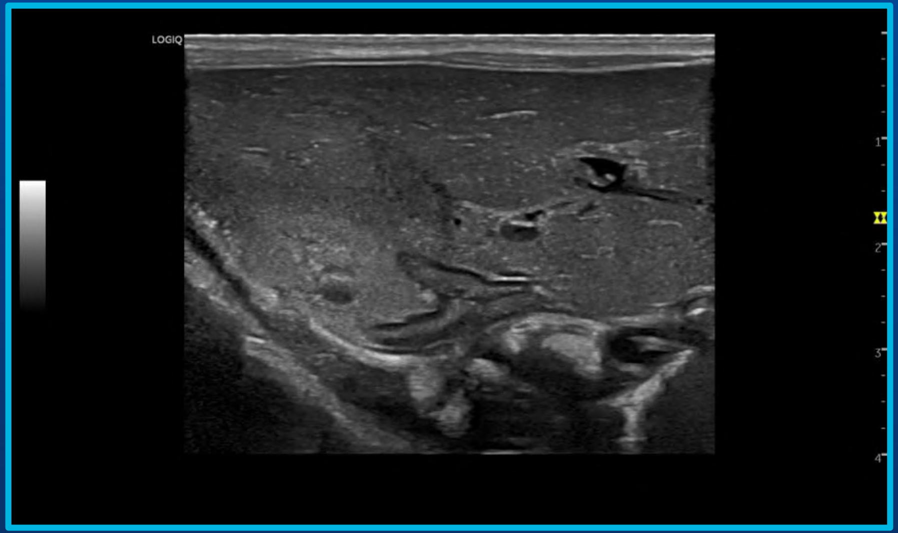
4CH heart, C1-6-D

HD*live* is a trademark of GE.

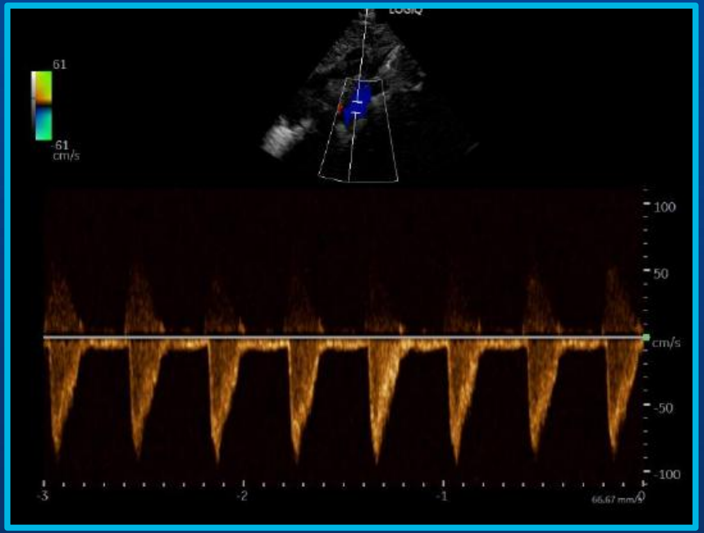
Pediatrics


LOGIQ
T12
L1
L2

Neonatal spine B-Mode, 12L-RS



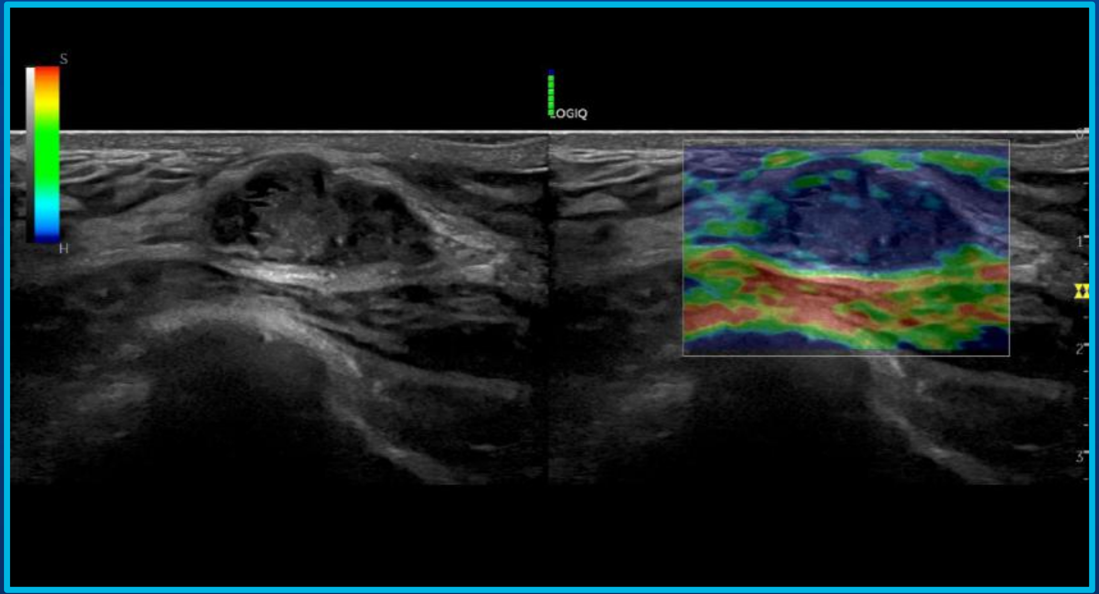
Neonatal abdomen, ML6-15-RS


LOGIQ
61
-61
cm/s
100
50
cm/s
-50
-100
-3
-2
-1
0

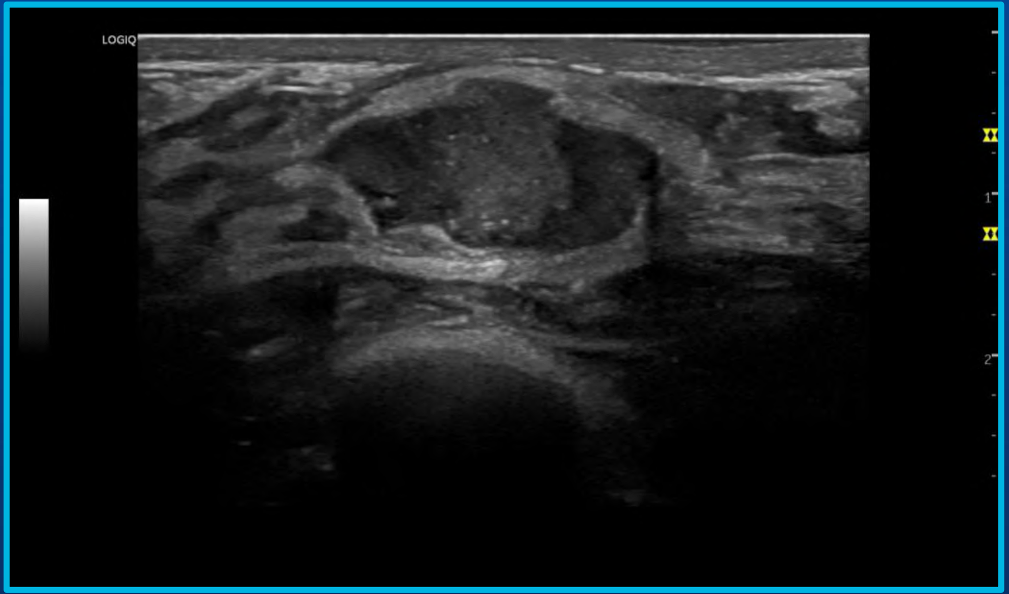
Pediatric heart CF and PW, 12S-RS

HD*live* is a trademark of GE.

Breast

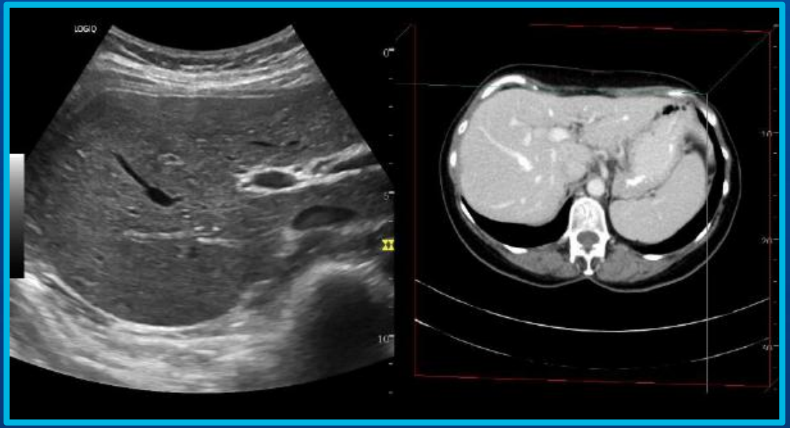


Breast Strain Elastography, ML6-15-RS

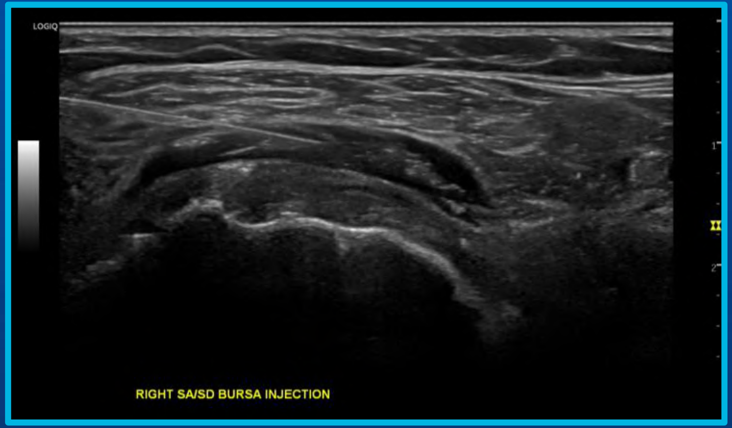


Breast, ML6-15-RS

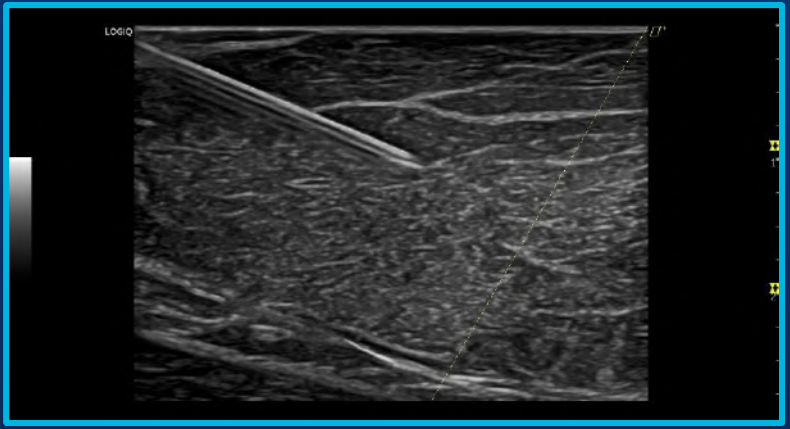
Interventional



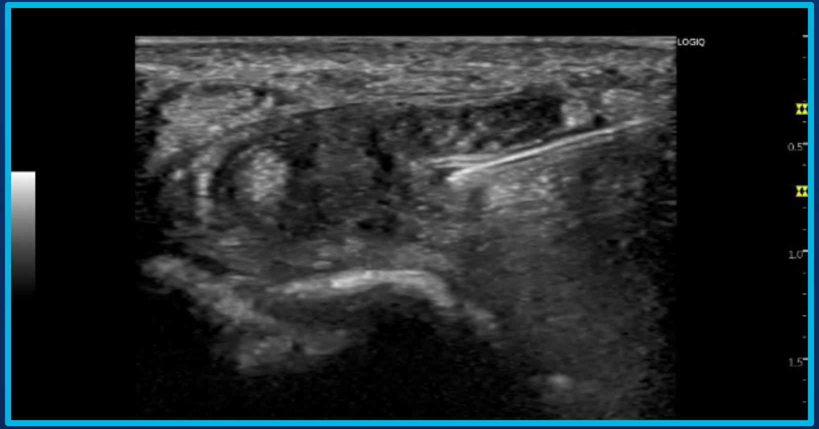
Liver, C1-5-RS and CT Abdominal scan


LOGIQ
RIGHT SA/SD BURSA INJECTION

Shoulder bursa injection, ML6-15-RS

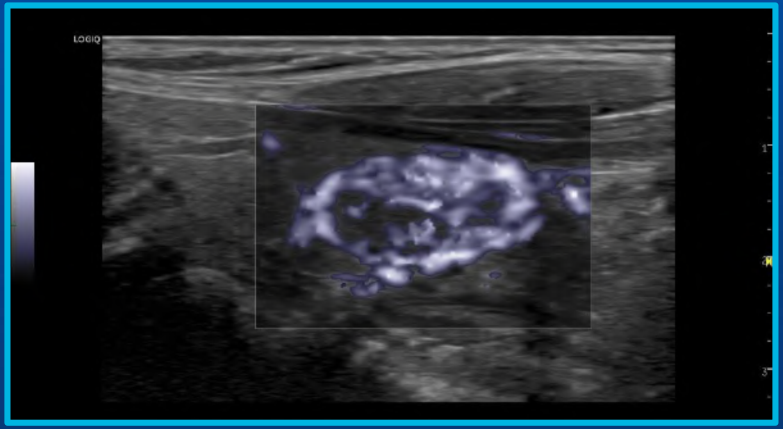


MSK B-Steer+, 12L-RS

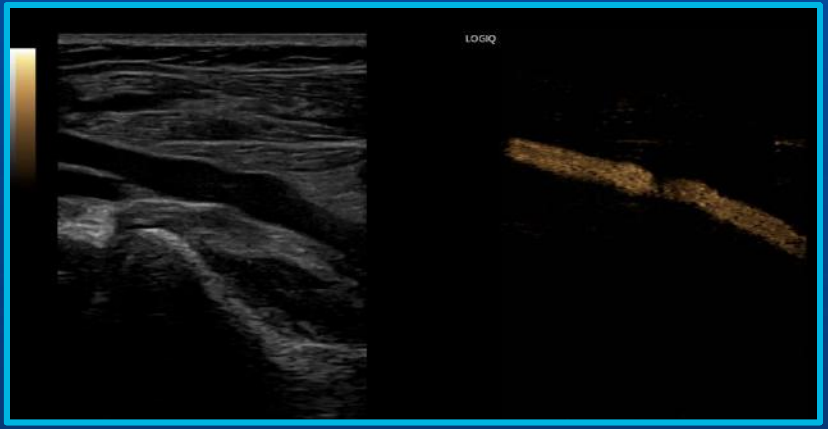


Wrist injection, L8-18i-RS

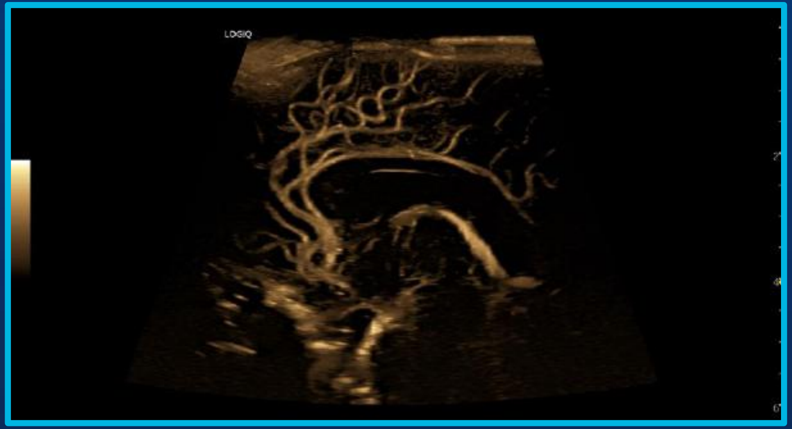
B-Flow™ Imaging



B-Flow HD Color Thyroid L3-12 -RS

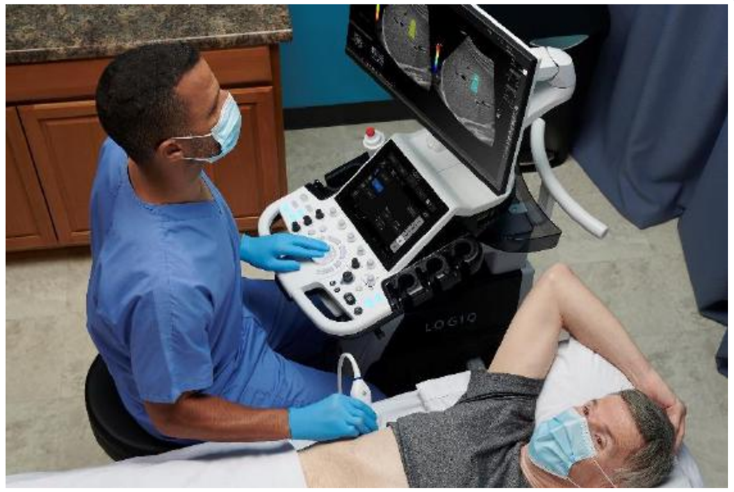


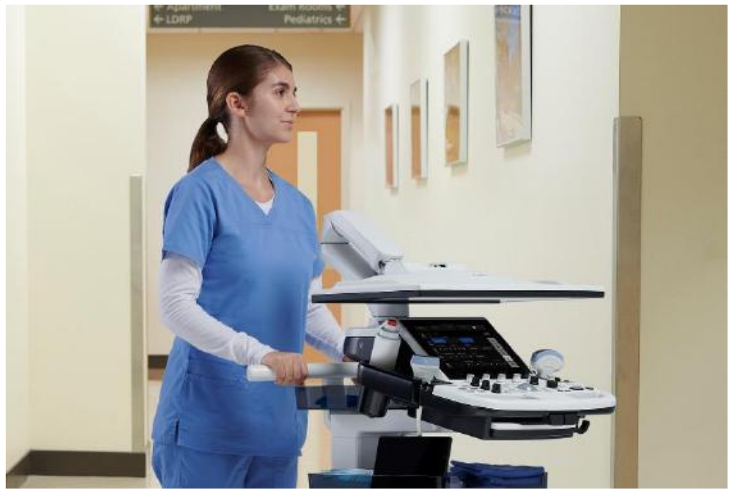
B-Flow dual LEV, L3-12-RS



Neonatal head B-Flow, 9L-RS

Powerful Support



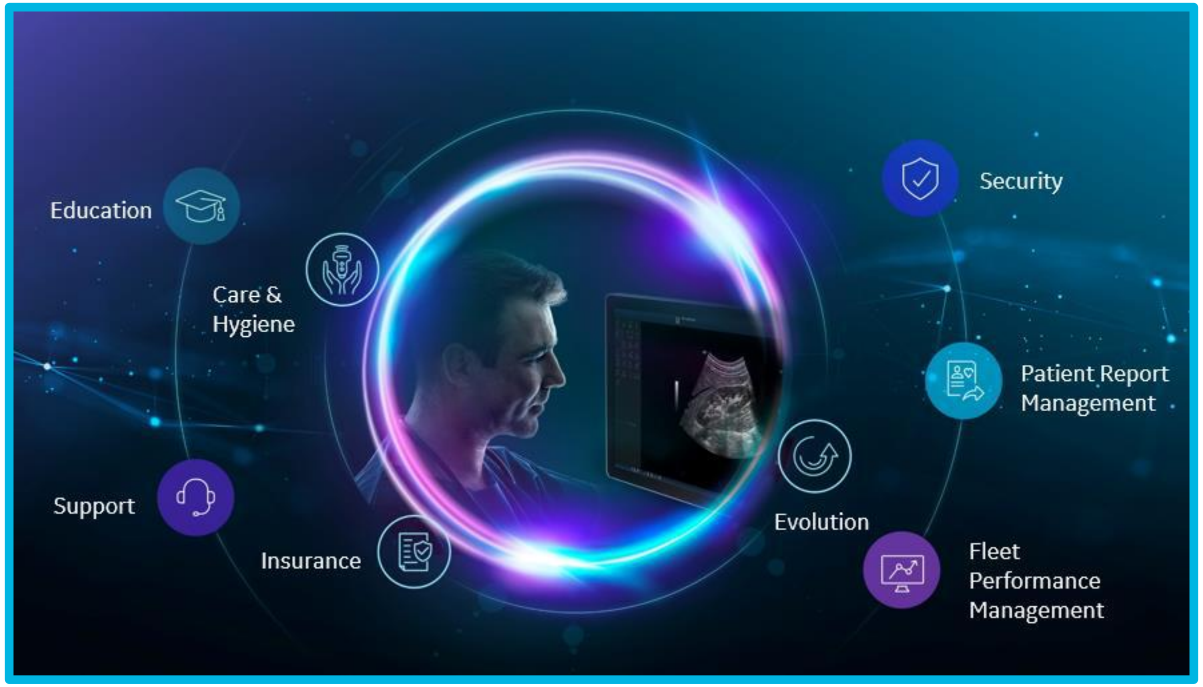

LDRP
Pediatrics

LOGIQ™ P9 XDclear™

Ecosystem of solutions to support you

Ultrasound Lifecycle solutions

Optimize system uptime and utilization, while enhancing user skills.


Education
Care & Hygiene
Support
Insurance
Security
Patient Report Management
Evolution
Fleet Performance Management

Data Security

SonoDefense, advanced CyberSecurity and Data Privacy protection

Education

- My Trainer – On-board training modules
- STAR – Augmented Reality & more
- LOGIQ Club community and educational services

Service and care

- Insurance
- Expert Live Support
- Fleet Performance Management
- Care & Hygiene

1. Refer to the LOGIQ P10 XDclear Product Data Sheet for a list of purchasable options.

LOGIQ and XDclear are trademarks of GE.
Windows is a registered trademark of Microsoft Corporation.
DICOM is a registered trademark of the National Electrical Manufacturers Association.

Ultrasound Lifecycle Solutions

How can the GE ultrasound ecosystem of solutions support you in your daily practice?

INSURANCE

Ensure peace of mind by protecting your investment with Ultrasound**Care** 3 years service contract, including 1 year of warranty and 2 years coverage with unlimited access to on-site corrective maintenance performed by a GE Healthcare engineer[1,2] and one probe replacement per year[3]

CARE & HYGIENE

Protect patients and caregivers against biological hazards and guarantee optimal care in your daily ultrasound activities thanks to our hygiene portfolio for cleaning, disinfection, transport, and storage of your ultrasound probes

EVOLUTION

Keep your console up to date with the latest clinical applications. We want to make sure you protect your investment and stay ahead of the curve in terms of innovations that will help you achieve more for your patients.

This is why we have different upgrades in our portfolio available for our wide range of products.

SUPPORT

Benefit from **Expert Live Support** for your new systems: fast access to GE technical and clinical experts to help you with all your questions during the lifetime of your system[4]

EDUCATION

Get the most out of your ultrasound console with:

- **STAR**, an augmented reality mobile application which makes you more comfortable with your equipment, for more efficiency
- **Ultrasound clubs** to access clinical education, product training and the latest news on GE Ultrasound World
- **Clinical web series**, an education programme with the possibility to learn, share experiences and ask questions

SECURITY

Ensure integrity of your patient data with our **SonoDefense** solution, included in our ultrasound system to keep it safe and functional in the face of cyberthreats, to protect patient data on the machine from unauthorised access and to enable you to successfully implement patient data and security policies, while still managing product daily workflows

FLEET PERFORMANCE MANAGEMENT

Maximise your operational ultrasound fleet performance with:

- **Ultrasound Excellence**: Leverage the power of usage data generated by all your GE & non-GE equipment on our neutral analytics platform. Benefit from the human expertise provided by
- our specialists to learn how to optimise your ultrasound fleet operationally, clinically and financially
- **iCenter™** and **MyGEHealthcare app** provides access 24/7 to all maintenance and the update status of your GE ultrasound equipment and stay permanently connected to the activities of the service teams

PATIENT REPORT MANAGEMENT

Optimise your patient workflow with **ViewPoint™**, image management and a reporting solution that helps enhance efficiency and quality in your daily routine

To benefit from digital solutions, your system should be connected to our GE back-office

---

References

1. Labor and travel for Field Replaceable Units included. Does not include travel and labor for Customer Replaceable Units.
2. When GE Healthcare performs the service. Labor, travel and remote support not included if service performed by certified GE distributor.
3. Standard probe replacement. Preventive maintenances, Loaners, Batteries, Consumables, and Accidental damage are excluded.
4. Depending on the country you are located

INSURANCE

UltrasoundCare

Your system is designed with Services.

Reduced cost of ownership

Minimize the risk of unexpected costs thanks to **multi-year service coverage packaged with your system**. What matters is covered.

Fast access to technical support

Having a service coverage gives you fast access to GE Healthcare's technical experts helping you ensure your system is running as expected.

Continuous access to education

Thanks to LOGIQ Club membership, access a variety of **educational resources** helping you experience the full power of your Venue ultrasound system

LOGIQ™ P9 XDclear™

YOUR SYSTEM
IS DESIGNED WITH

SERVICE

CORRECTIVE MAINTENANCE

Unlimited access to on-site corrective maintenance performed by a GE Healthcare engineer.[1,2]

PROBE

One probe replacement per year is included in your coverage.[3]

EDUCATION

Access the LOGIQ CLUB, with privileged access to many tools, resources and benefits only available to members: educational offerings & online trainings, application tips and tricks, white papers & user guides, and much more.

References

1. Labor and travel for Field Replaceable Units included. Does not include travel and labor for Customer Replaceable Units.
2. When GE Healthcare performs the service. Labor, travel and remote support not included if service performed by certified GE distributor.
3. Standard probe replacement. Preventive maintenances, Loaners, Batteries, Consumables, and Accidental damage are excluded.

INSURANCE

UltrasoundCare

Flexibility to meet your needs

UltrasoundCare

3 YEARS

1 year warranty

+

2 years coverage

INCLUDED WITH YOUR EQUIPMENT

EXPAND YOUR COVERAGE WITH :

UltrasoundCare+

2 years additional coverage

FOR MAXIMIZED PRODUCTIVITY

LOGIQ™ P9 XDclear™

Performance Series

Make it easy. Make it your own.

Its sleek, lightweight design incorporates powerful technologies while enhancing workflow and user experience.

All at an affordable price that helps meet budget expectations.

LOGIQ and XDclear are trademarks of GE.

Personalized Workflow

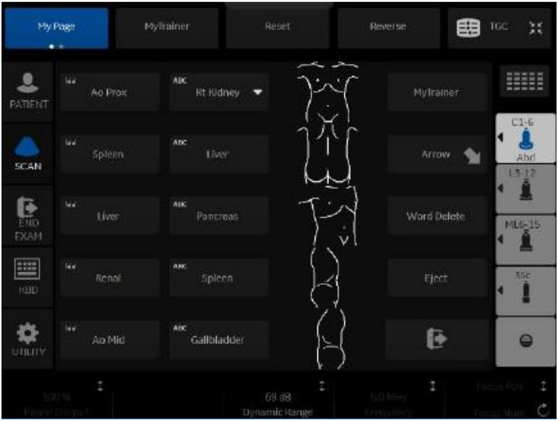
LOGIQ
LOGIQ
LOGIQ

My Page

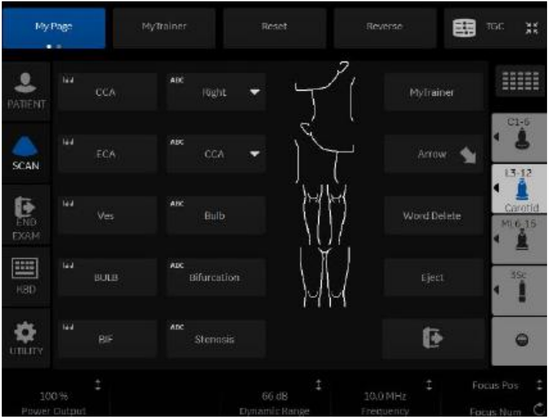
Configurable on each My Page

- GE innovative personalization feature
- Preset depended (Abd/Carotid/…has My Page)
- Each use case (preset) has My Page

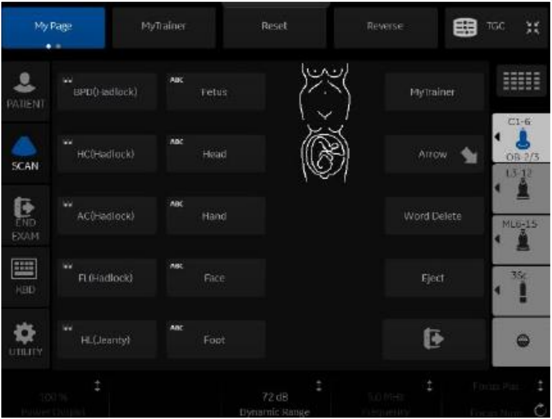
Abd


My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
Ao Prox
Rt Kidney
Spleen
Liver
Liver
Pancreas
Renal
Spleen
Ao Mid
Gallbladder
MyTrainer
Arrow
Word Delete
Eject
C1-6
Abd
L3-12
ML6-15
3Sc
100 %
Power Output
69 dB
Dynamic Range
6.0 MHz
Frequency
Focus Pos
Focus Num

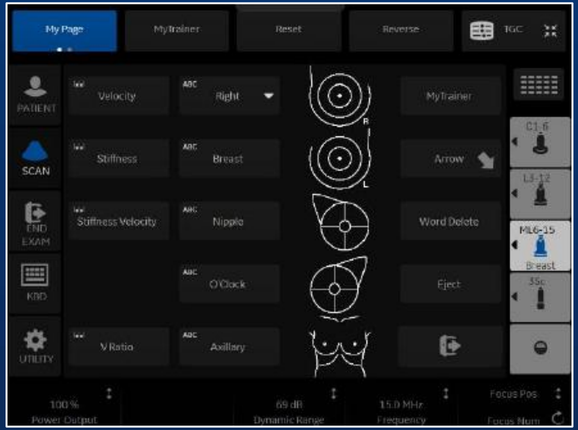
Carotid


My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
CCA
Right
ECA
CCA
Ves
Bulb
BULB
Bifurcation
BIF
Stenosis
MyTrainer
Arrow
Word Delete
Eject
C1-6
L3-12
Carotid
ML6-15
3Sc
100 %
Power Output
66 dB
Dynamic Range
10.0 MHz
Frequency
Focus Pos
Focus Num

OB


My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
BPD(Hadlock)
Fetus
HC(Hadlock)
Head
AC(Hadlock)
Hand
FL(Hadlock)
Face
HL(Jeanty)
Foot
MyTrainer
Arrow
Word Delete
Eject
C1-6
OB 2/3
L3-12
ML6-15
3Sc
100 %
Power Output
72 dB
Dynamic Range
Frequency
Focus Pos
Focus Num

Breast


My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
Velocity
Right
Stiffness
Breast
Stiffness Velocity
Nipple
O'Clock
V Ratio
Axillary
MyTrainer
Arrow
Word Delete
Eject
C1-6
L3-12
ML6-15
Breast
3Sc
100 %
Power Output
69 dB
Dynamic Range
15.0 MHz
Frequency
Focus Pos
Focus Num

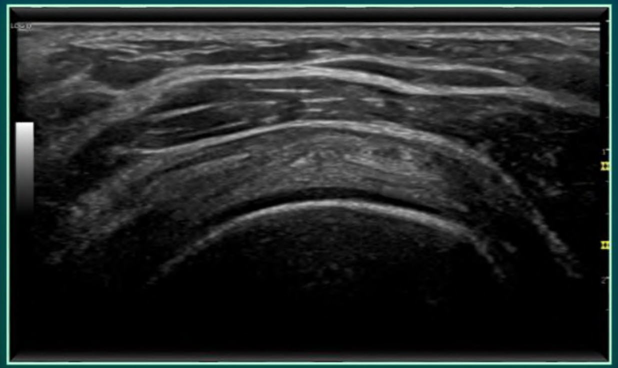
Start Assistant

Current Workflow

1. Select Patient from Worklist
   Auto Populate Exam Description
2. Select Exam Category Tab
3. Select Scan Assistant
4. Exit Patient Screen
5. Select Probe
6. Select Application

With Start Assistant

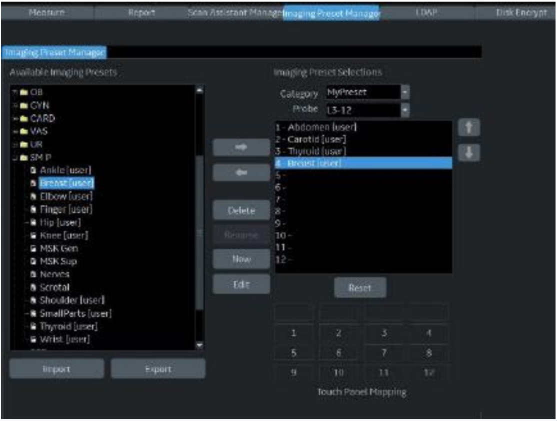
1. Select Patient from Worklist
   Auto Populate Exam Description
   Auto Select Exam Category Tab
   Auto Select Scan Assistant
2. Exit Patient Screen
   Auto Select Probe
   Auto Select Application



My Preset

With My Preset, users can customize their own workflow preferences and use case presets, and then launch these settings in seconds.

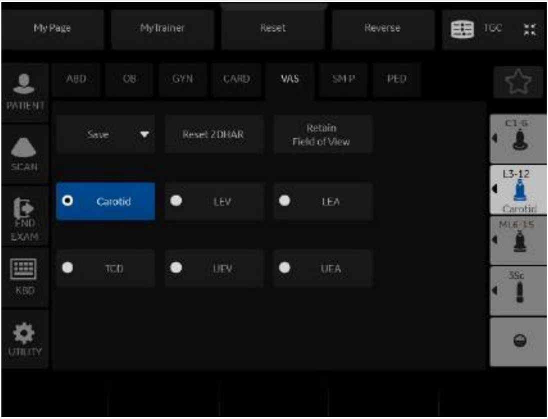
Utility page


Measure
Report
Scan Assistant Manager
Imaging Preset Manager
LDAP
Disk Encrypt
Imaging Preset Manager
Available Imaging Presets
OB
GYN
CARD
VAS
UR
SM P
Ankle [user]
Breast [user]
Elbow [user]
Finger [user]
Hip [user]
Knee [user]
MSK Gen
MSK Sup
Nerves
Scrotal
Shoulder [user]
SmallParts [user]
Thyroid [user]
Wrist [user]
Import
Export
Delete
Rename
New
Edit
Imaging Preset Selections
Reset
Touch Panel Mapping

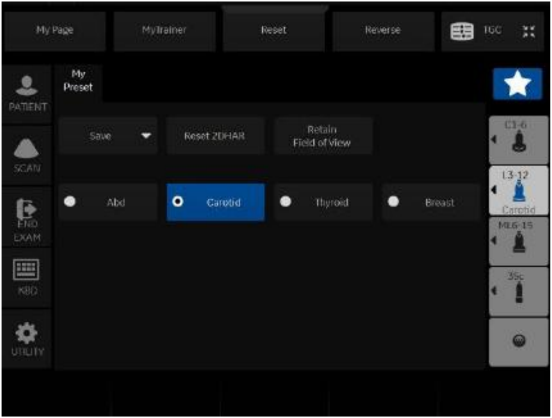
Category MyPreset
Probe L3-12

1 - Abdomen [user]
2 - Carotid [user]
3 - Thyroid [user]
4 - Breast [user]
5 -
6 -
7 -
8 -
9 -
10 -
11 -
12 -

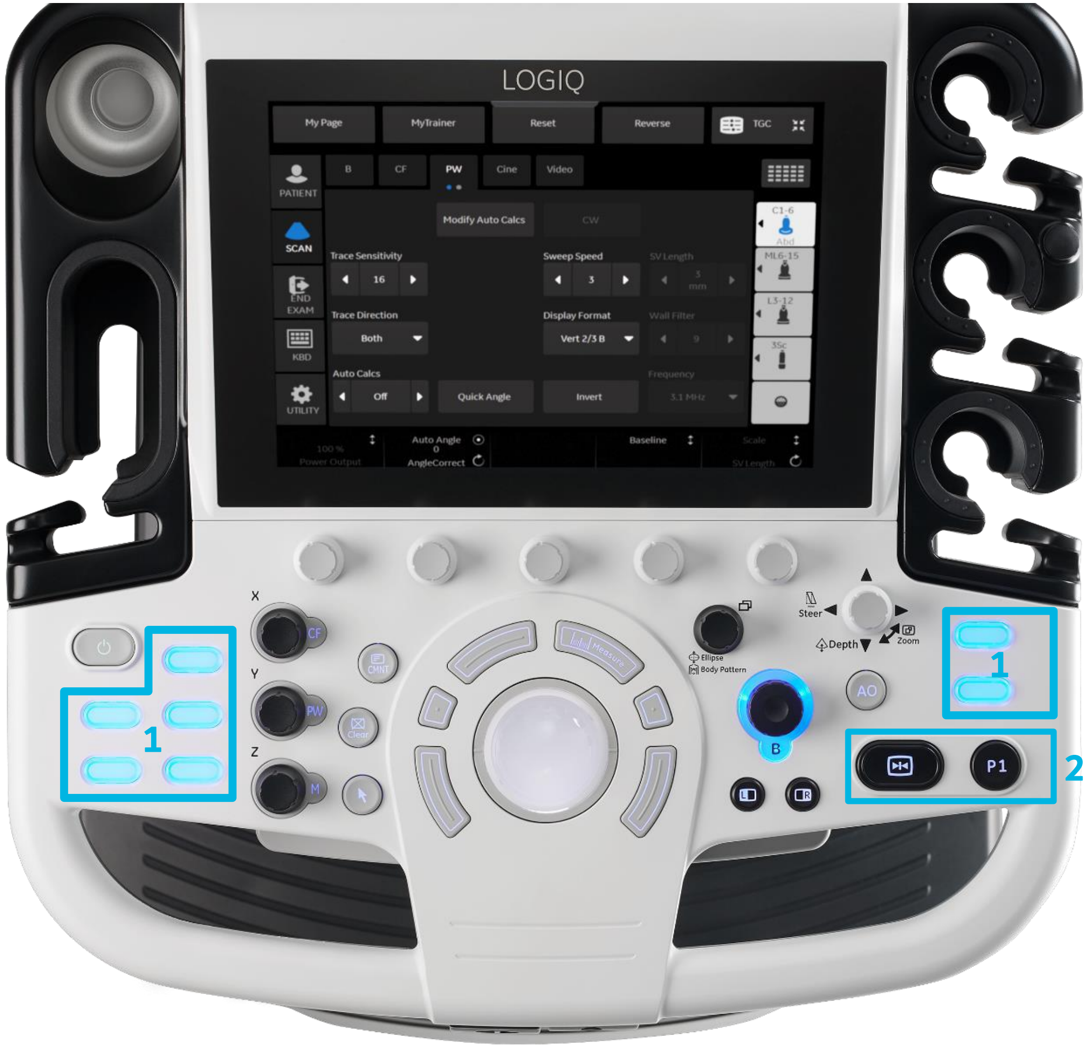
My Preset off


My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
ABD
OB
GYN
CARD
VAS
SM P
PED
Save
Reset 2DHAR
Retain Field of View
Carotid
LEV
LEA
TCD
UEV
UEA
C1-6
L3-12
Carotid
ML6-15
3Sc

My Preset on


My Page
MyTrainer
Reset
Reverse
TGC
My Preset
PATIENT
SCAN
END EXAM
KBD
UTILITY
Save
Reset 2DHAR
Retain Field of View
Abd
Carotid
Thyroid
Breast
C1-6
L3-12
Carotid
ML6-15
3Sc

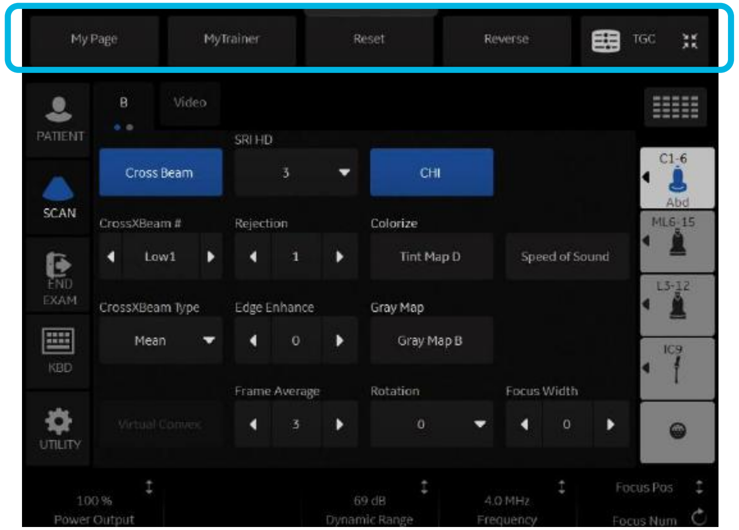
Additional configurable capability


LOGIQ
My Page
MyTrainer
Reset
Reverse
TGC
1
1
2
P1
X
Y
Z
CF
PW
M
AO
B
Steer
Depth
Zoom

1: 7 physical user defined keys

2: Freeze & P1
Exchangeable

5 digital user defined keys


My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
B
Video
Cross Beam
CHI
Speed of Sound
Virtual Convex
C1-6
Abd
ML6-15
L3-12
IC9

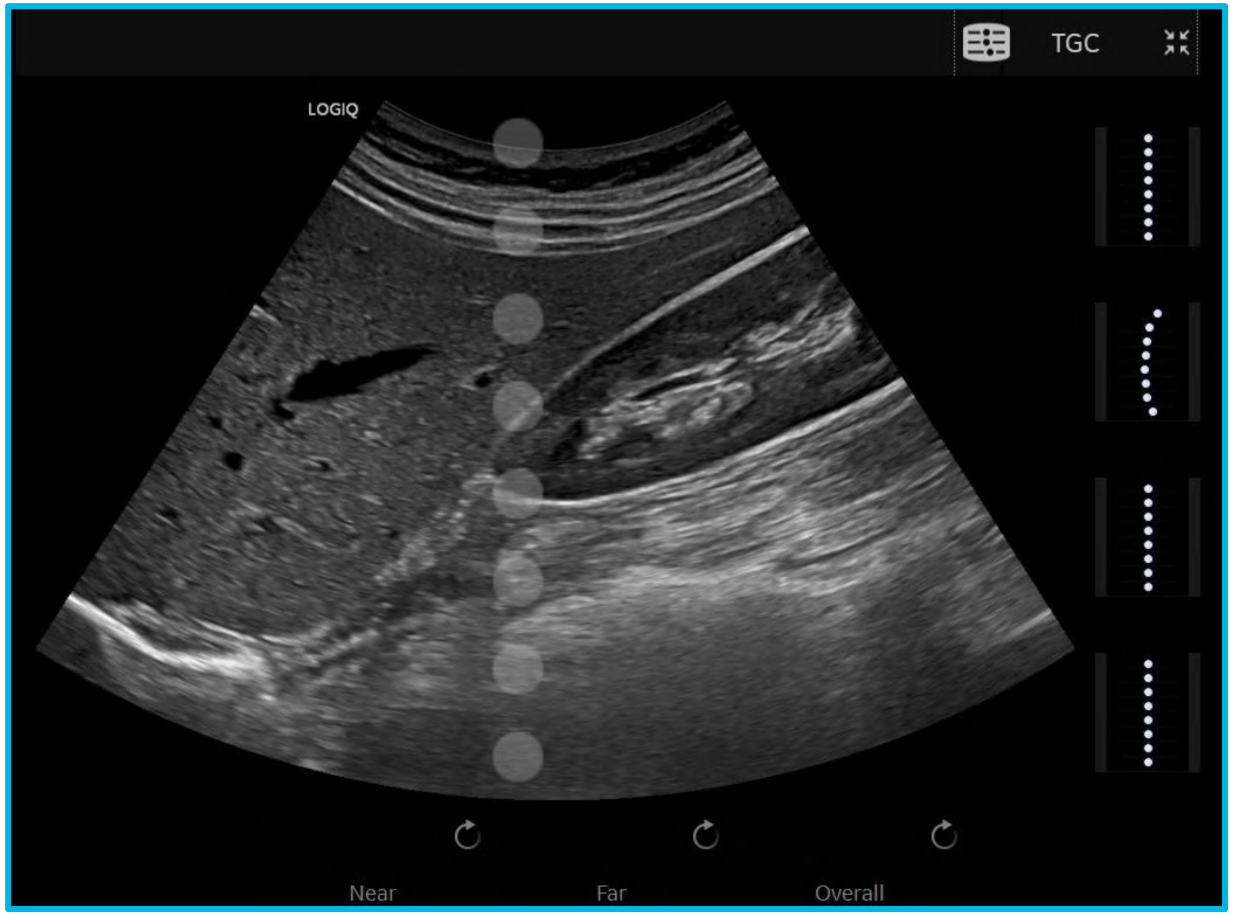
SRI HD 3
CrossXBeam # Low1
Rejection 1
Colorize Tint Map D
CrossXBeam Type Mean
Edge Enhance 0
Gray Map Gray Map B
Frame Average 3
Rotation 0
Focus Width 0
100 % Power Output
69 dB Dynamic Range
4.0 MHz Frequency
Focus Pos
Focus Num

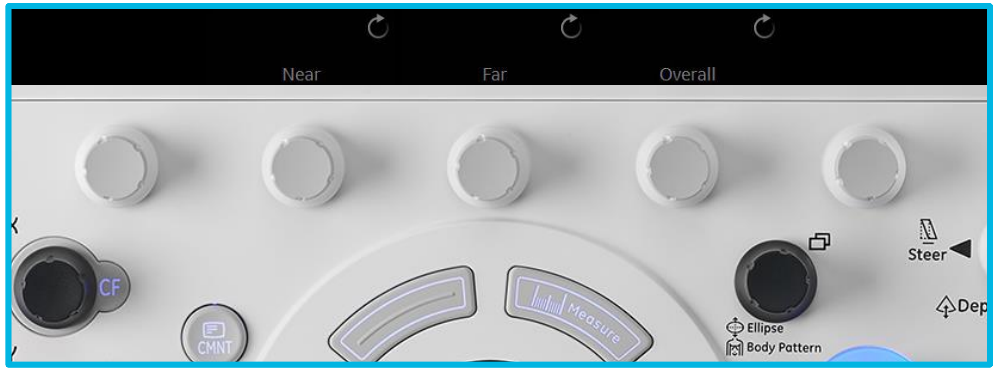
Configurable smart keys

Imaging mode	Function
Live B, Con, B-Flow	Focal Zone Up/Down
	Frequency Up/Down
CF, TVI, B-Flow Color, PDI	Box Steer
	Scale (PRF) Up/Down Auto Doppler Assistant
PWD, CW, TVD	Baseline Up/Down
	Scale (PRF) Up/Down Auto Doopler Assistant
M/D cursor	Sample volume size

B-Flow is a trademark of GE.

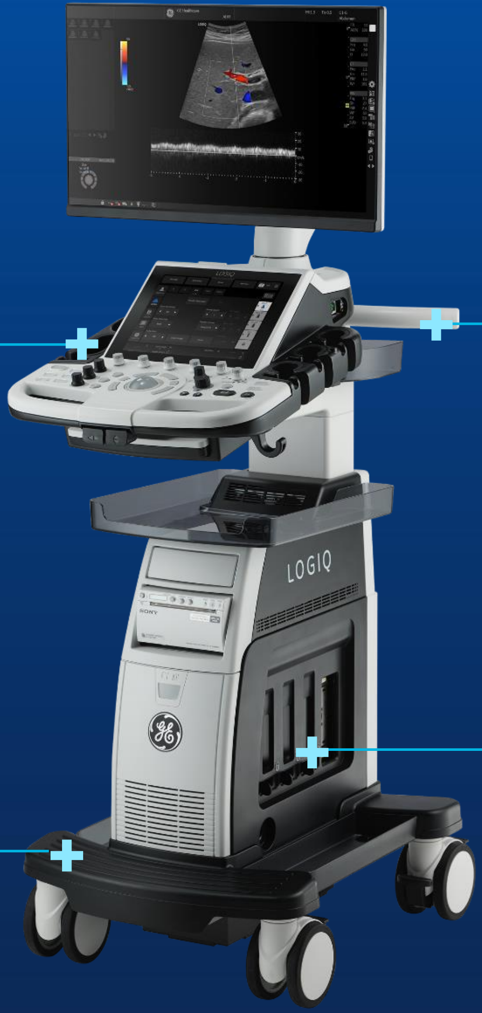
Digital TGC control assigned to rotary knobs


TGC
LOGIQ
Near
Far
Overall


Near
Far
Overall
CF
CMNT
Measure
Ellipse
Body Pattern
Steer
Dep

Ergonomic adaptable system[1]

Gel warmer



Rear handle

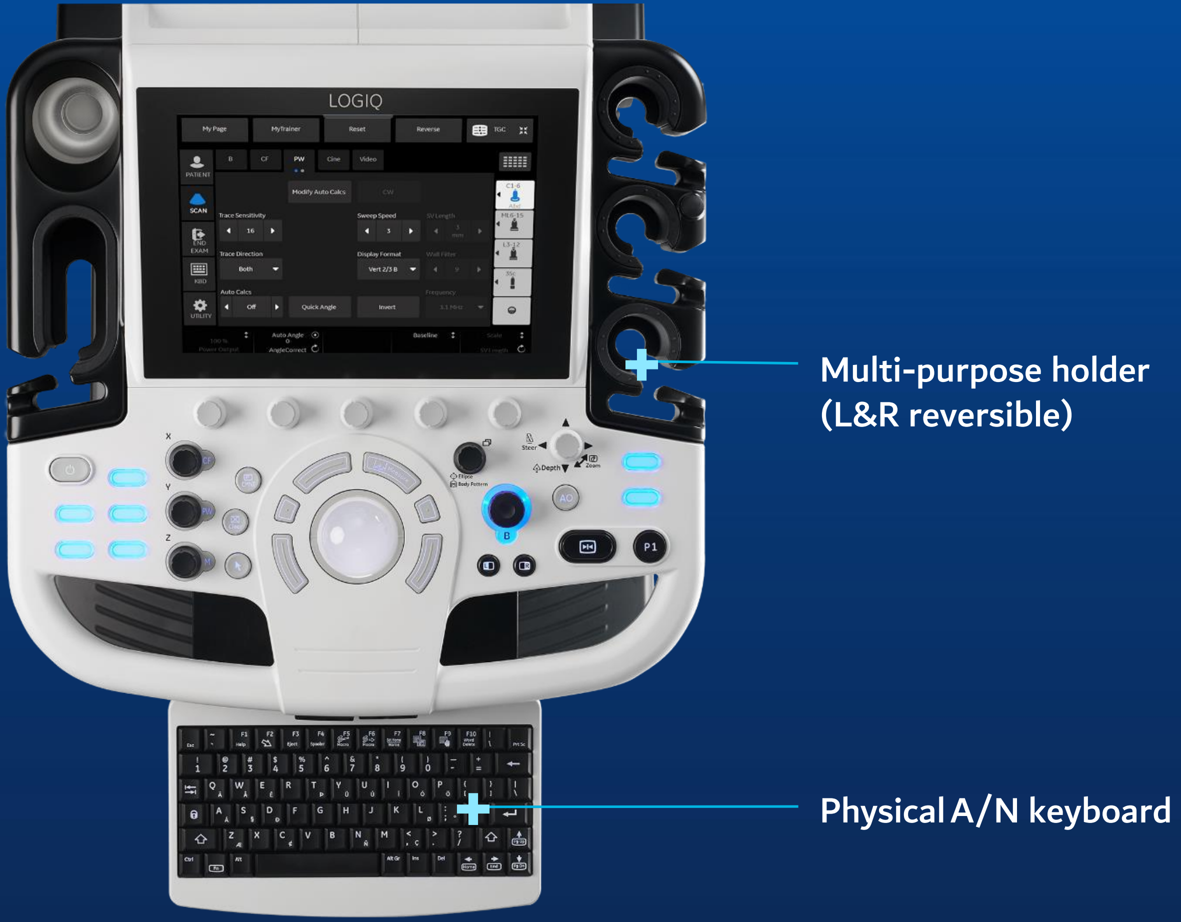
Small physical footprint

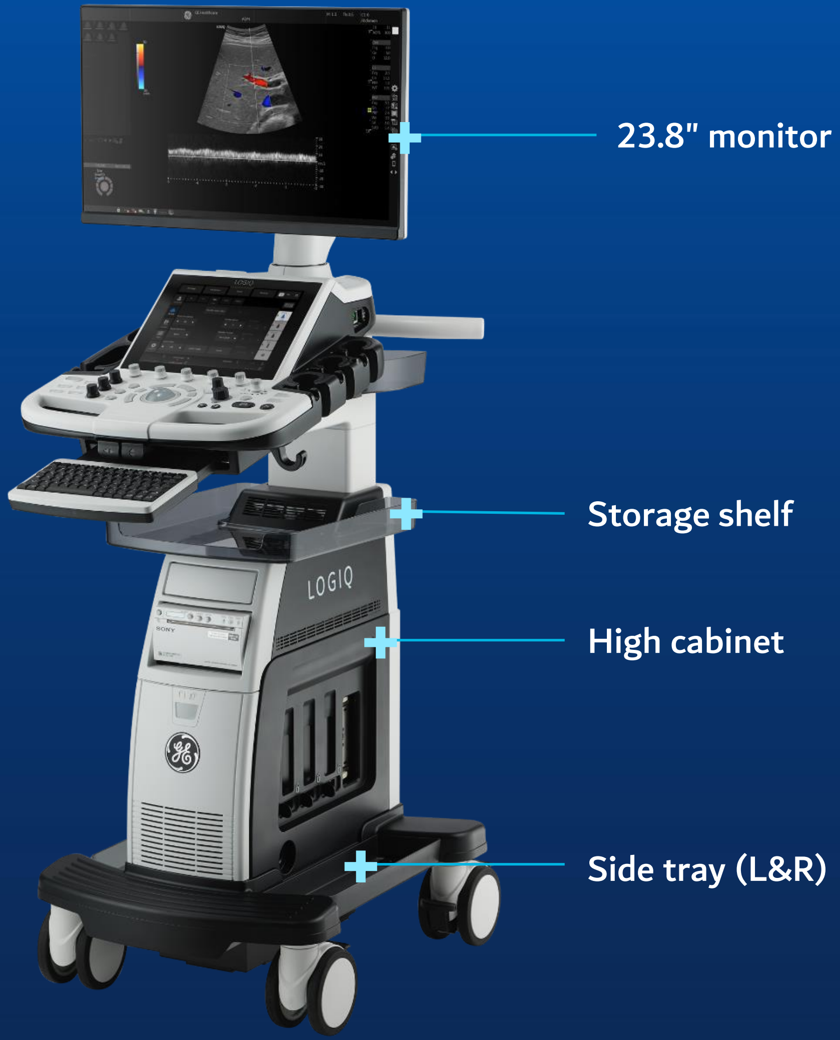
4 active probe ports with
probe light –
3 x RS and 1 x DLP

---

1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

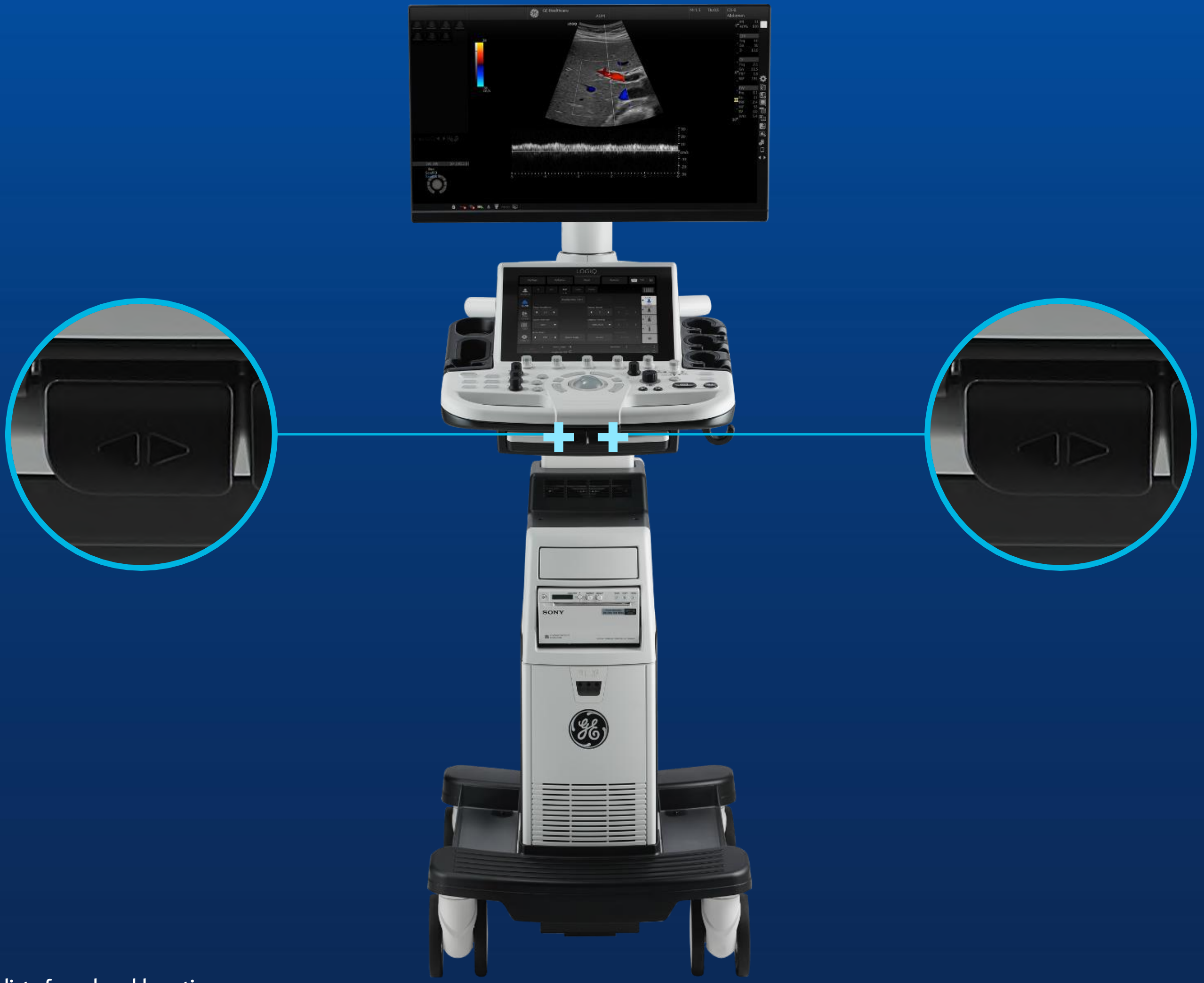
Ergonomic adaptable system[1]


Multi-purpose holder
(L&R reversible)
Physical A/N keyboard


23.8" monitor
Storage shelf
High cabinet
Side tray (L&R)

1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

Ergonomic adaptable system[1]



Rotate
+/– 30 degrees

Up/down
810 – 910 mm

---

1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

Ergonomic adaptable system[1]

LOGIQ
200 mm

200 mm
LOGIQ
My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
B
CF
PW
Cine
Video
Modify Auto Calcs
CW
Trace Sensitivity
16
Sweep Speed
3
SV Length
Trace Direction
Both
Display Format
Vert 2/3 B
Wall Filter
Auto Calcs
Off
Quick Angle
Invert
Frequency
Auto Angle
AngleCorrect
Baseline
C1-6
ML6-15
L3-12
X
Y
Z
CF
PW
M
AO
B
P1
Steer
Depth
Zoom
Ellipse
Body Pattern

---

1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

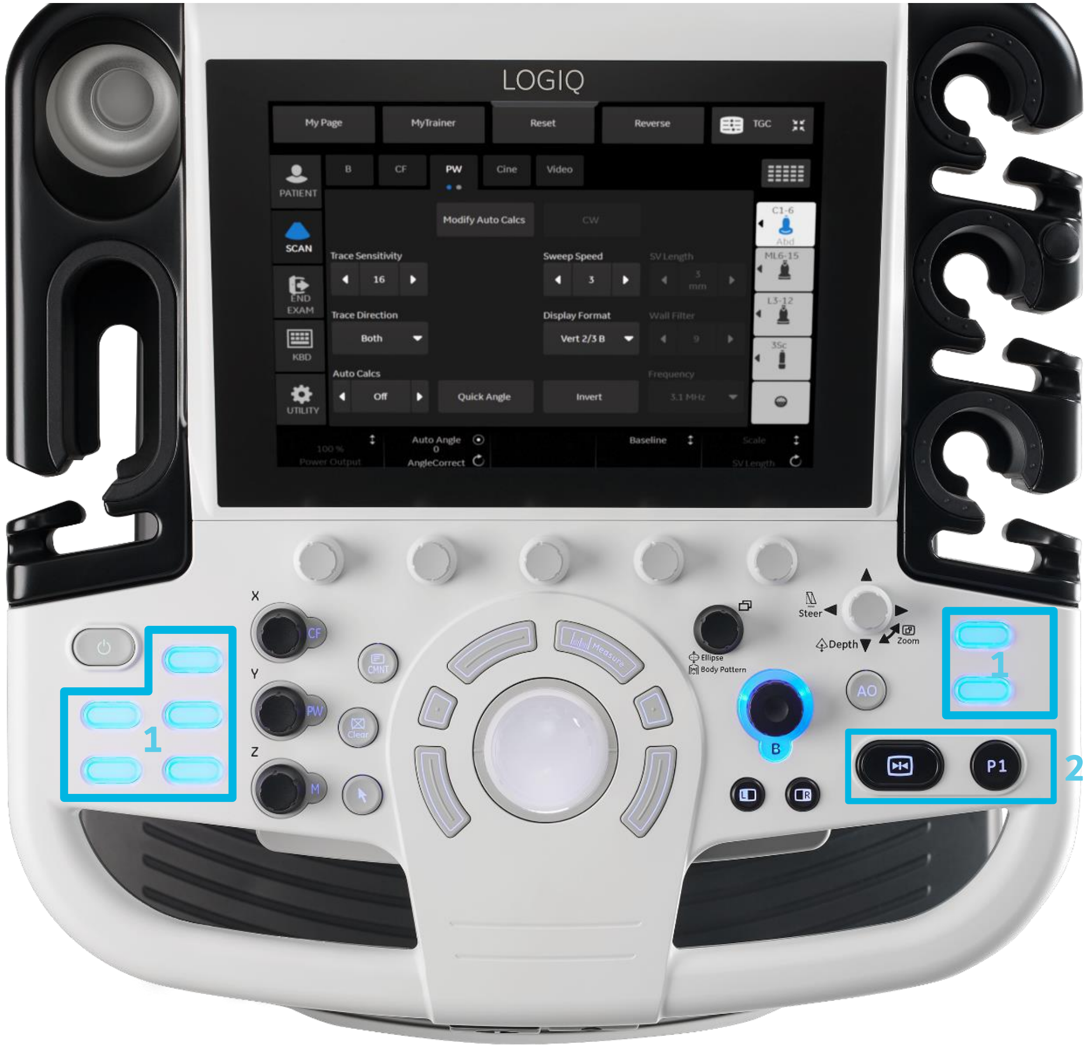
LOGIQ is a trademark of GE.

LOGIQ™ brand usability

The redesigned user interface — with customizable keys — delivers the simplicity and ease of operation you’ve come to expect from LOGIQ systems.

LOGIQ is a trademark of GE.

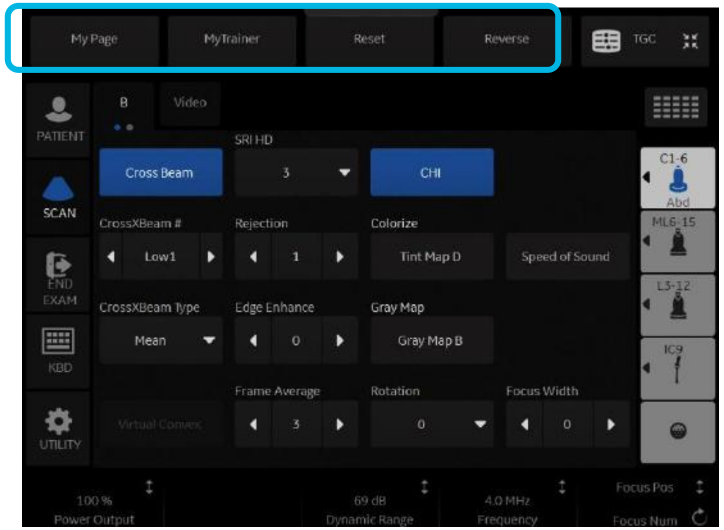
Additional configurable capability


LOGIQ
My Page
MyTrainer
Reset
Reverse
TGC
1
1
2
P1

1: 7 physical user defined keys

2: Freeze & P1
Exchangeable

4 digital user defined keys


My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
B
Video
Cross Beam
CHI
Speed of Sound
Virtual Convex
C1-6 Abd
ML6-15
L3-12
IC9
100 % Power Output
69 dB Dynamic Range
4.0 MHz Frequency
Focus Pos
Focus Num

SRI HD 3
CrossXBeam # Low1
Rejection 1
Colorize Tint Map D
CrossXBeam Type Mean
Edge Enhance 0
Gray Map Gray Map B
Frame Average 3
Rotation 0
Focus Width 0

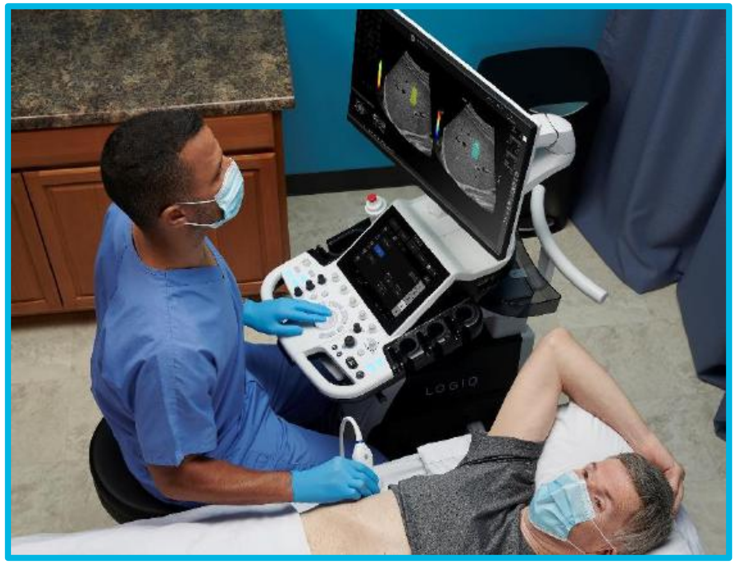
Configurable smart keys

Imaging mode	Function
Live B, Con, B-Flow™	Focal Zone Up/Down
	Frequency Up/Down
CF, TVI, B-Flow Color, PDI	Box Steer
	Scale (PRF) Up/Down Auto Doppler Assistant
PWD, CW, TVD	Baseline Up/Down
	Scale (PRF) Up/Down Auto Doppler Assistant
M/D cursor	Sample volume size

B-Flow is a trademark of GE.

Intuitive interface

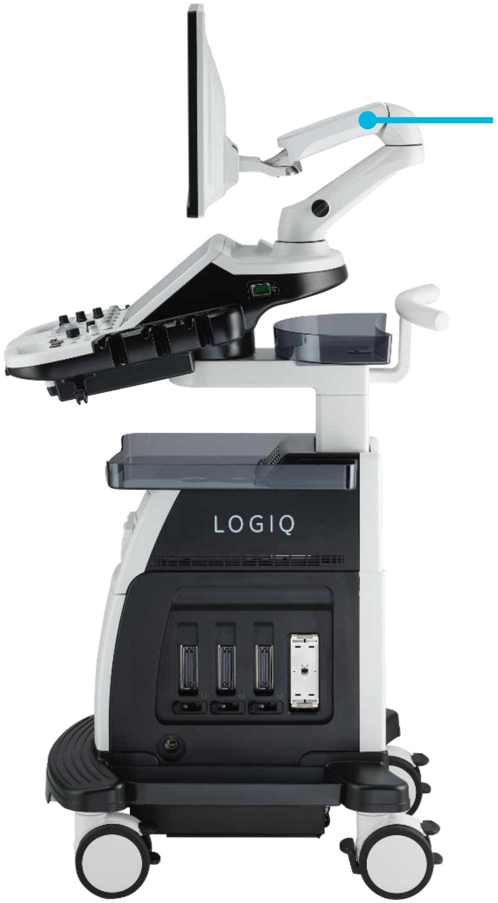
- Touch control for easy imaging parameter adjustment, even with gloves on
- 10.4" touch screen with simplified user interface
- User-friendly keys and backlight design
- Joystick



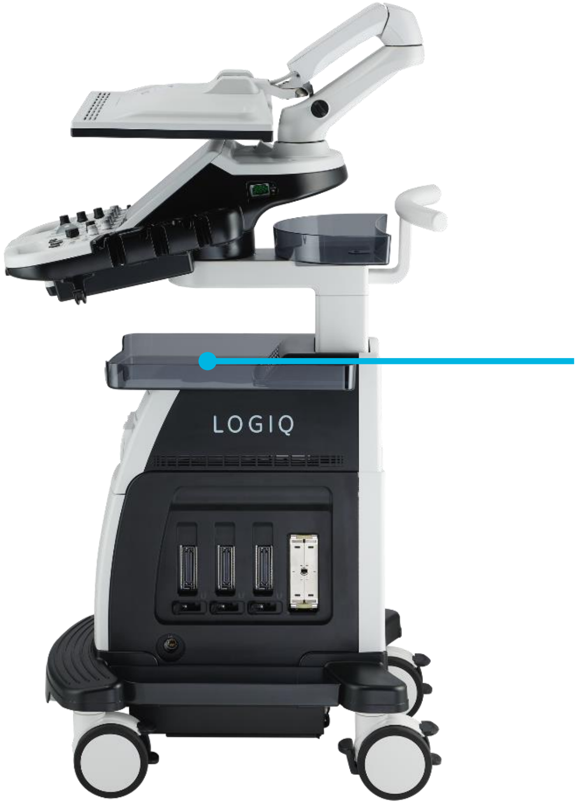
LOGIQ
LOGIQ
SONY

System adjustability

Up and down



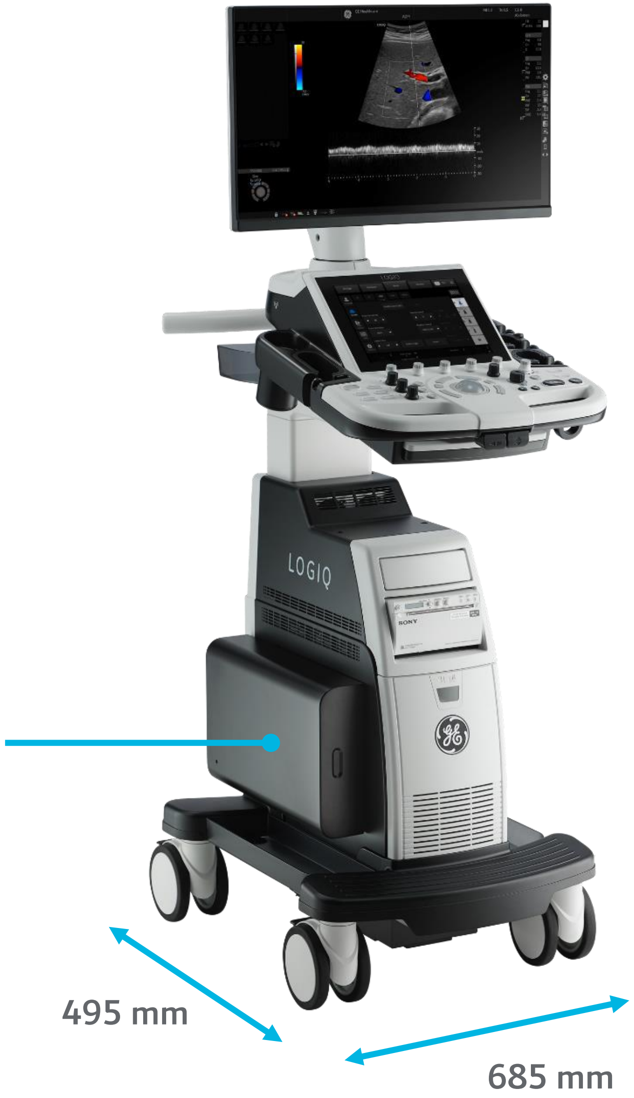
Articulating arm



Storage bins for carrying supplies

Compact system – Easy to move

← Apartment
← LDRP
Exam Rooms ←
Pediatrics ←
LOGIQ

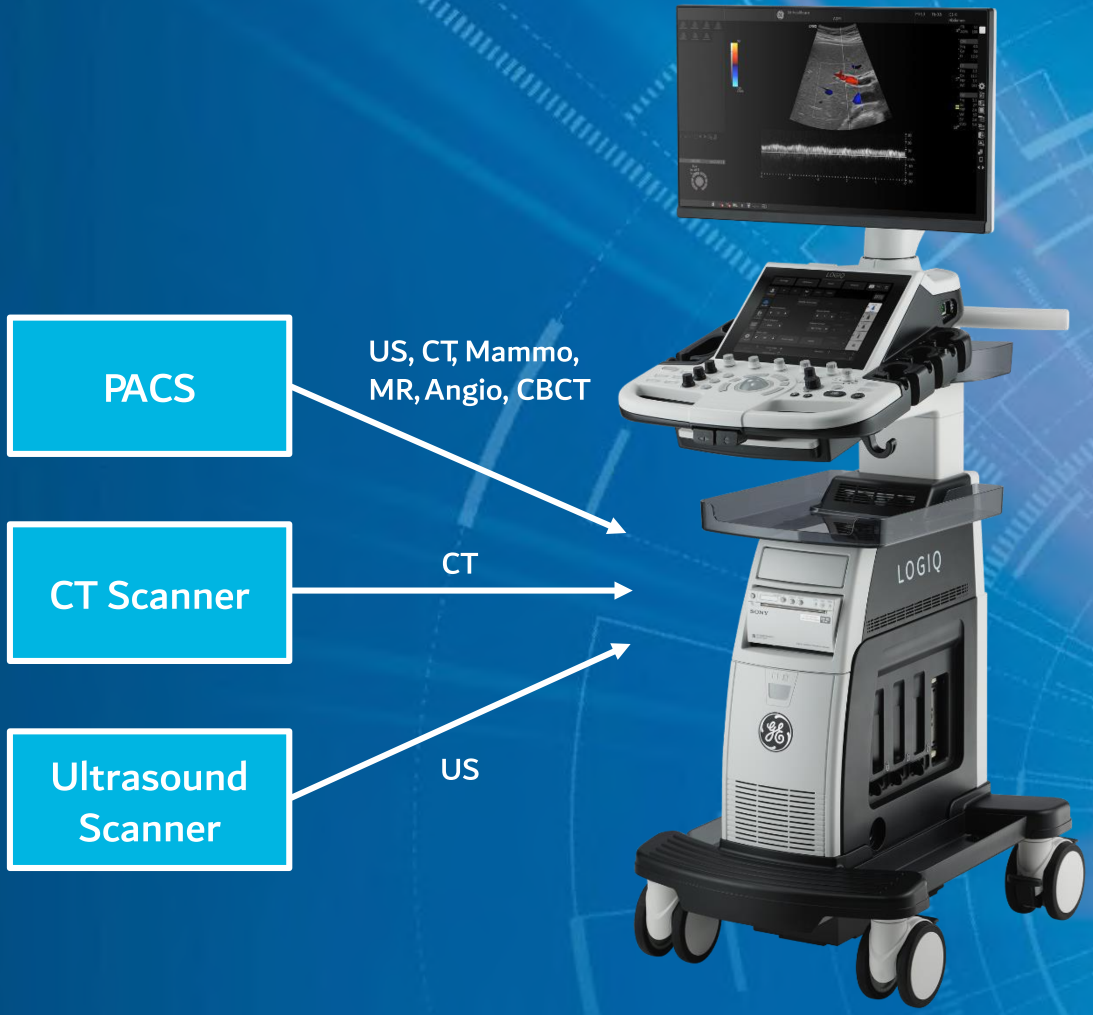

LOGIQ
495 mm
685 mm

External battery for off-line scanning, up to one hour

Easy access to PACS

Highlights

- Enables the console to receive exams from PACs in the background without interrupting workflow
- Easily pull images via Query Retrieve to console
- Operates both wired and wirelessly



PACS

CT Scanner

Ultrasound Scanner

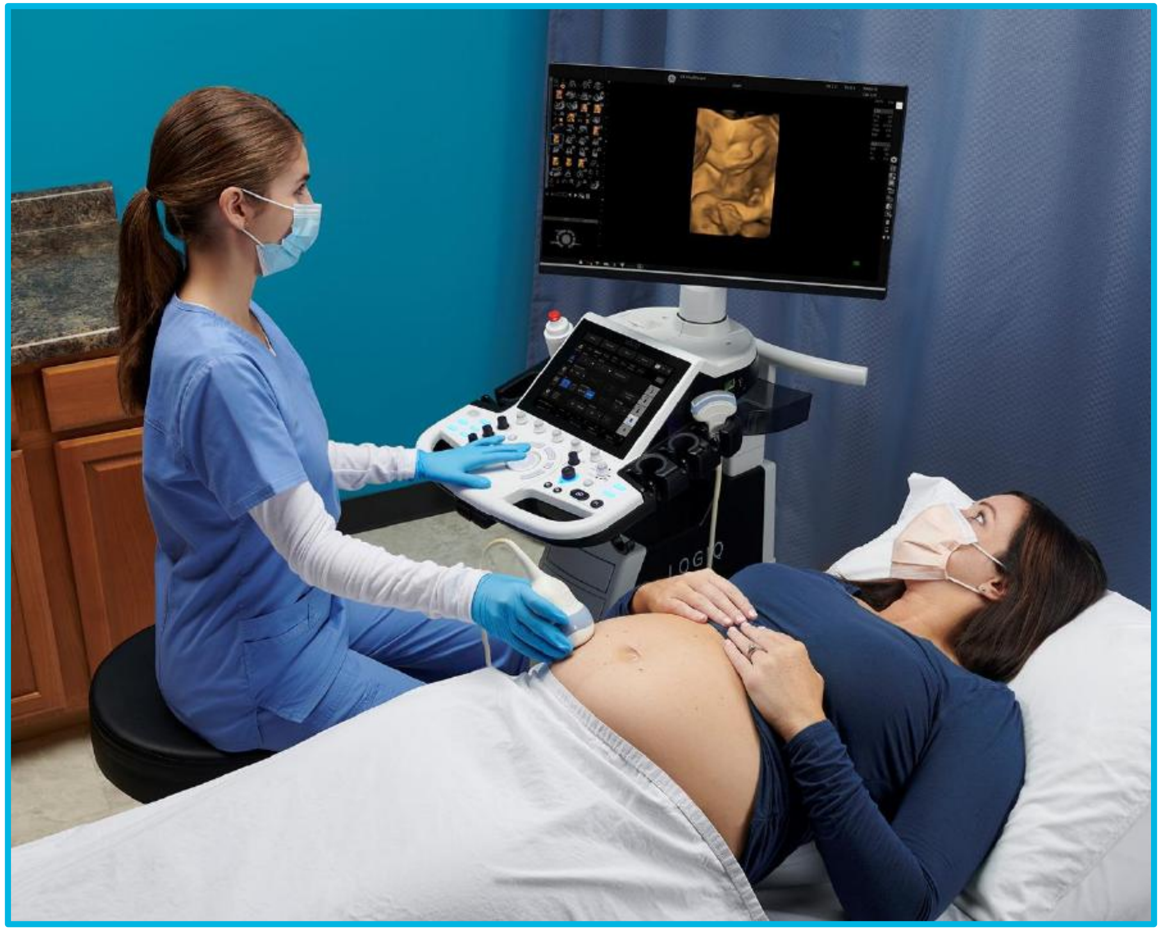
US, CT, Mammo, MR, Angio, CBCT

CT

US

Fetal Assessment Tools

SonoNT and SonoIT semi-automated measurement tools support exam consistency and reproducibility, while SonoRender*live* automates render line placement in 3D/4D imaging



AI-based Workflow and Decision Support Tools

LOGIQ™ P9 XDclear™ harnesses artificial intelligence for imaging standardization, speed and decision support:

- Auto Lesion Segmentation
- OB Measurement Assistant
- Auto Doppler Assistant
- Breast Assistant, powered by Koios DS™*

*Not all products or features are available in all geographies. Check with your local GE Healthcare representative for availability in your country.

LOGIQ and XDclear are trademarks of GE.
Koios DS is a trademark of Koios Medical.

AI-based Workflow Tools

LOGIQ™ P9 XDclear™ harnesses artificial intelligence for imaging standardization, speed and decision support:

- Auto Lesion Segmentation
- OB Measurement Assistant
- Auto Doppler Assistant

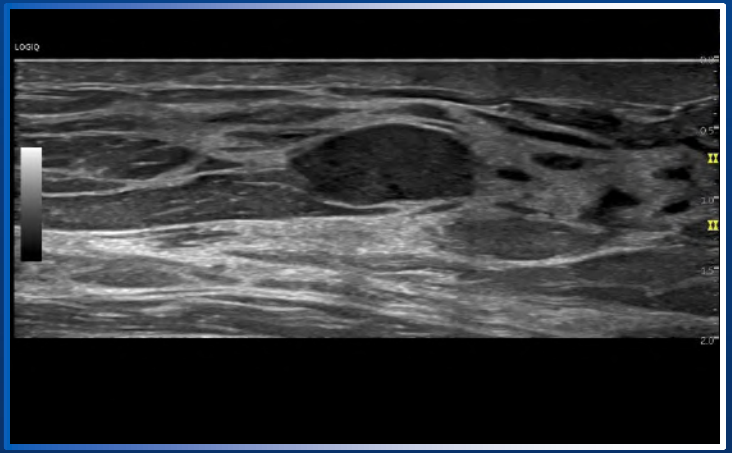
LOGIQ and XDclear are trademarks of GE.

LOGIQ™ P9: Harnessing the power of AI

AI-based Auto Lesion Segmentation

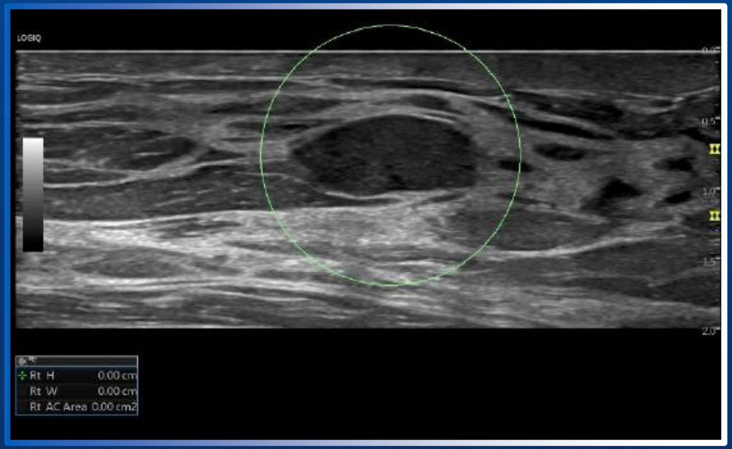
Edison

User identifies a breast, thyroid or liver lesion



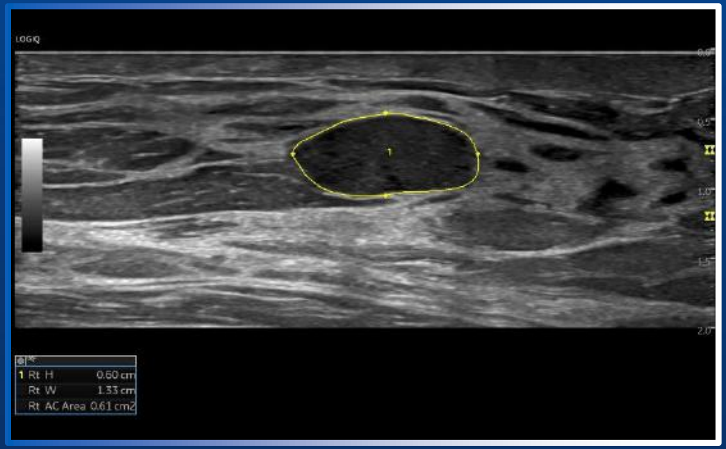
Benefit: Users scan as they normally would

User clicks on the lesion and simply expands a graphical circle to encompass it


LOGIQ
Rt H 0.00 cm
Rt W 0.00 cm
Rt AC Area 0.00 cm2

Benefit: User identifies a lesion with a single click

The algorithm segments the lesion, providing a trace and extents of the lesion


LOGIQ
1 Rt H 0.60 cm
Rt W 1.33 cm
Rt AC Area 0.61 cm2

Benefit: Calipers are automatically placed to measure the lesion, saving keystrokes and providing consistency

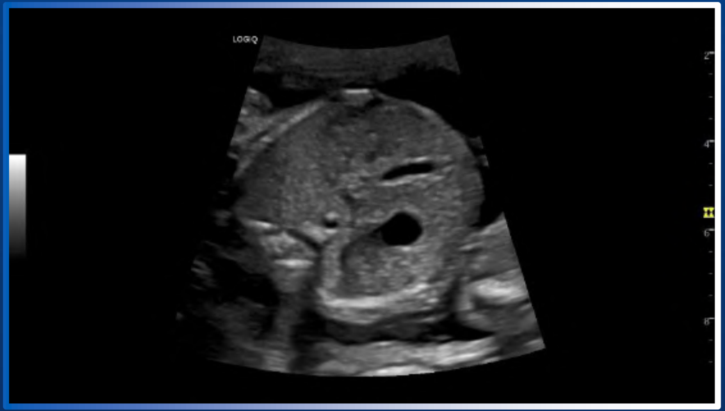
Manual view classification

Semi-automated structure detection

LOGIQ is a trademark of GE.

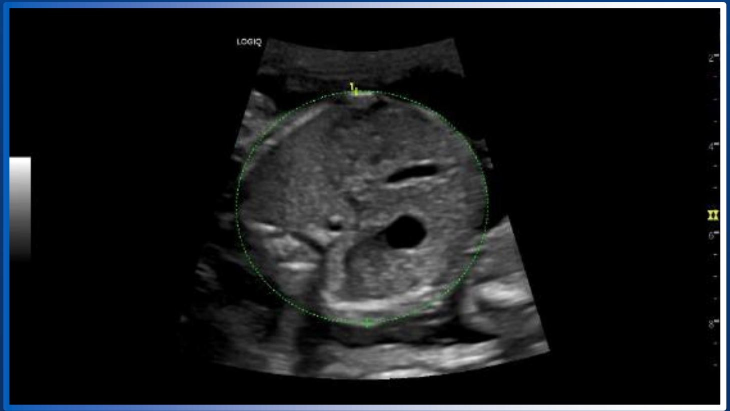
LOGIQ™ P9: Enhancing user productivity and experience over time | The journey to AI: Auto OB Assistant

User identifies a view appropriate for measuring the BPD, HC, AC, FL and HL and initiates a measurement



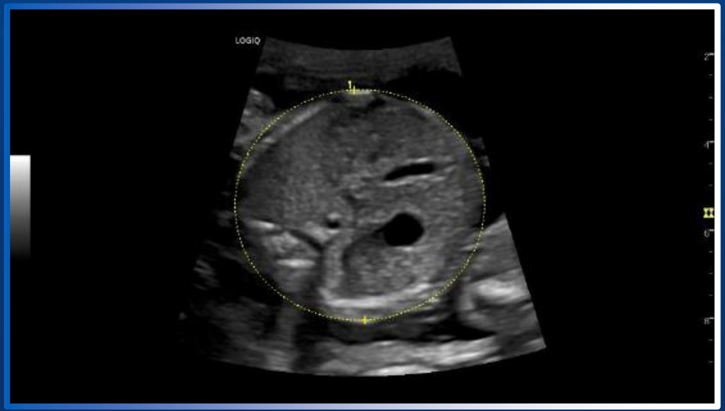
Benefit: Users scan and initiates a measurement as they normally would

Auto OB Assistant automatically segments out the appropriate structure from the image



Benefit: Measurement is automatically performed, saving keystrokes and providing consistency

The measurement result and associated fetal age is presented to the user



Benefit: Results presented to the user without extra steps

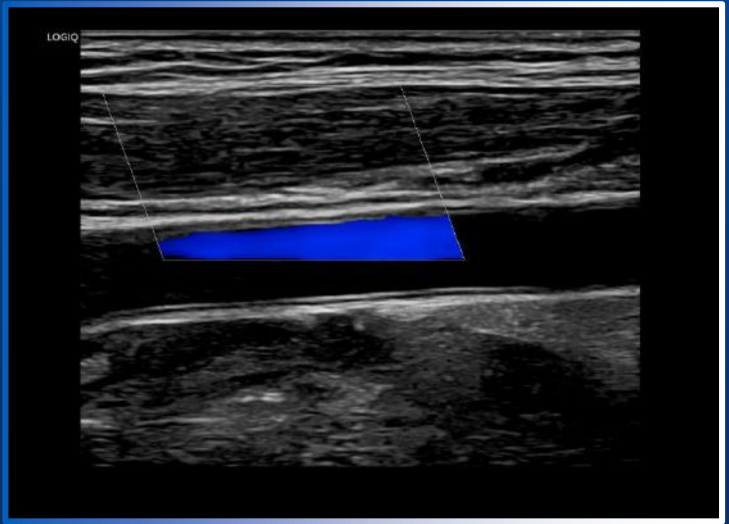
Manual view classification

Automated structure detection and results

Harnessing the power of AI

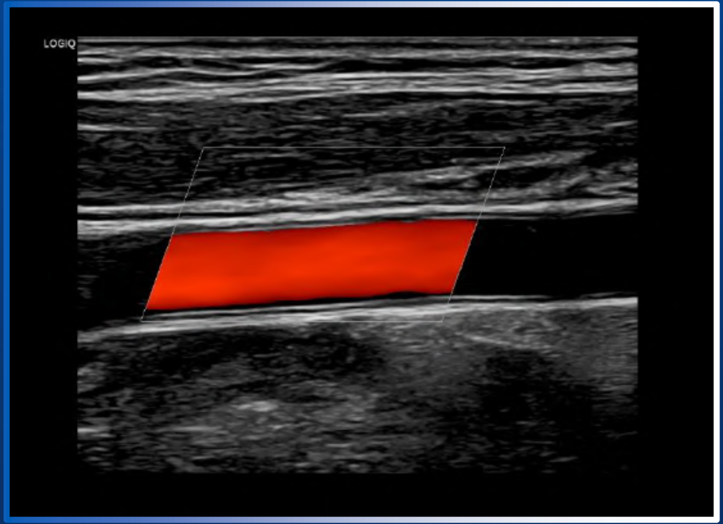
AI-based Auto Doppler Assistant on the LOGIQ™ P9

User guides system to the vasculature of interest and pushes a button



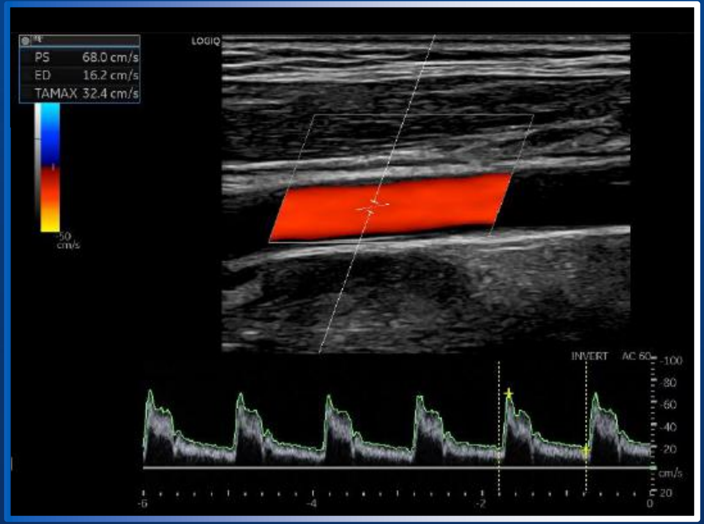
Benefit: Users scan as they normally would and control initiation of the algorithm

Doppler Assistant determines the location and direction of vessels



Benefit: Keystrokes are reduced as the color ROI and Doppler gate are automatically placed

Doppler Assistant determines the location and direction of vessels


PS 68.0 cm/s
ED 16.2 cm/s
TAMAX 32.4 cm/s
LOGIQ
INVERT
AC 60
-100
80
60
40
20
cm/s
20

Benefit: Results are appropriate for venous versus atrial exams even when both types of vessels are present

Manual view classification

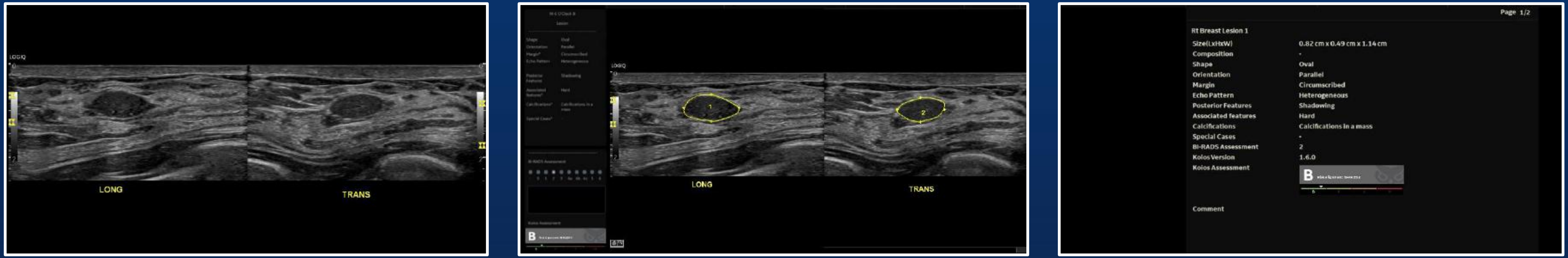
Automated structure detection and classification

Breast Assistant, powered by Koios DS™*

Automatically provides an AI-based quantitative risk assessment that aligns to a BI-RADS® category

In Breast Assistant:

- Measure the lesion (either manually or with Auto Contour)
- Select the "Koios" button to analyze the image
- In 2 seconds or less, a quantitative color-coded confidence scale is generated that includes the Likelihood of Malignancy (LoM)



Rt Breast Lesion 1

Size(LxHxW)	0.82 cm x 0.49 cm x 1.14 cm
Composition	-
Shape	Oval
Orientation	Parallel
Margin	Circumscribed
Echo Pattern	Heterogeneous
Posterior Features	Shadowing
Associated features	Hard
Calcifications	Calcifications in a mass
Special Cases	-
BI-RADS Assessment	2
Koios Version	1.6.0
Koios Assessment	B
Comment	

Benign Breast Mass, L3-12-RS

Designed to increase clinical confidence and reduce patient anxiety

*Not all products or features are available in all geographies. Check with your local GE Healthcare representative for availability in your country.

BI-RADS is a trademark of the American College of Radiology.
Koios DS is a trademark of Koios Medical.

Breast Assistant, powered by Koios DS™

Automatically provides an AI-based quantitative risk assessment that aligns to a BI-RADS® category:

- Based on machine learning
- Uses a proprietary AI algorithm that includes >400,000 clinical breast lesion images
- One button click to analyze
- A color-coded confidence scale generates a likelihood of malignancy (LoM) aligned to the appropriate BI-RADS category
- Results on scanner
- Select the “Koios” button to analyze the image
- Available in two seconds, or less
- Based on machine learning

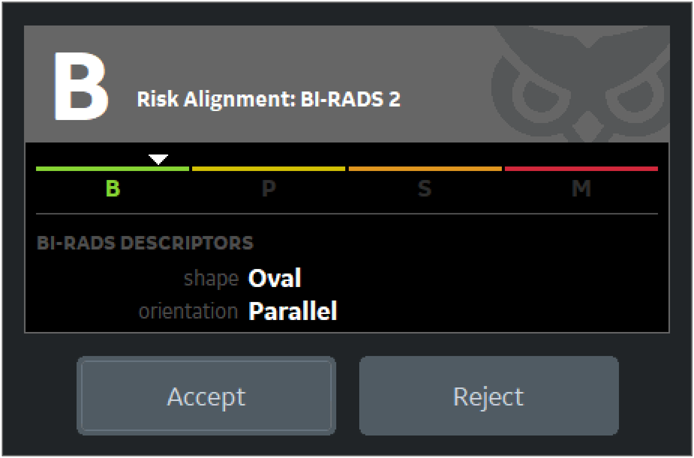
*Not all products or features are available in all geographies. Check with your local GE Healthcare representative for availability in your country.

BI-RADS is a trademark of the American College of Radiology.
Koios DS is a trademark of Koios Medical.

Breast Assistant, powered by Koios DS™

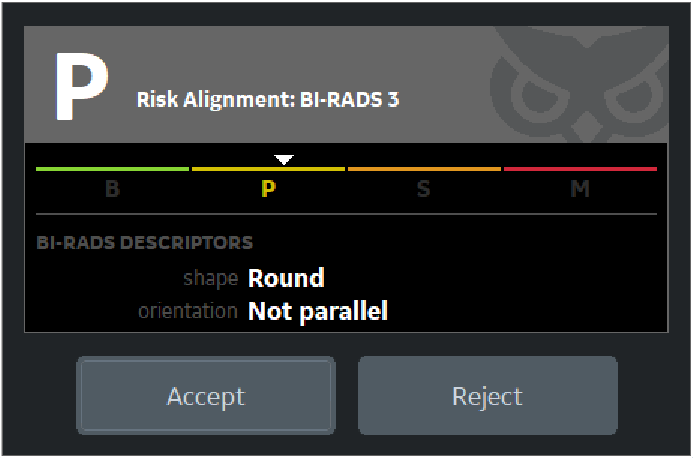
Analysis return examples

B = Benign
P = Probable Benign
S = Suspicious
M = Malignant



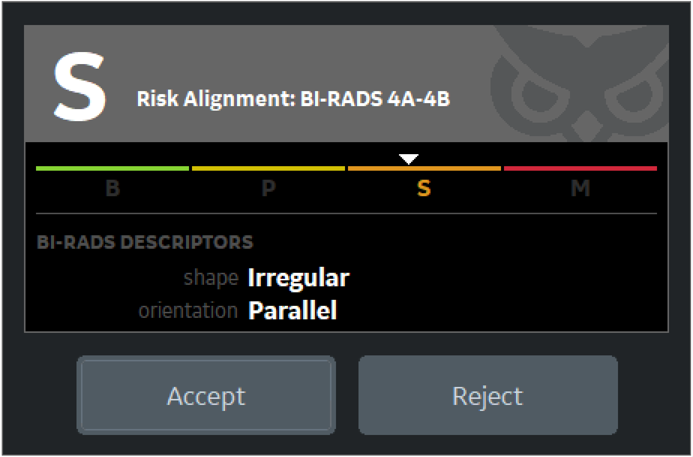
B Risk Alignment: BI-RADS 2

BI-RADS DESCRIPTORS
shape **Oval**
orientation **Parallel**



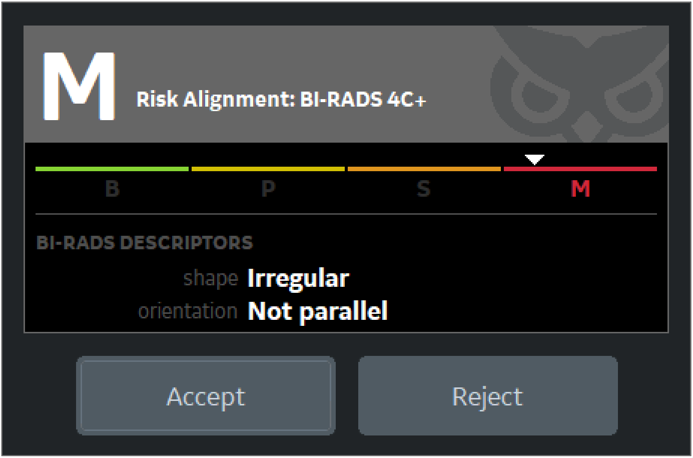
P Risk Alignment: BI-RADS 3

BI-RADS DESCRIPTORS
shape **Round**
orientation **Not parallel**



S Risk Alignment: BI-RADS 4A-4B

BI-RADS DESCRIPTORS
shape **Irregular**
orientation **Parallel**



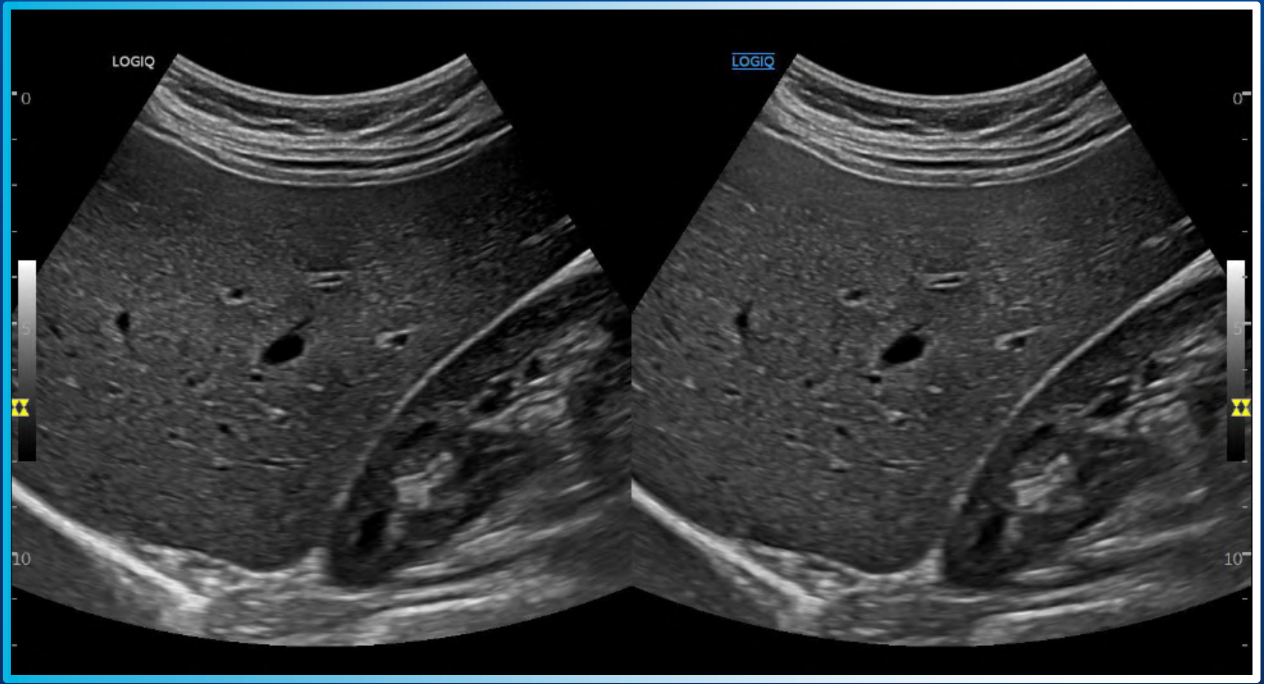
M Risk Alignment: BI-RADS 4C+

BI-RADS DESCRIPTORS
shape **Irregular**
orientation **Not parallel**

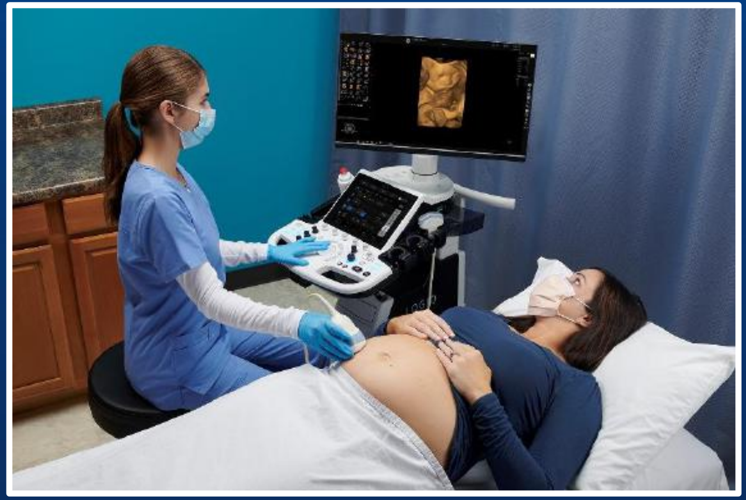
*Not all products or features are available in all geographies. Check with your local GE Healthcare representative for availability in your country.
Koios DS is a trademark of Koios Medical.

Continuous Tissue Optimization (CTO)

Delivers continuously optimized images with incredible uniformity from near to far field



Patient-Centric Diagnosis



Traditional ultrasound

Rigid assumptions about how sounds interact with the body

- Speed of sound is constant (1540 m/s)
- Sound attenuation is constant
- Ultrasound beam is pencil shaped
- Vessels are straight
- Blood flow is laminar

Looking at the body as a phantom

Reality is not so simple:

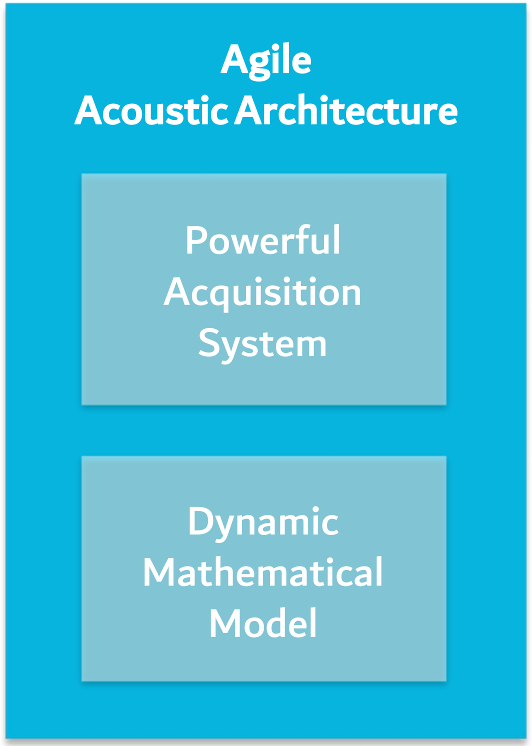
- Sound attenuation and velocity vary
- Ultrasound beam is a volume
- Vessels are tortuous
- Blood flow can be turbulent

Simplifying assumptions can lead to:

- Poor image quality
- Distortion of image geometry
- Lots of adjustments to optimize images

Agile Acoustic Architecture

- Flexible clinically-based mathematical models of the body
- Dynamically optimizes image acquisition for every body type
- Including the reality of body types
- Speed of sound is variable: 1450-1560 m/s
- Sound attenuation varies based on tissue type
- Ultrasound beam is dynamic



Agile Acoustic Architecture

Powerful Acquisition System

Dynamic Mathematical Model

P-Agile Acoustic Architecture

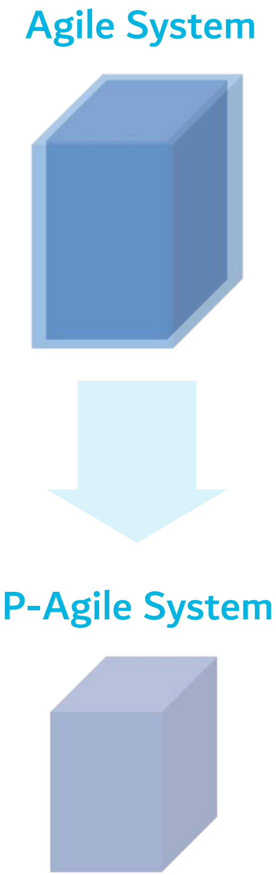
Agile Architecture

Leadership core technology for advanced clinical applications

Migration of technology

P-Agile Architecture

Compact size and technology to fit P-series customers workflow

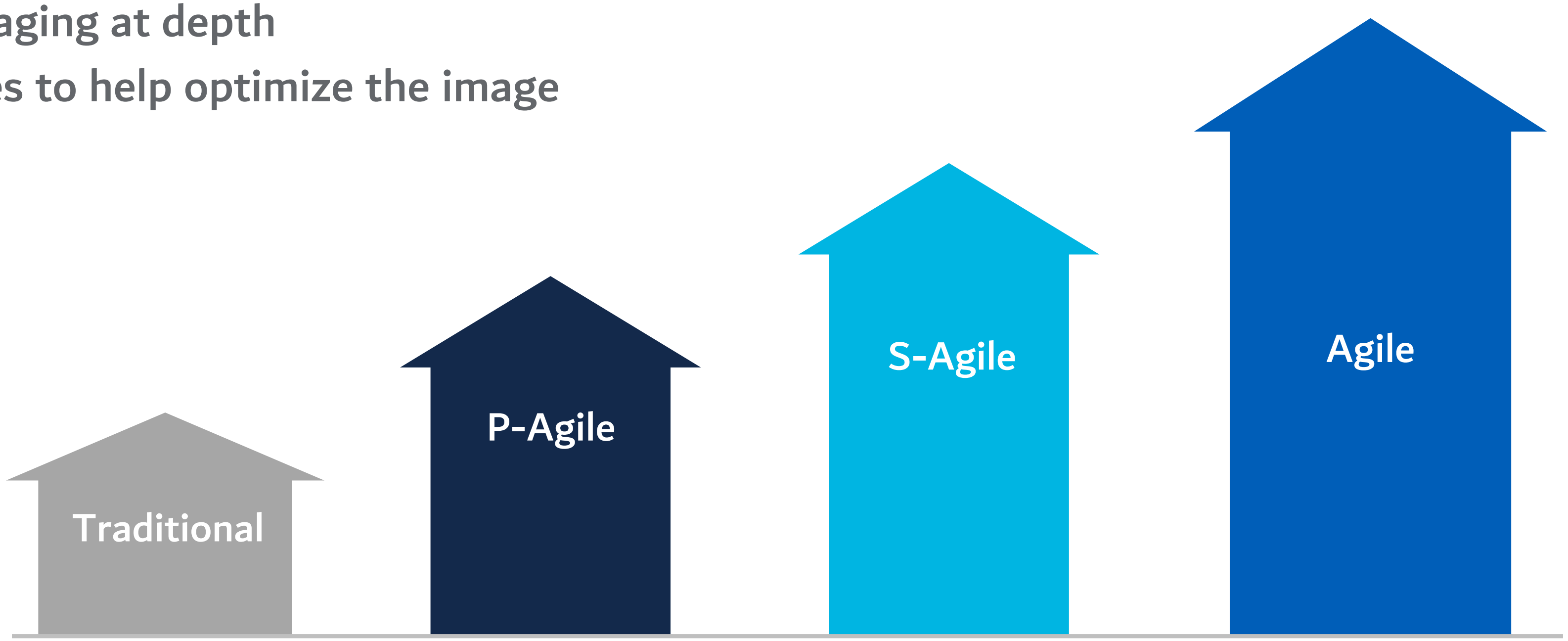


Agile Acoustic Architecture

Helping improve your diagnostic confidence

Clinical benefits

- Image uniformity
- Spatial resolution
- High frequency imaging at depth
- Reduced keystrokes to help optimize the image


Traditional
P-Agile
S-Agile
Agile

LOGIQ™ P Series probes

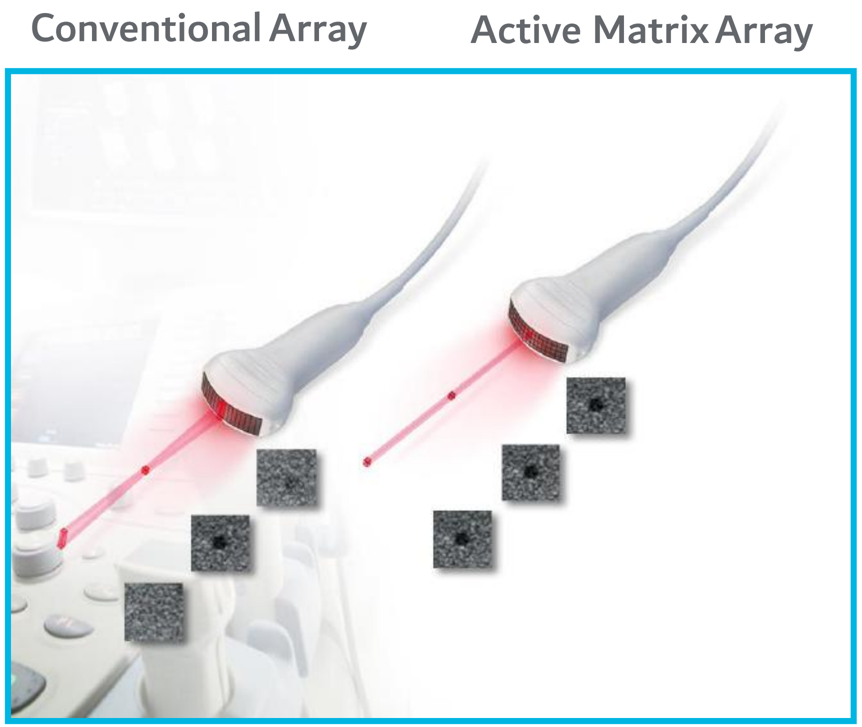
Innovative technologies

ML6–15-RS

High frequency linear probe

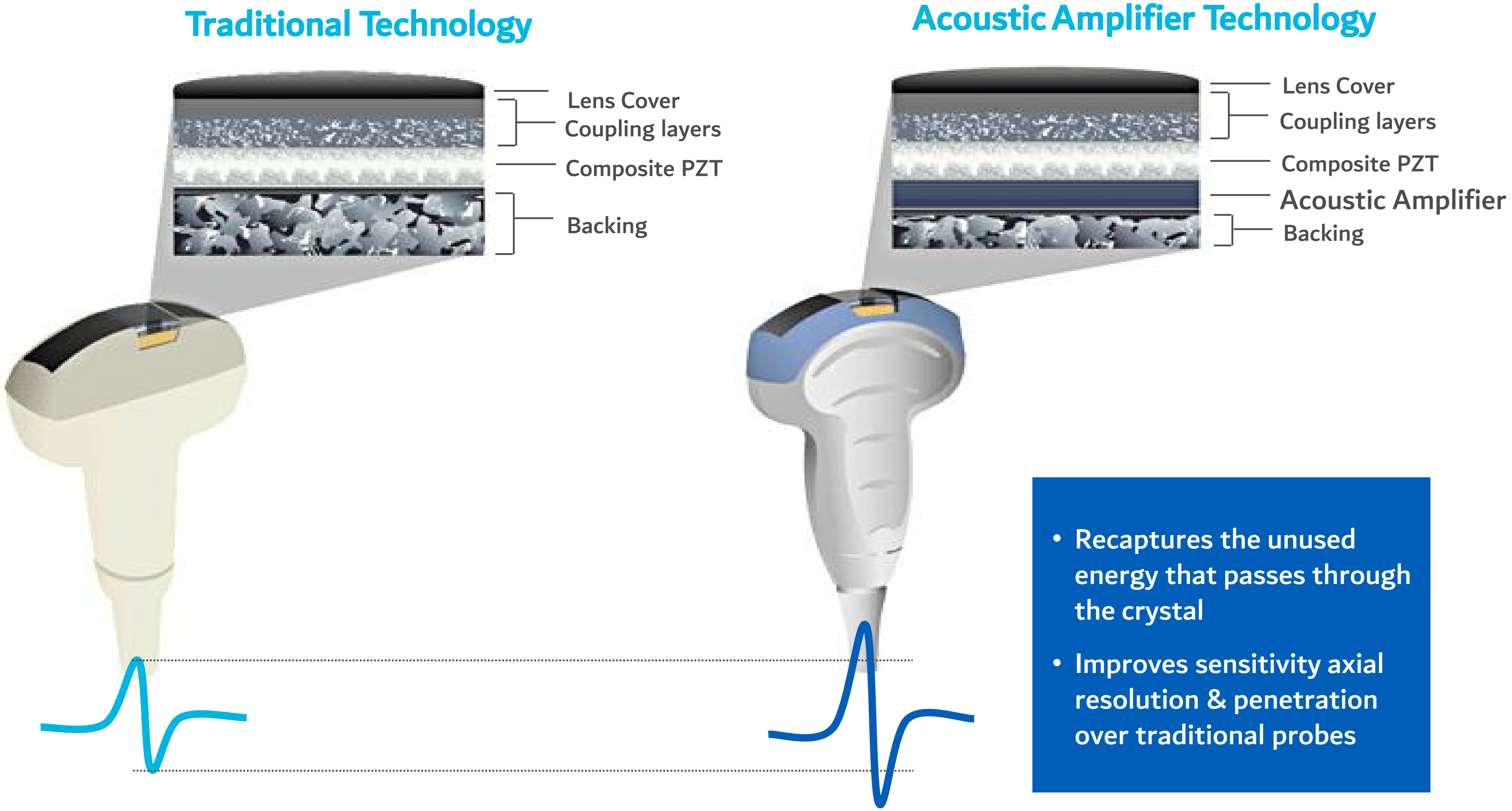
Matrix arrays provide multiple rows of crystals, allow focusing in the near, mid and far field.

- Great spatial resolution and image uniformity from near to far field
- Footprint: 50 mm
- Ultra-high Doppler & color frequency for excellent slow flow sensitivity



LOGIQ™ P Series probes

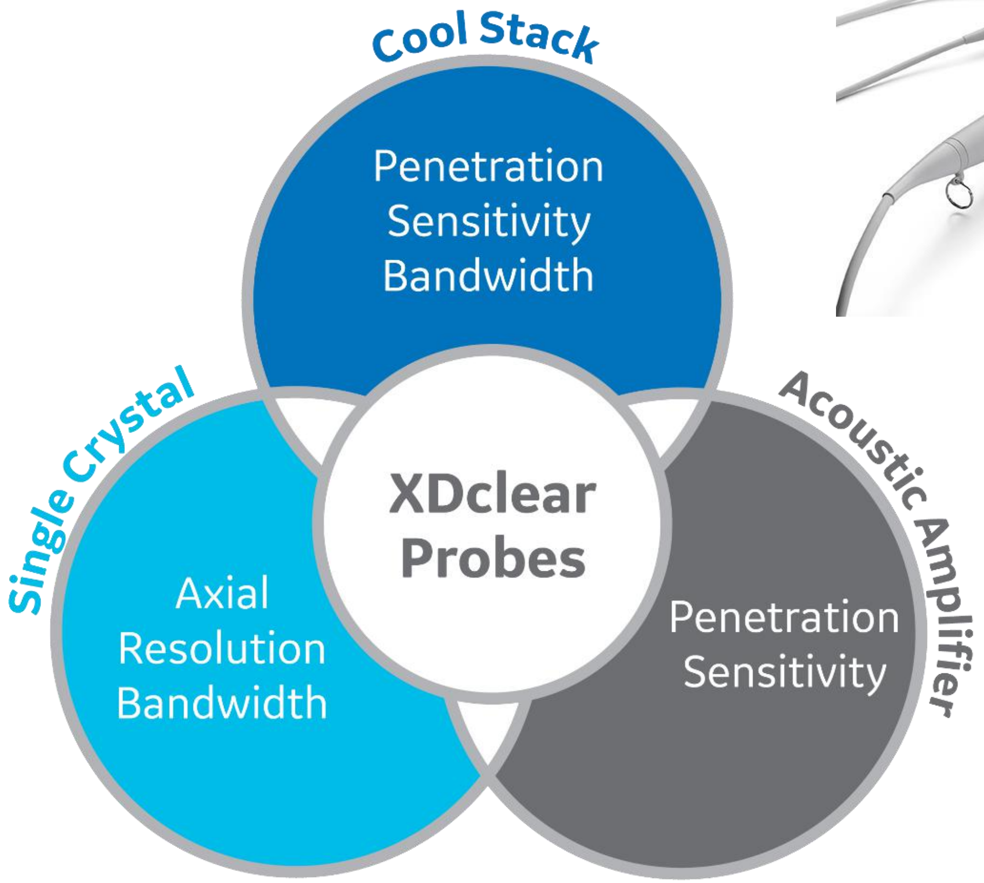
Acoustic Amplifier


Traditional Technology
Lens Cover
Coupling layers
Composite PZT
Backing
Acoustic Amplifier Technology
Lens Cover
Coupling layers
Composite PZT
Acoustic Amplifier
Backing

- Recaptures the unused energy that passes through the crystal
- Improves sensitivity axial resolution & penetration over traditional probes

LOGIQ is a trademark of GE.

XDclear™
Extended to more probes



Cool Stack

Penetration
Sensitivity
Bandwidth

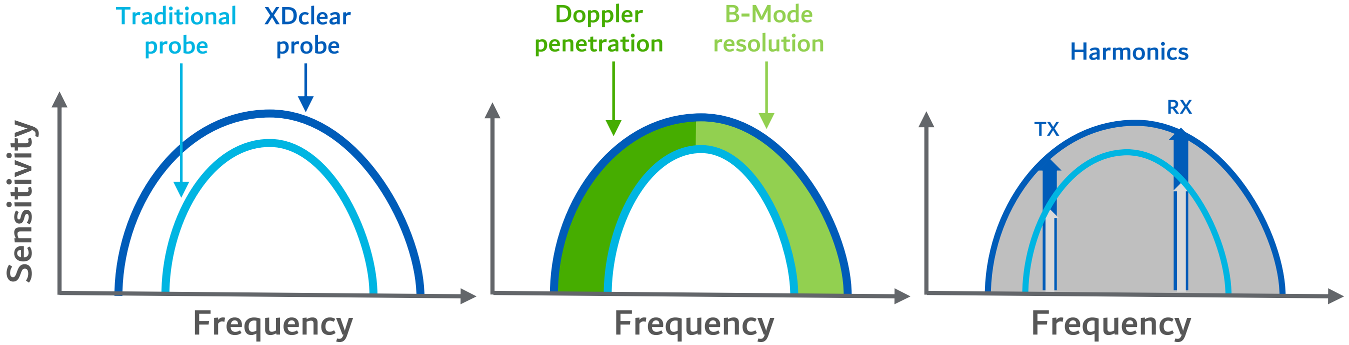
Single Crystal

Axial
Resolution
Bandwidth

Acoustic Amplifier

Penetration
Sensitivity

XDclear
Probes



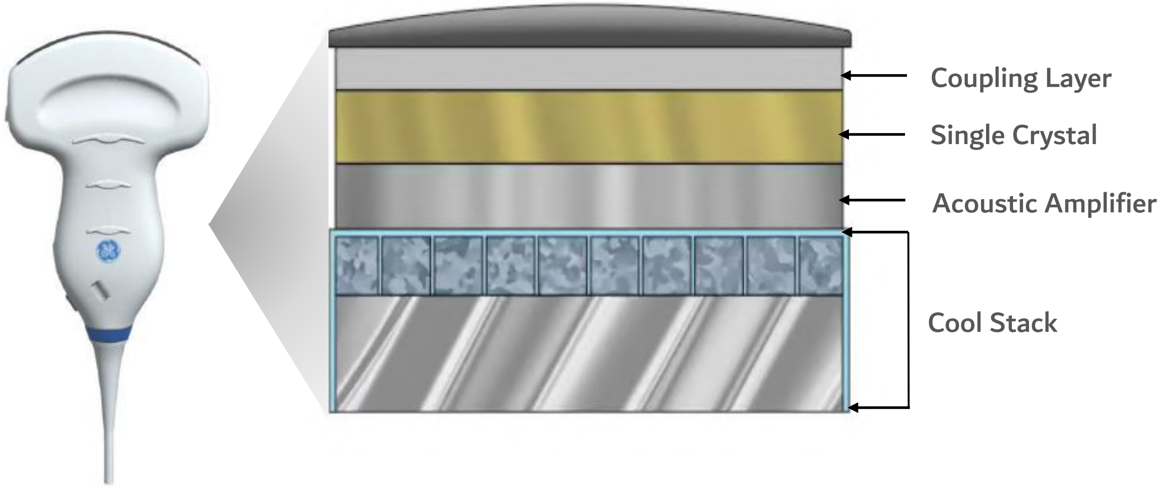
XDclear is a trademark of GE.

XDclear™ probes

Cool Stack
Penetration, sensitivity, bandwidth

Single Crystal
Axial Resolution, bandwidth

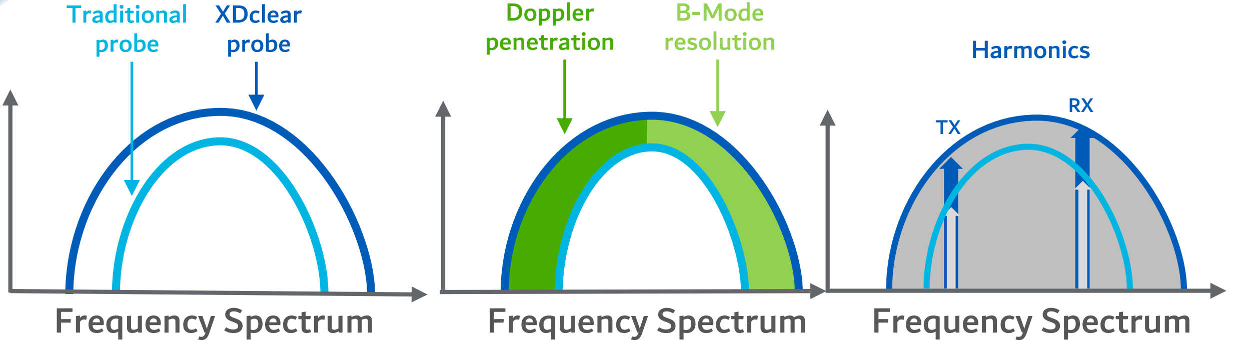
Acoustic Amplifier



Single Crystal: Advanced piezoelectric material that delivers high quality acoustic signal

Acoustic Amplifier: Innovative design that captures and redirects the unused energy that
passes through the crystal

Cool Stack: Patented technology integrated into the transducer's internal architecture that relieves inherent heat generation that can otherwise reduce sensitivity and penetration



XDclear is a trademark of GE.

LOGIQ™ P9 XDclear™ – Probe line up

Addressing a wide range of patients

Abdominal

C1-6-D, C2-7-D, C1-5-RS, 3Sc-RS, RAB2-6-RS, 9L-RS, L3-12-RS, L3-9i-RS

Small Parts

ML6-15-RS, L4-12t-RS, 12L-RS, L8-18i-RS, L3-12-RS, 9L-RS, L6-12-RS, L10-22-RS, C1-6-D, C1-5-RS

Vascular

C1-6-D, C1-5-RS, C2-7-D, 10C-D, ML6-15-RS, 9L-RS, L4-12t-RS, 12L- RS, L3-12-RS, L8-18i-RS,L6-12-RS, P2D, P6D, P8D

OB/GYN

RAB2-6-RS, C1-6-D, C1-5-RS, IC9-RS, E8C-RS, E8CS-RS, RIC5-9A-RS, 9L-RS, L3-12-RS

Cardiac

3Sc-RS, 6S-RS, 12S-RS, 6Tc-RS, P2D

Breast

ML6-15-RS, L4-12t-RS, 12L-RS, L3-12RS, 9L-RS, L6-12-RS, L8-18i-RS

Pediatrics/Neonatal

10C-D,C2-7-D, 8C-RS, 6S-RS, 12S-RS, ML6-15-RS, L8-18i-RS, L4-12t-RS, 12L-RS, L3-12RS, 9L-RS, C1-6-D, C1-5-RS

Urology

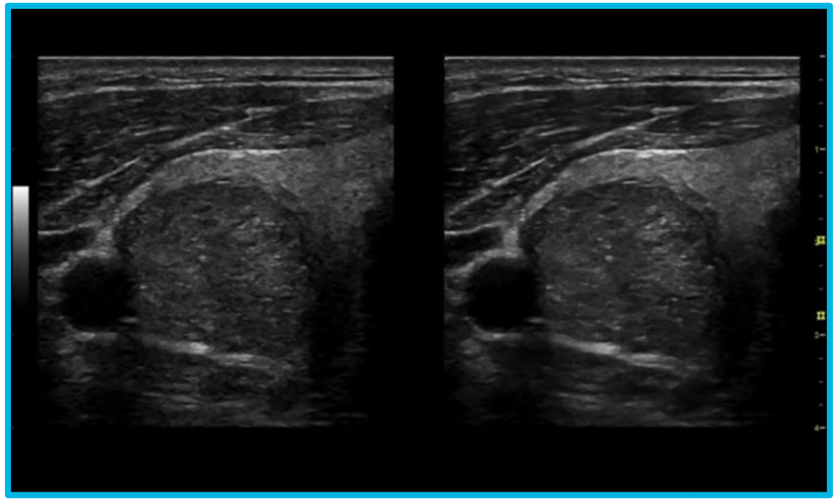
C1-6-D, C1-5-RS, E8CS-RS, RIC5-9A-RS, BE9CS-RS, IC9-RS, L3-12-RS, ML6-15-RS, 12L-RS

LOGIQ and XDclear are trademarks of GE.

CrossXBeam™

Spatial compounding imaging

- Provides 3, 5, 7 of spatial compounding
- Live side-by-side dual view display
- Compatible with:
  - Color Mode
  - PW
  - SRI-HD
  - Coded Harmonic Imaging
  - Virtual Convex



Help increase clinical confidence in all imaging modes

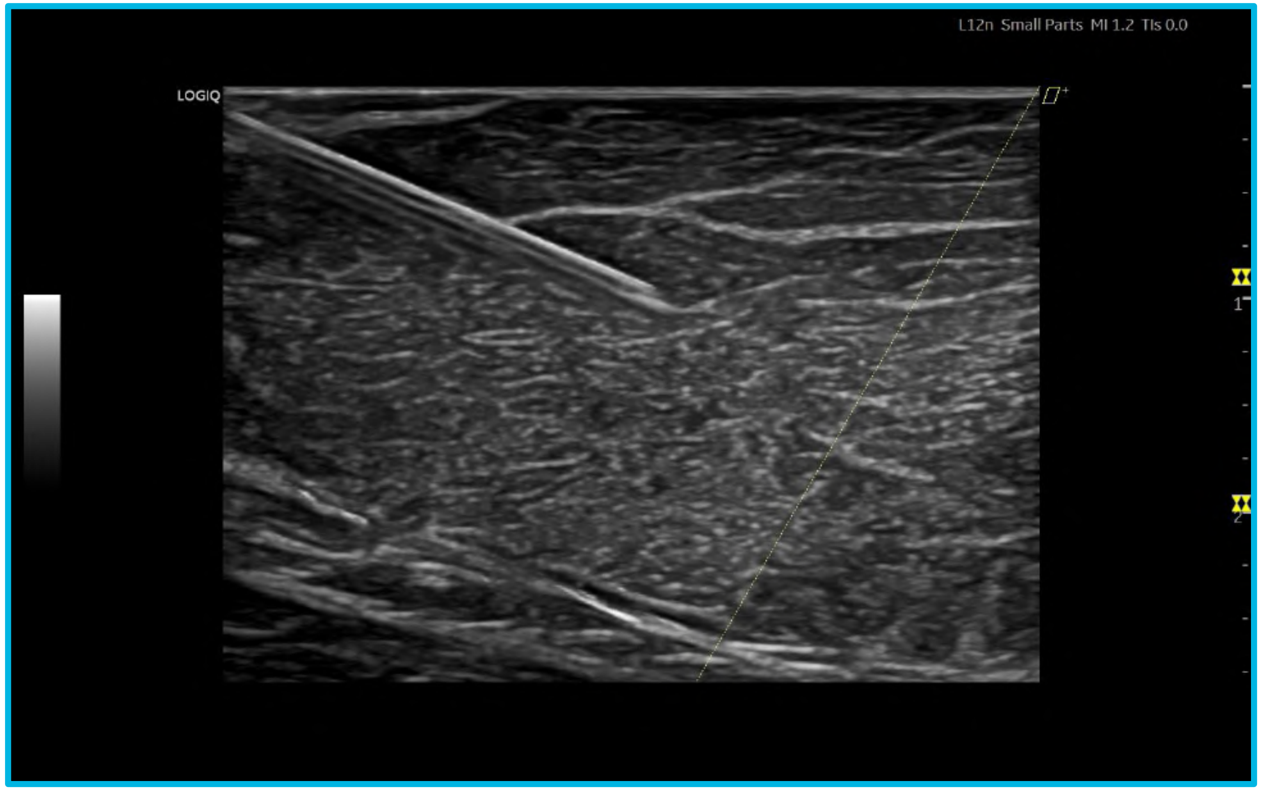
CrossXBeam is a trademark of GE.

B-Steer+

B-Steer+[1] enables enhanced visualization of the needles structure during interventional procedures, helping improve user confidence and exam accuracy.

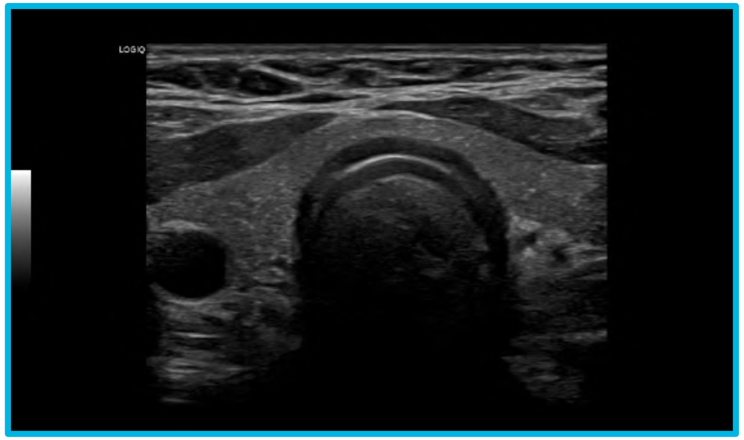
Highlights:

- Up to 8 selectable steering angles available (4 each direction)
- Separate gain control for needle reflection
- Available on all linear and convex probes
- Quick one-button operation
- Dynamic FOV
- Needle thickness

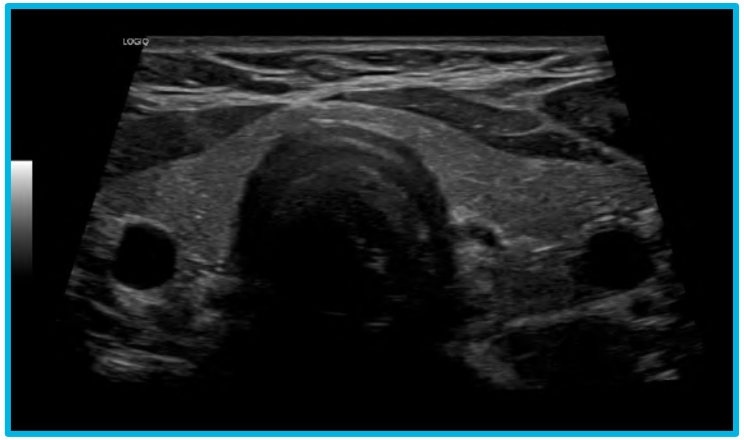


Virtual Convex

- Provides a convex field of view
- 20% increase in image size
- Compatible with CrossXBeam™
- Available on linear and phased array probes



No VC thyroid



VC thyroid

View large anatomy in greater detail

CrossXBeam is a trademark of GE.

Contrast Imaging[1,2]

Amplitude Modulation Technique

- Great penetration and contrast sensitivity
- Excellent tissue suppression
- High image uniformity

Hi-Res Technique

- Superb spatial and temporal resolution

Imaging modes

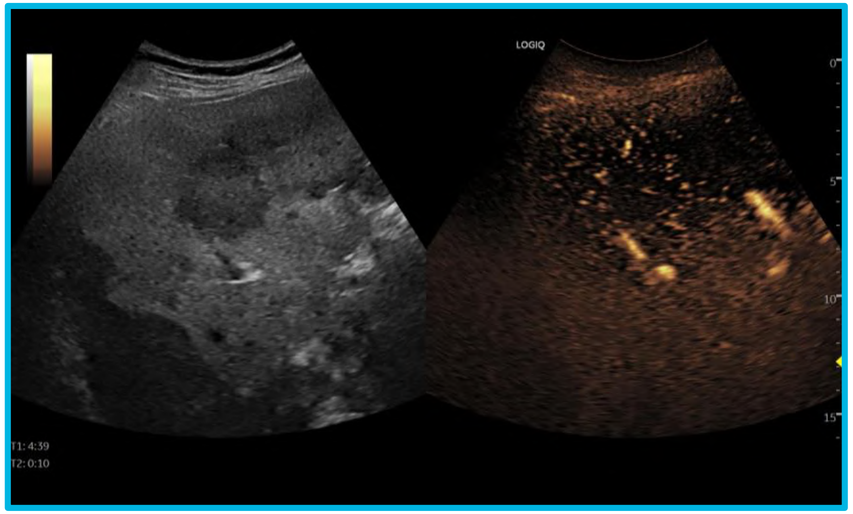
- Dual or single display
- Hybrid contrast
- Accumulation
- 'Easy 3D' CEUS[1] imaging

Features

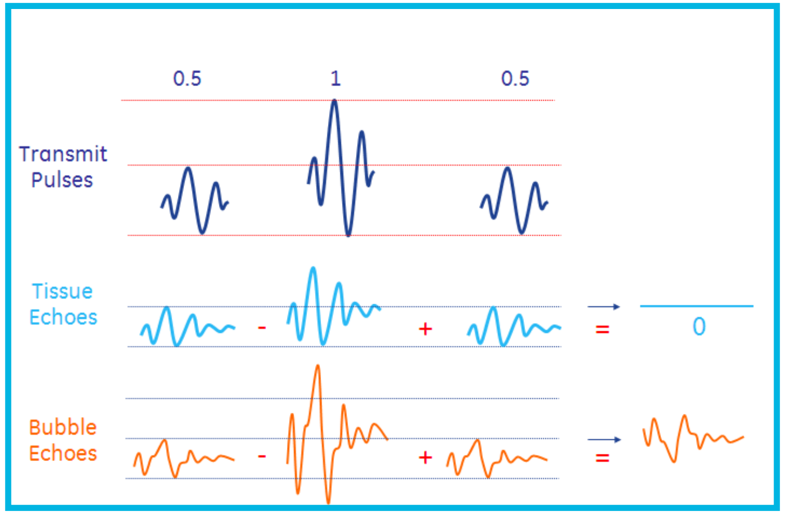
- Dual caliper, dual timer
- TIC Q-analysis package
- Retrospective/prospective storage
- One button background storage

Supported probes

- BE9CS-RS, C1-5-RS, C1-6-D, C2-7-D, 9L-RS, 3Sc-RS, IC9-RS



C1-5 CEUS



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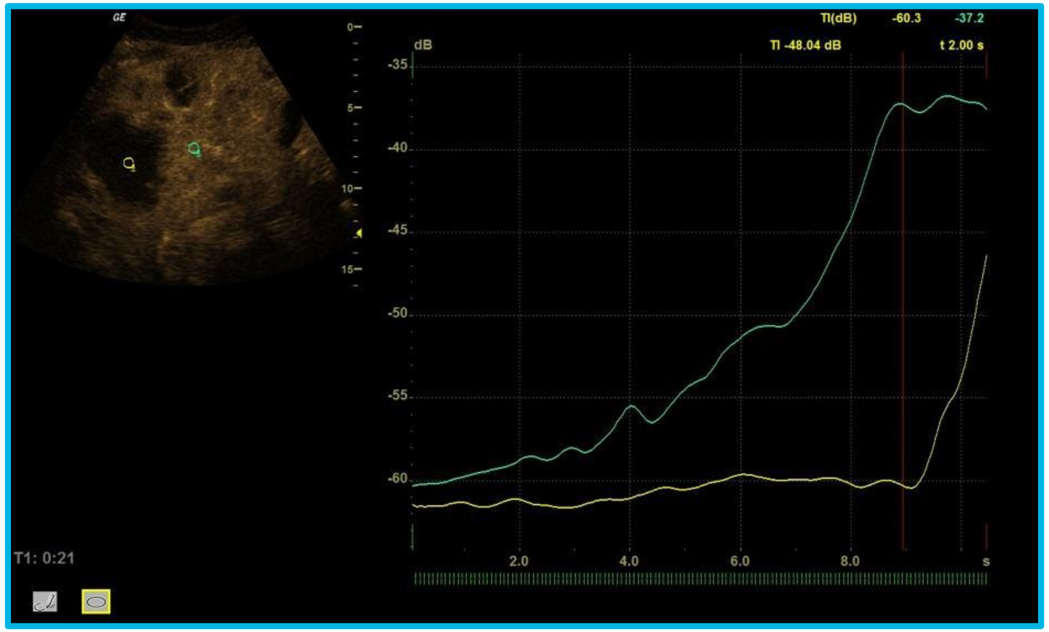
1. The LOGIQ P9 XDclear has been designed for compatibility with most commercially available ultrasound contrast agents. Availability of these agents is subject to government regulation and approval. Contrast imaging should be performed within the approved indications for use of the contrast agent used in the exam.
2. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

Contrast Imaging[1,2]

Time Intensity Curve (TIC)

- Raw data processing for contrast uptake
- Q-Analysis of both compressed and uncompressed data
- Up to 8 selectable ROI’s
- Up to 10 parameters
- Ellipsoid or manual ROI tracing
- Anchor tracking function
- Automated motion tracking
- Automatic enabling/disabling of frames
- Trace export in ASCII format



TIC/Q-Analysis

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1. The LOGIQ P9 XDclear has been designed for compatibility with most commercially available ultrasound contrast agents. Availability of these agents is subject to government regulation and approval. Contrast imaging should be performed within the approved indications for use of the contrast agent used in the exam.
2. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

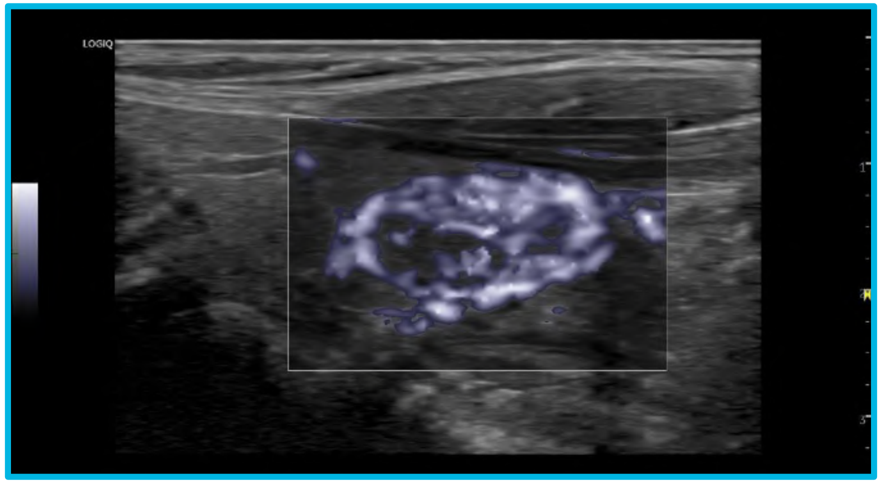
B-Flow/B-Flow Color

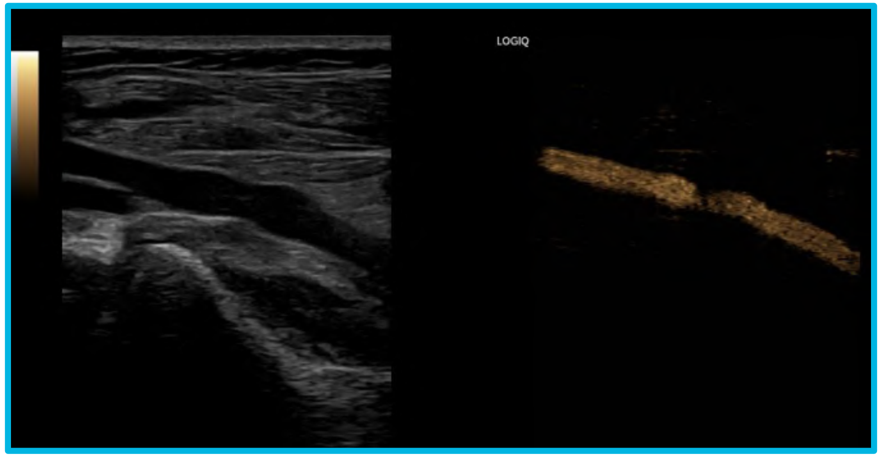
A GE innovation[1]

- Does not use Doppler processing
- Based on GE patented coded technology
- Display real hemodynamics
- Direct visualization of blood reflectors

True hemodynamics and anatomy

- Dynamic appearance of flow
- Minimal tissue overwrite compared to Color Flow
- Excellent control of flash artifacts compared to Color Flow
- Clearly visible background image
- Independent mode control





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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

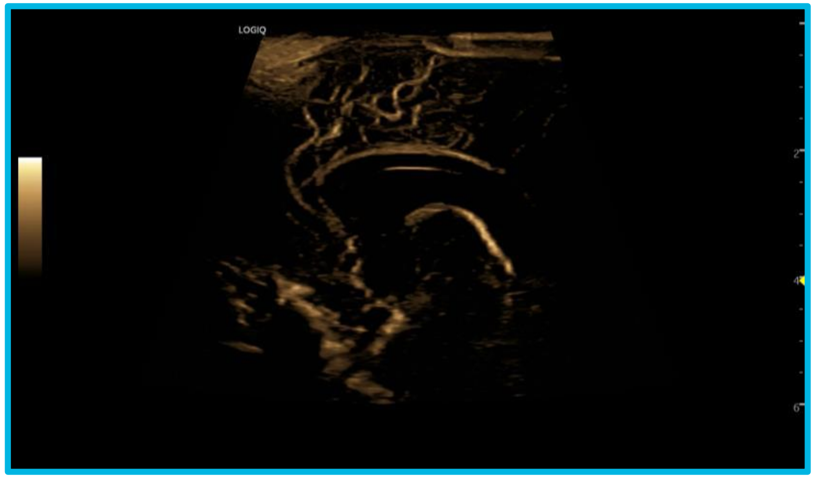
B-Flow/B-Flow Color

Benefits over Doppler

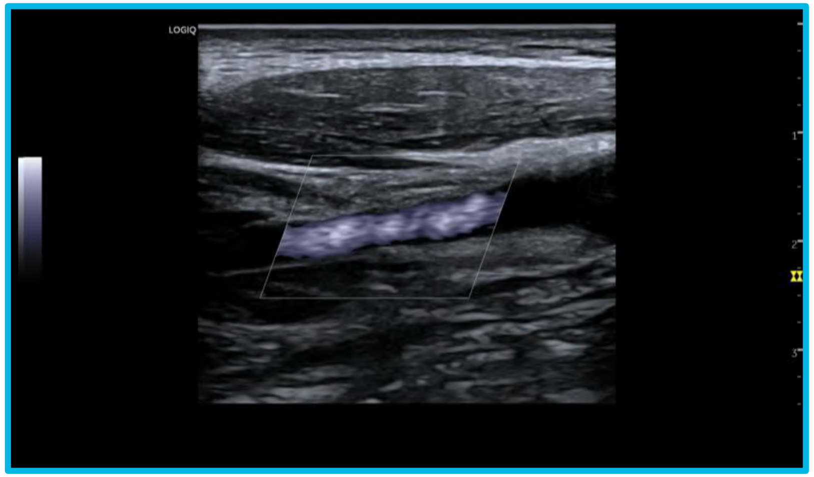
- No tissue overwrite
- No impact on frame rate
- Less angle dependency
- High resolution Imaging
- Background image clearly visible

Available on probes

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



Neonatal head B-Flow, 9L-RS



B-Flow Color ICA, L6-12-RS

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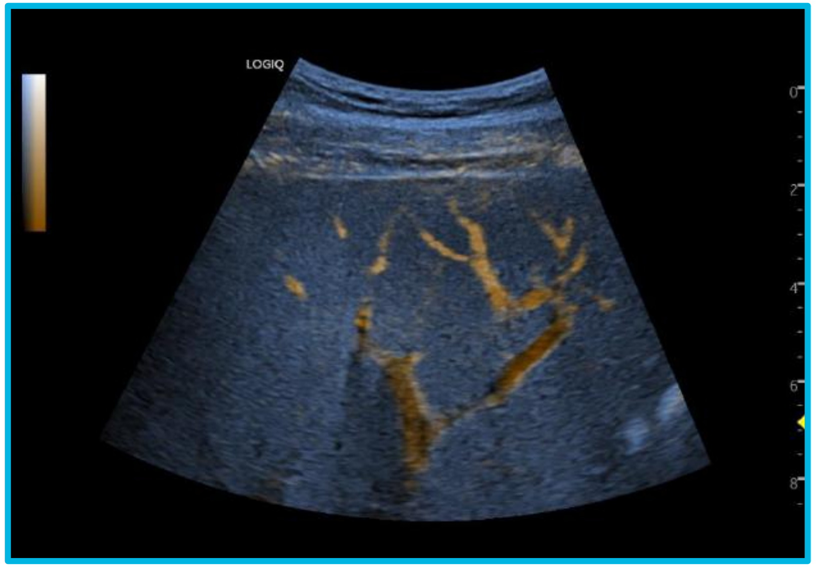
1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

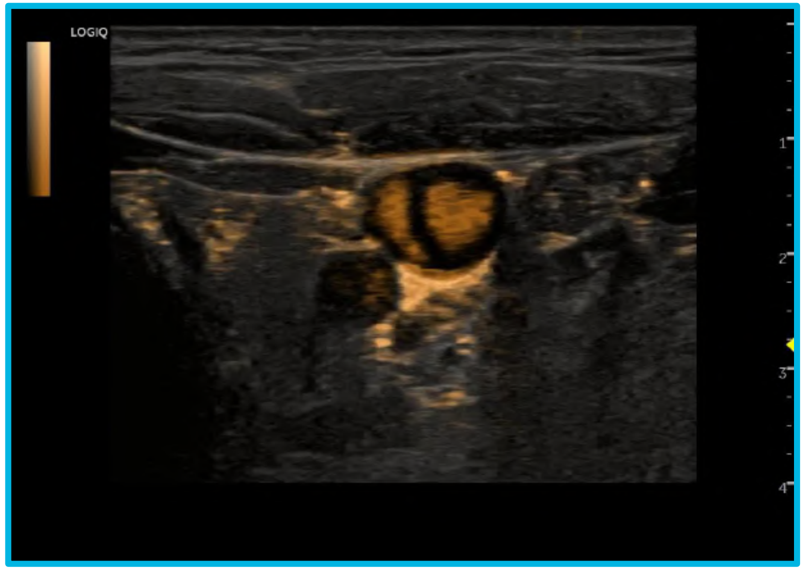
Hybrid B-Flow

Hybrid B-Flow[1]

- Visualization Modes – Toggle between three Modes: B-Flow; Dual B-Flow (simultaneous, side-by-side displays of B-Mode reference image and B-Flow); and Hybrid B-Flow (reference B-Mode image overlaid on the B-Flow for improved detail and less noise)
- Available with Easy 3D, PW, Accumulation Mode, and ON/OFF tissue background information



B-Flow Hybrid Liver, C1-5-RS



B-Flow Hybrid Jugular Vein, L3-12-RS

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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

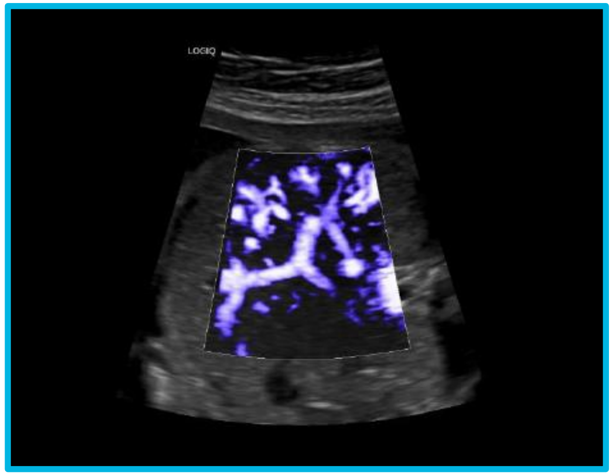
HD Color

HD Color – new functionality within B-Flow™ Color – offers sensitivity in visualizing small vessels and slow flow to enhance diagnostic confidence in:

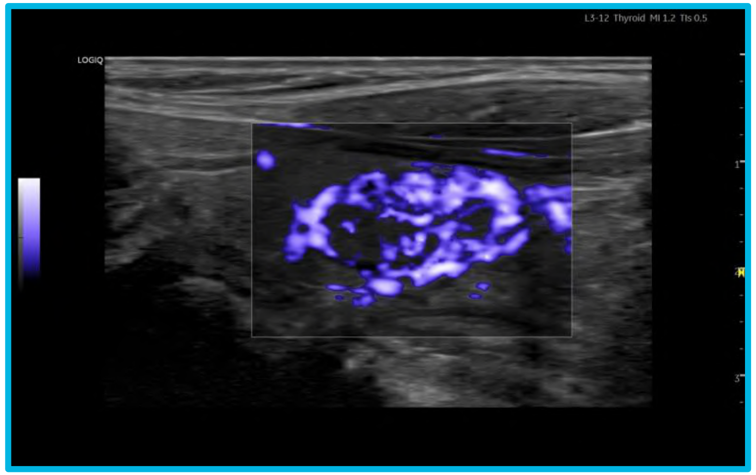
- Venous, liver, and renal imaging
- Musculoskeletal imaging
- Pediatric imaging
- Small parts imaging

Probe availability:

- C1-5-RS
- C1-6-D
- ML6-15-RS
- 12L-RS
- L3-12-RS
- L4-12t-RS



B-Flow™ HD Color obstetric, C1-5-RS

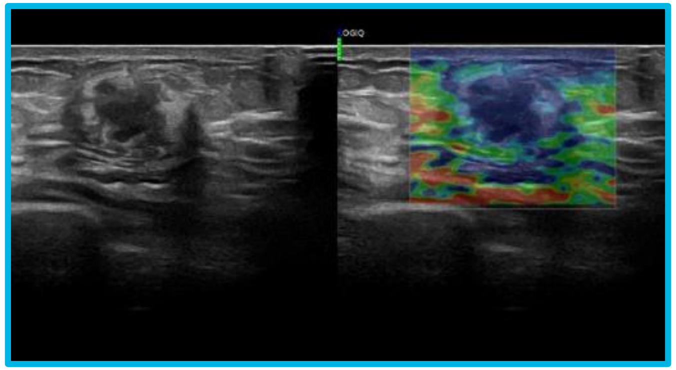


B-Flow™ HD Color thyroid, L3-12-RS

B-Flow is a trademark of GE.

Elastography – Clinical Applications

As a non-invasive technique to help clinicians characterize abnormal tissue, ultrasound elastography offers exceptional versatility:



Chronic Liver Disease

- Evaluation of liver fibrosis
- Monitor response to therapy
- Assist in patient management decisions

Oncology

- Evaluation of soft tissue lesions, including breast, small parts and urology
- Soft tissue lesion classification
- Surgical planning

Musculoskeletal

- Provide additional information for diagnosis of tendinopathy, tendinosis, synovial hypertrophy, tears, and other conditions
- Assist in injury management from early diagnosis (e.g. acute muscle injury) to treatment response

Gynecology

- Additional information to assess cervical strength to help identify women at risk of preterm birth

Urology

- Assists in prostate cancer identification by improving localization of abnormal foci thus enabling more targeted biopsies

Breast

- Useful in the detection and characterization of breast disease
- Well-suited for dense breast patients
- Provides a quantitative measurement of tissue elasticity

Thyroid

- Useful in nodules with indeterminate US or cytologic characteristics
- Well-suited to follow up on lesions

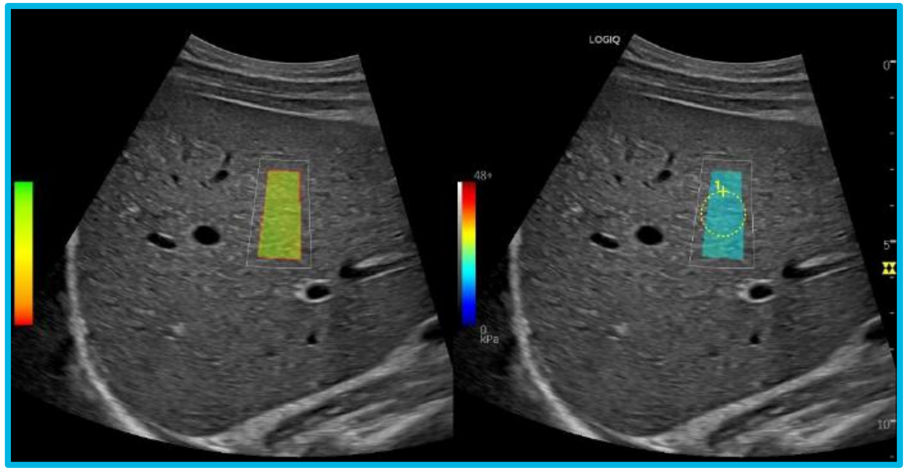
2D Shear Wave Elastography

Provides a quantitative estimate of tissue elasticity and displays this measurement in color-coded elastograms. Ultrasound imaging and 2D Shear Wave Elastography can be combined in a single exam.

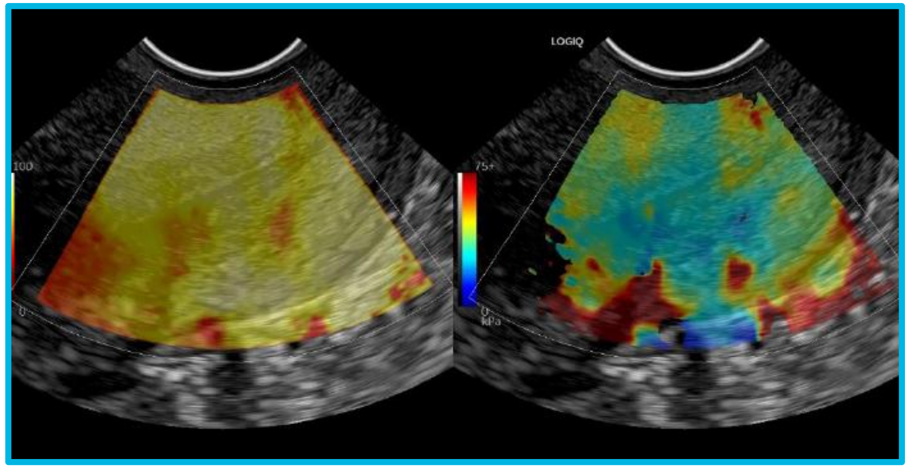
- Assists in a growing range of applications, including chronic liver disease, and diseases of the breast, musculoskeletal (MSK) and small parts
- Semi-automatic measurements provide quick, quantifiable information
- Multiple measurement regions of interest (ROIs) help increase exam speed

Probe availability:

- C1-6-D
- C1-5-RS
- L3-12-RS
- ML6-15-RS
- 12L-RS
- IC9-RS



2D Shear Wave Elastography with Quality Indicator, Liver, C1-6-D



2D Shear Wave Elastography with Quality Indicator, Cervix, IC9-RS

Strain Elastography[1]

Strain imaging technology requiring a light manual compression or patient breath to perform tissue deformation. A qualitative and Semi-Quantitative[2] solution.

Highlights:

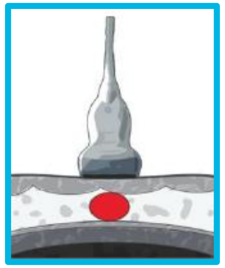
- High sensitivity and persistence
- Consistent pattern
- User selectable color maps
- Dual measurements
- User support by pressure quality bar and graph

Shear Wave elastography

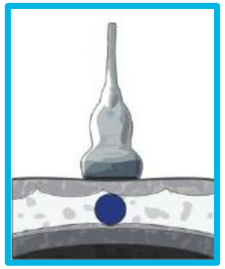
- Focused burst of acoustic energy to perform tissue deformation through a comb-push excitation
- Color coded elastogram and quantitative measurements
- Focus: Chronic liver disease, oncology

Available on the following probes:

- C1-5-RS
- C1-6-D
- ML6-15-RS
- 9L-RS
- 12L-RS
- L6-12-RS
- L4-12t-RS
- L3-12-RS
- E8CS-RS
- BE9CS-RS
- IC9-RS



This soft lesion deforms under pressure.

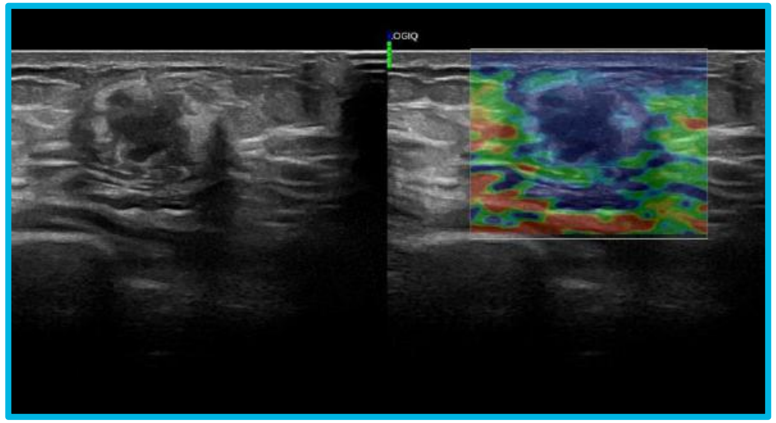


This hard lesion does not deform under pressure.

$$\text{Elasticity} = \frac{\text{Stress}}{\text{Strain}}$$

Stress = axial force applied to lesion

Strain = tissue deformation due to applied stress



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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.
2. Not cleared by the U.S. FDA and not fore sale in the USA.

Strain Elastography[1]

Semi-Quantification[2]

E-Index

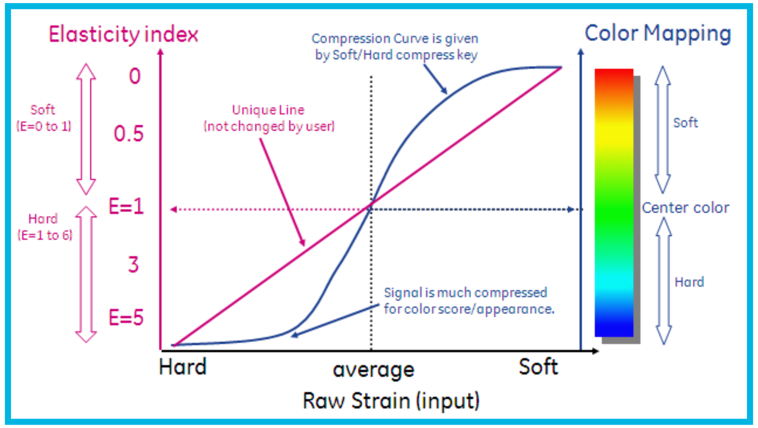
- Selected ROI's elasticity value
- Round or manual tracing of ROI
- E-index range from 0 – 6
- Based on GE Raw Data processing

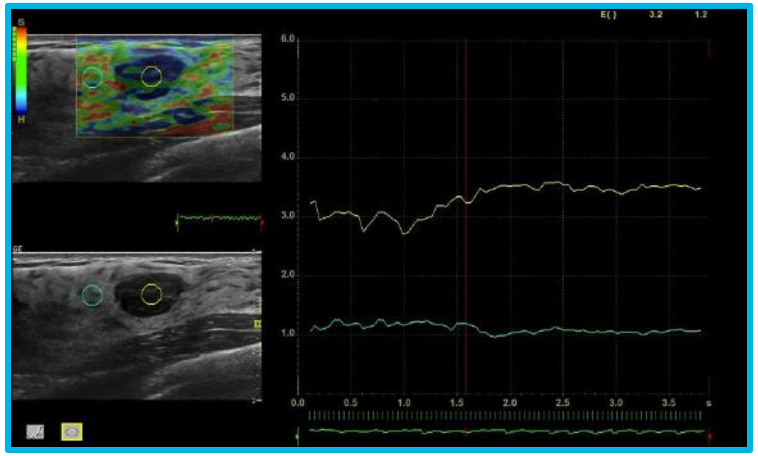
E-Ratio

- Calculated E-Index between ROI's (up to 8)
- Representing relative stiffness

Q-Analysis over multi-frame acquisition

- Automatic skip of low quality frames
- Anchor function
- Trace export in ASCII format


Elasticity index
Soft
(E=0 to 1)
Hard
(E=1 to 6)
0
0.5
E=1
3
E=5
Compression Curve is given
by Soft/Hard compress key
Unique Line
(not changed by user)
Signal is much compressed
for color score/appearance.
Hard
average
Soft
Raw Strain (input)
Color Mapping
Soft
Center color
Hard


S
H
GE
E( )
3.2
1.2
6.0
5.0
4.0
3.0
2.0
1.0
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
s

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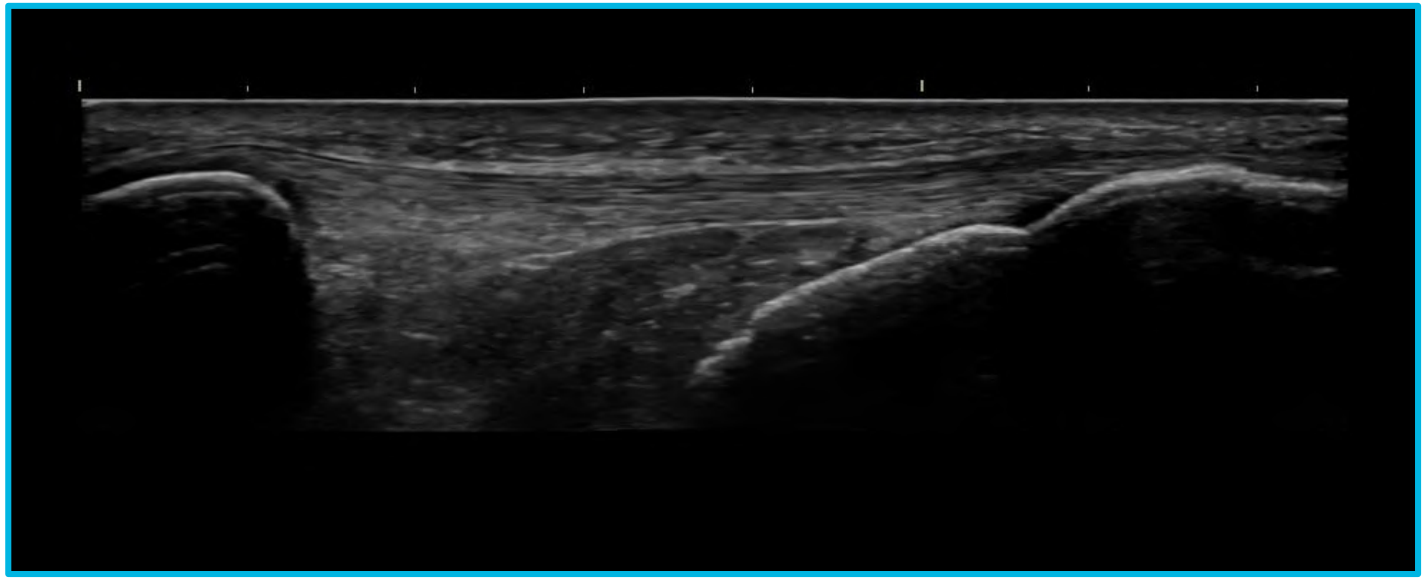
1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.
2. Not cleared by the U.S. FDA and not fore sale in the USA.

LOGIQ™ View

LOGIQ View[1] allows a real-time representation of long anatomical areas (e.g. Patellar Tendon)

- Available on all probes
- Combine with CrossXBeam™ for linear probes and convex probes
- Auto detection of scan direction
- Up to 60 cm scan length



---

1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

CrossXBeam is a trademark of GE.

3D/4D ultrasound[1]

GE Volume Imaging with 3D/4D dedicated probe

Highlights:

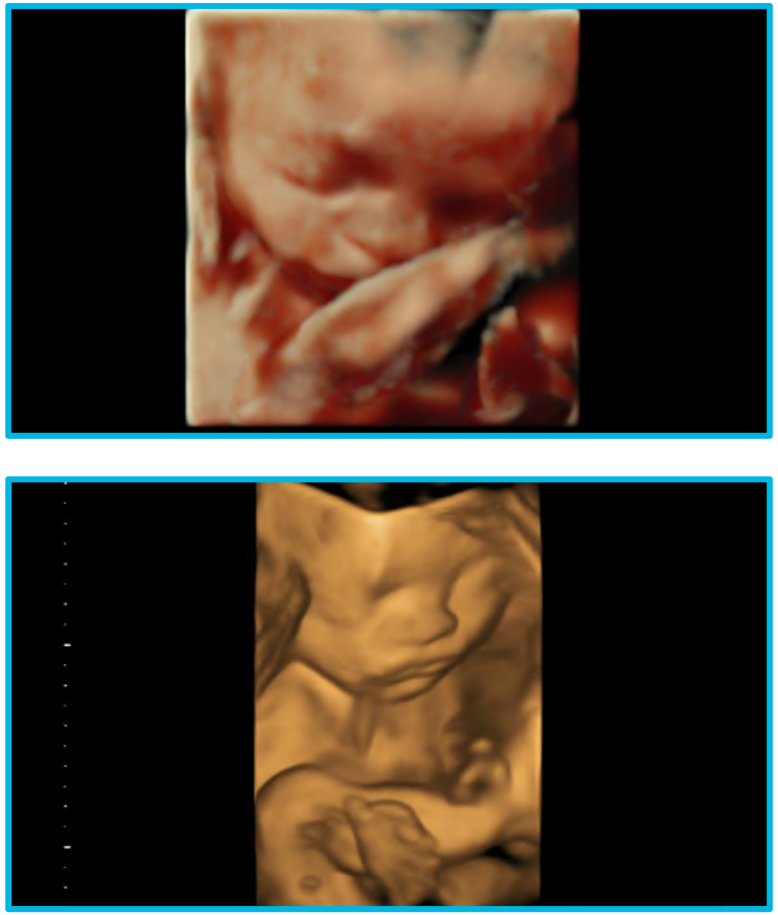
- Easy, quick, reproducible
- High volume data accuracy
- Tint Render Map
- Comprehensive settings

Volume Modes:

- Multi-planar Imaging
- Surface rendering
- TUI – Tomographic Ultrasound Imaging
- VCI – Volume Contrast Imaging
- Vocal– Volume Calculation
- STIC
- OmniView
- SonoRender*live*
- HD*live*™

Probe:

- RAB2-6-RS
- RIC5-9A-RS



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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

HD*live* is a trademark of GE.

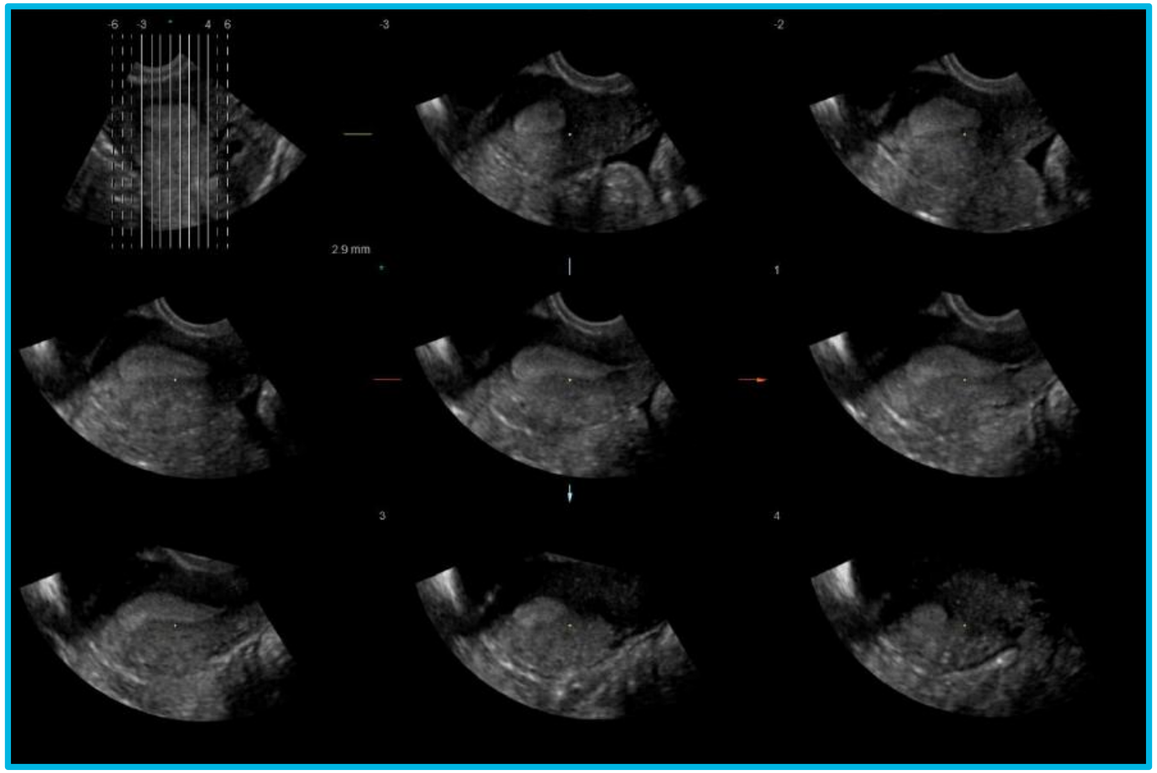
3D/4D ultrasound[1]

TUI – Tomographic Ultrasound Imaging

Visualization mode that presents data as parallel slices (planes) through acquired Volume dataset. It works with CFM/PDI and SRI-HD.

Highlights:

- Information consistent to CT & MR format
- 3D static with color
- Up to 9 slices, with user selectable distance (min 0.5 mm, step by 0.1 mm) and angle
- Top left held as reference image
- Works with SRI



Pelvic TUI

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[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

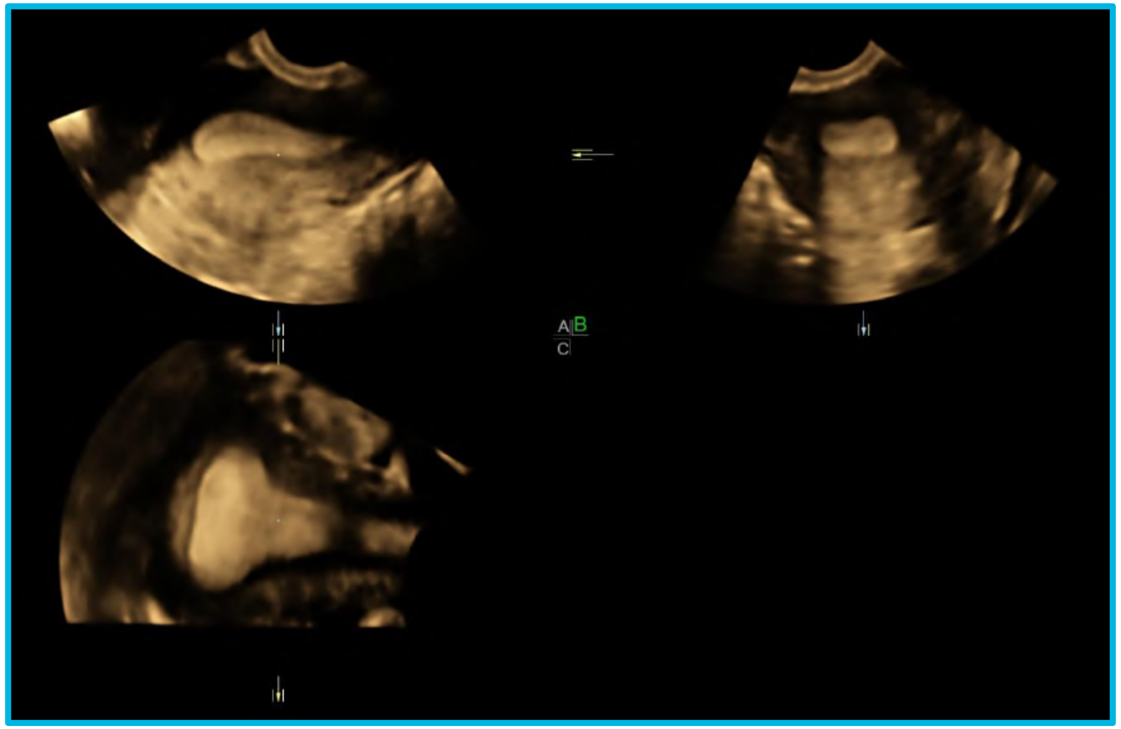
3D/4D ultrasound[1]

VCI – Volume Contrast Imaging

VCI is a volume acquisition technique enhancing B-Mode contrast resolution and speckle suppression.

Highlights:

- Help improve assessment of lesions size, margins and internal structures for comprehensive patient management
- 3D manipulation in A, B, and C planes



VCI uterus, RIC5-9A-RS

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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

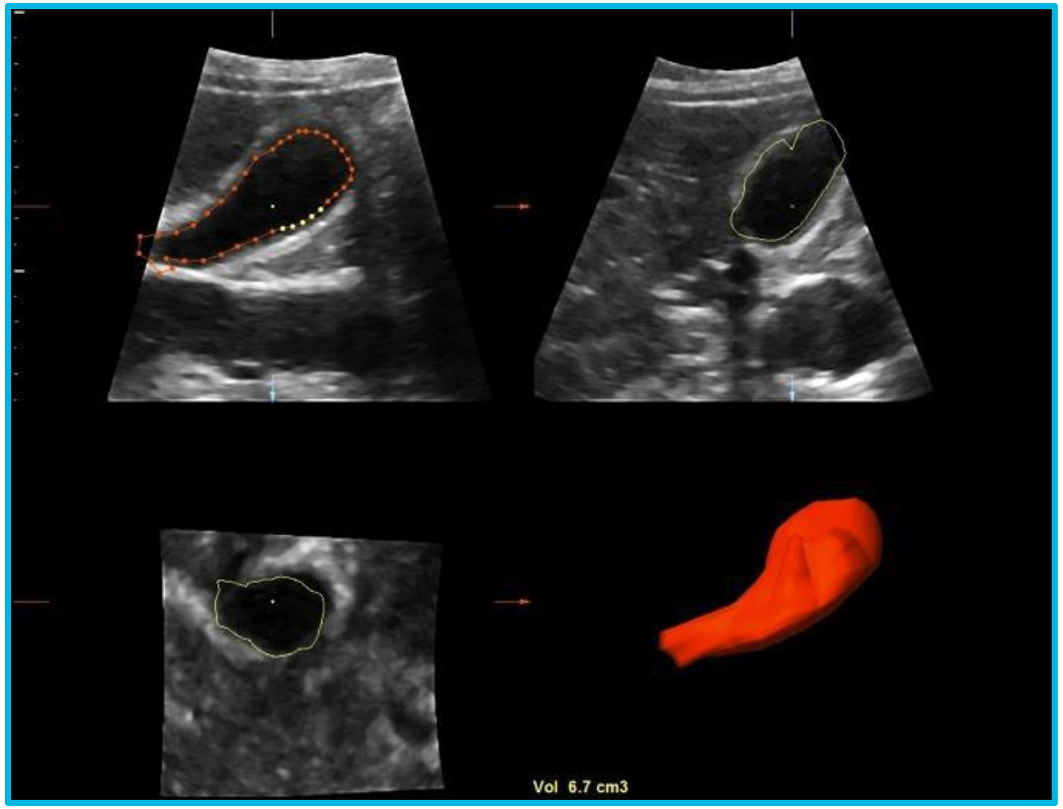
3D/4D ultrasound[1]

Vocal

Vocal is a 'Volume Computer-aided analysis' based on a volume acquisition enabling fast and accurate volume calculations.

Highlights:

- Manual, semi-automatic or automatic borders definition
- Basic measurements as length, angle and area
- Easy corrections and contour modifications
- Can be used with any lesion or volume to measure



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[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

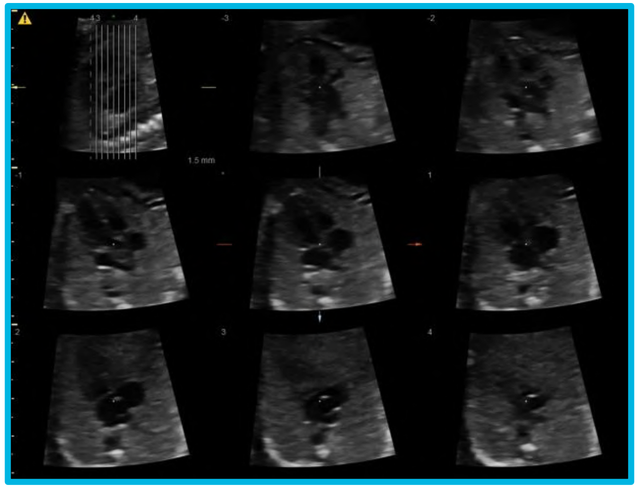
3D/4D ultrasound[1]

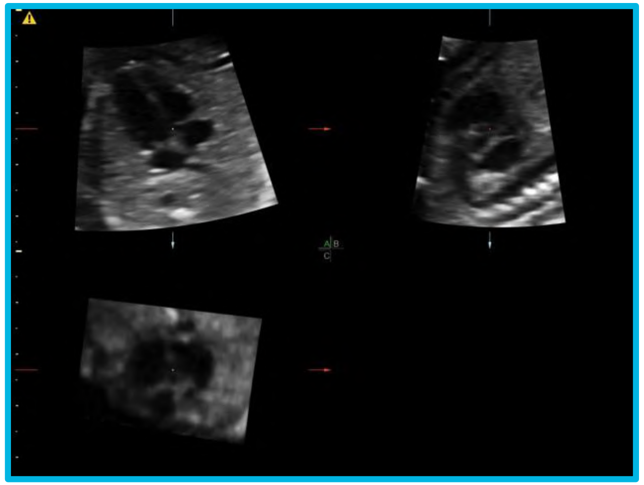
STIC

Spatio-Temporal Image Correlation (STIC) captures one fetal heart cycle in 3D cine.

Highlights:

- Adjustable acquisition time
- Use with Color Doppler or Power Doppler modes
- 3D manipulation in A, B, and C planes





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[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

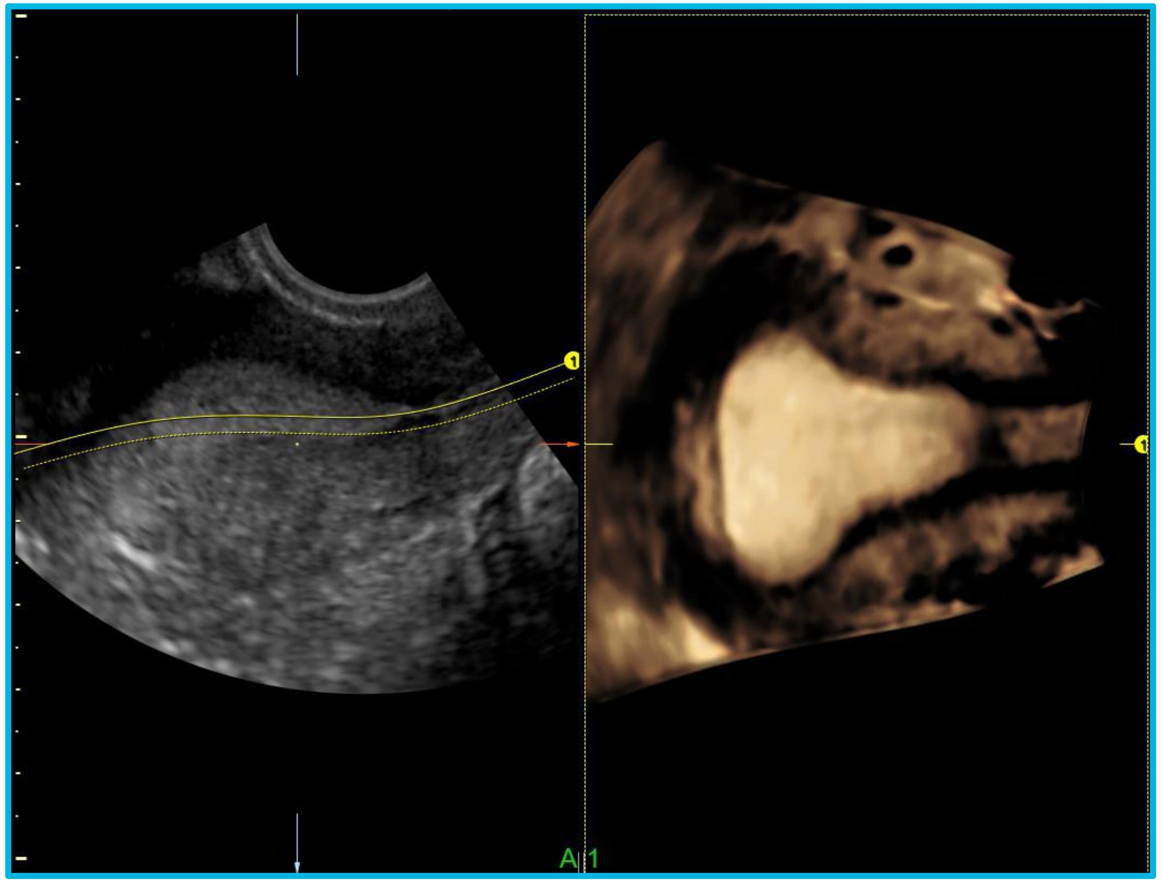
3D/4D ultrasound[1]

OmniView

OmniView is the “any-plane” function for 3D and 4D data

Highlights:

- Gives the ability to trace along any shape or structure
- Can be started from A, B, or C. Up to 3 planes can be displayed simultaneously



VCI OmniView, RIC5-9A-RS

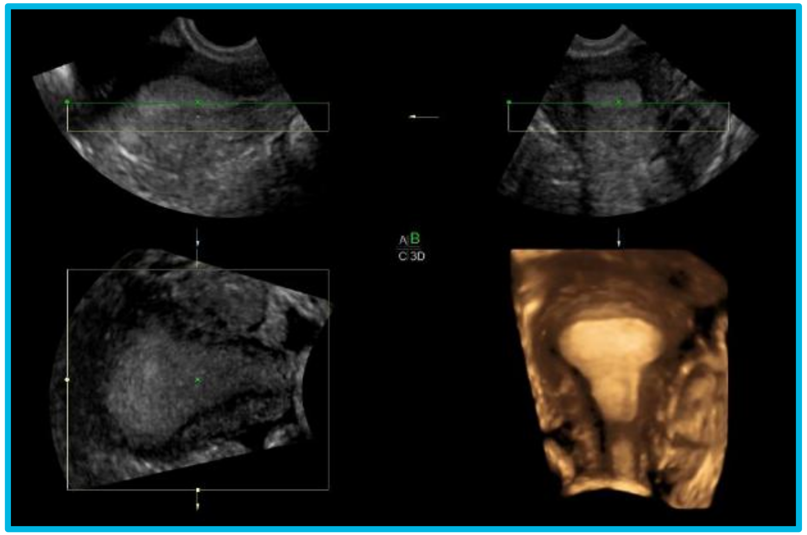
---

[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

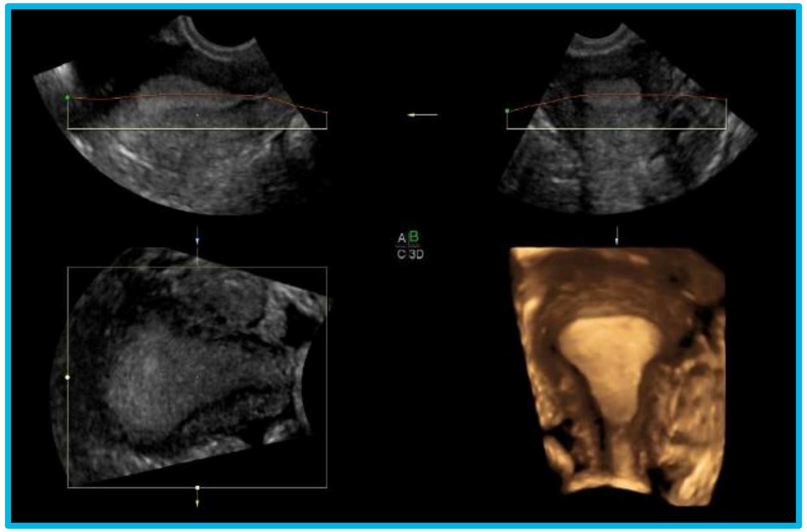
3D/4D ultrasound[1]

SonoRender*live*

- Automates render line placement in 3D/4D imaging
- Helps remove artifacts, improves rendered image without having to use the scalpel tool



SonoRender*live* off



SonoRender*live* on

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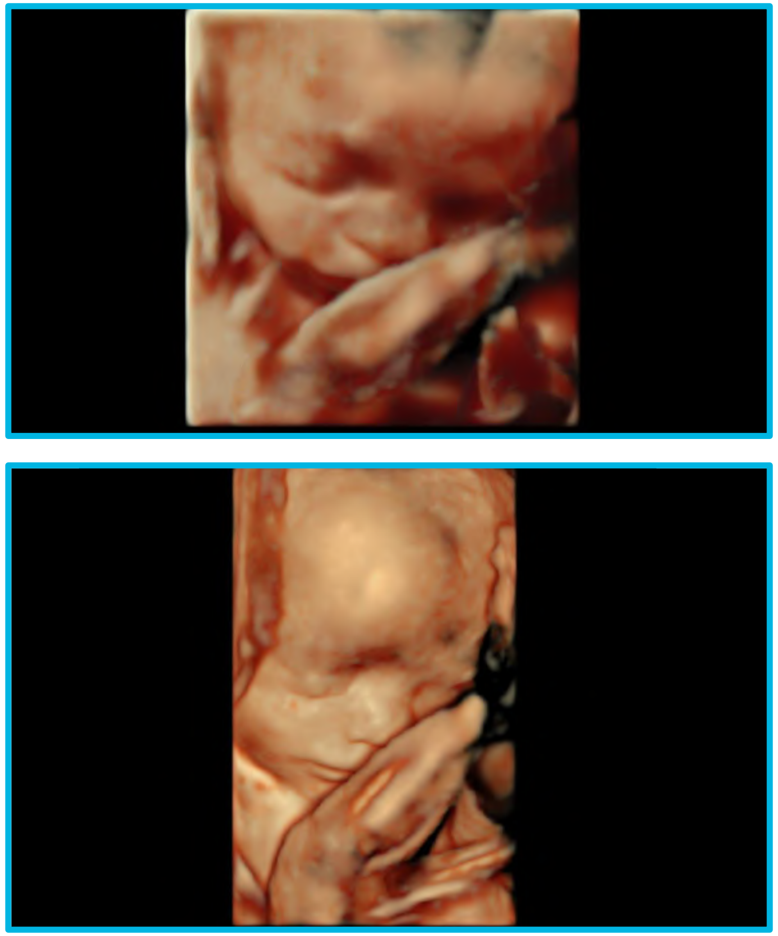
1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

3D ultrasound[1]

HD*live*™

- Reveal a clinical perspective of fetal and female anatomy that brings anatomical realism to surface structures
- Utilizes a combination of advanced skin illuminating and shadowing techniques to expose possible hidden details for a deeper understanding of relational anatomy and developing structures



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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

HD*live* is a trademark of GE.

Flow Quantification[1]

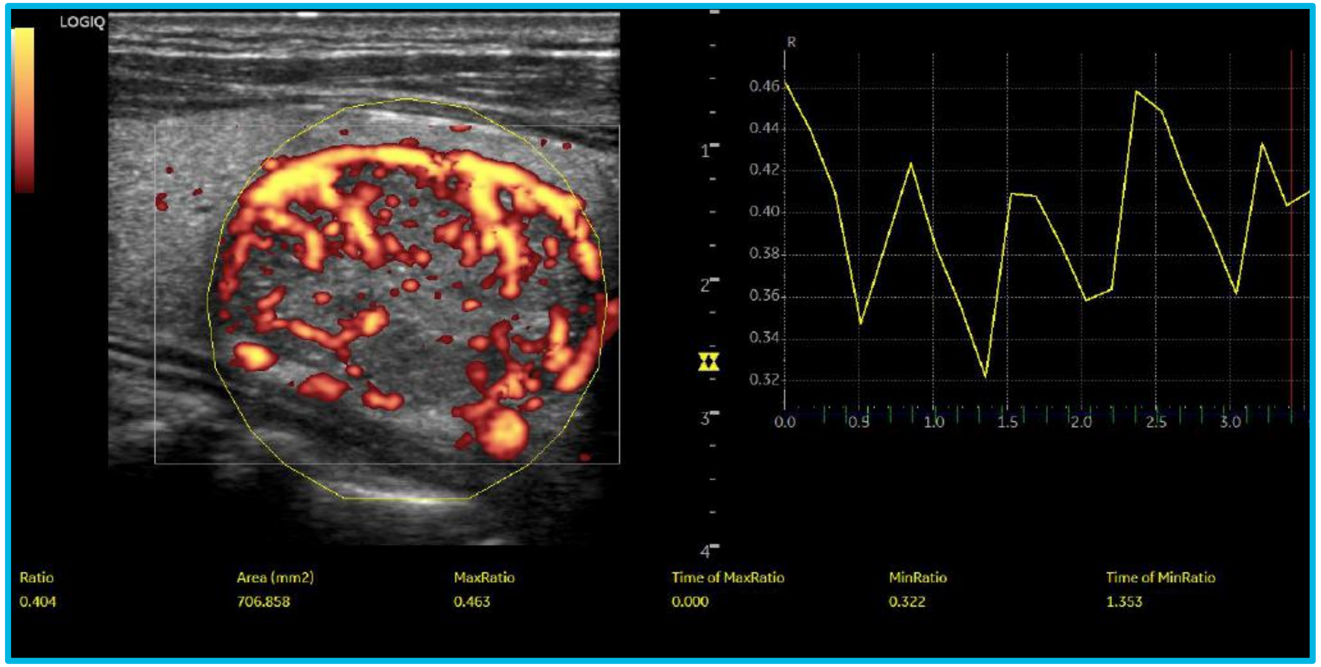
2D CFM/PDI Quantitative assessment of vascular feeding in a selected ROI

Highlights:

- Consistent, repeatable and objective measurement
- Can help in treatment planning and monitoring protocols
- Provides data to support outcome measurements

Features:

- Up to 8 selectable ROI's
- Analysis over 4/5 heart beat cycles
- Automatic or manual ROI tracing
- "Save ROI" feature for monitoring
- Manual disabling & enabling of frames
- Export traces in ASCII format



Ratio	Area (mm2)	MaxRatio	Time of MaxRatio	MinRatio	Time of MinRatio
0.404	706.858	0.463	0.000	0.322	1.353

QA analysis

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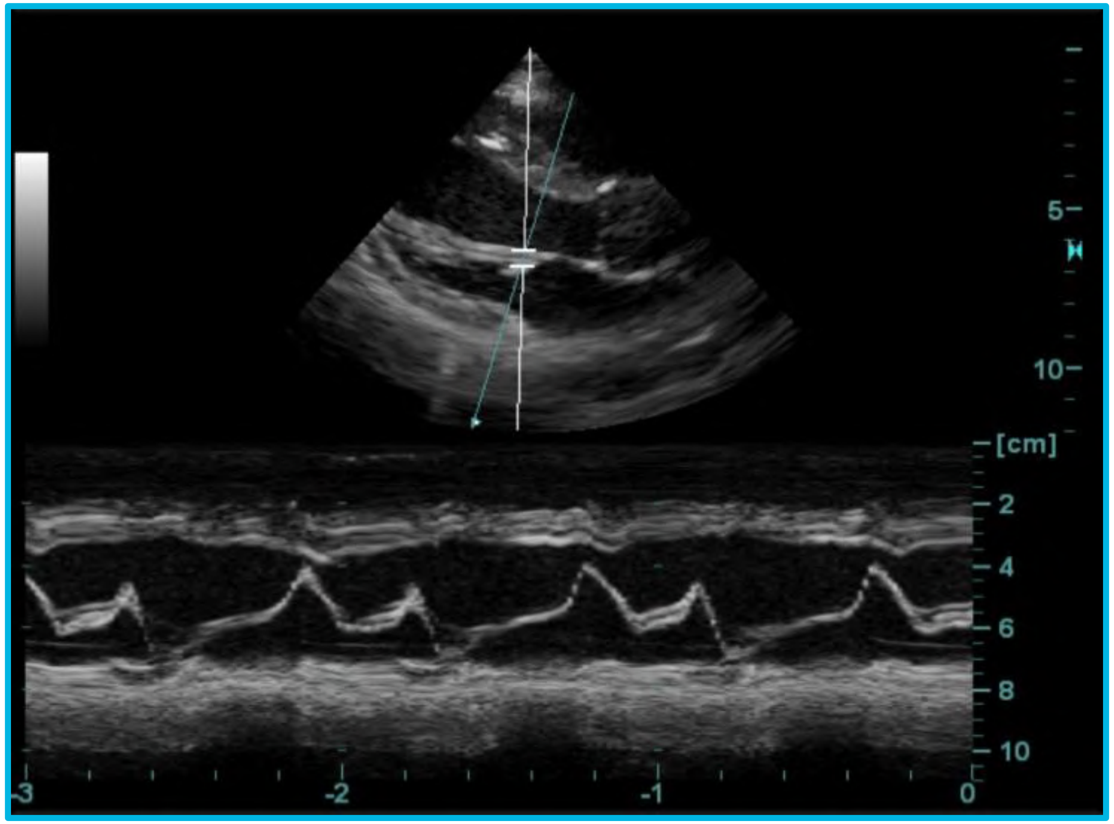
1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

AMM – Anatomical M-Mode[1]

- M-Mode cursor adjustable at any plane to be vertical to myocardium
- Compatible with:
  - – Live image
  - – Stored image – Raw Data
  - – Color Flow Mode



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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

Connectivity

Output ports

- USB
- Composite
- HDMI
- S-Video
- Ethernet

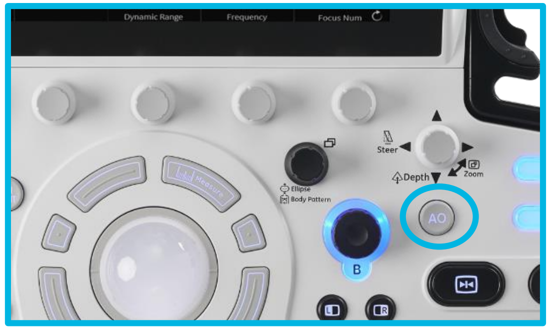
Network storage

- DICOM®
- SaveAs
- MPEGView
- Report Save As

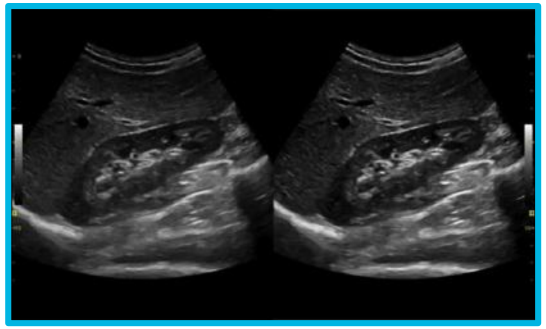
DICOM is a registered trademark of the National Electrical Manufacturers Association.

Auto Optimization

One button press

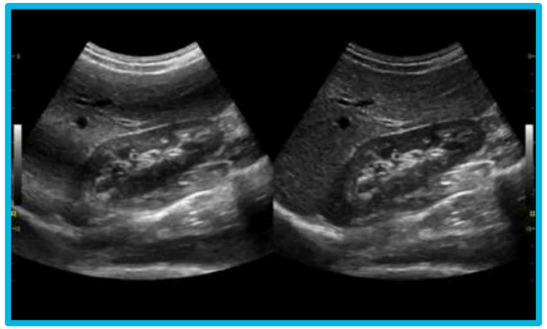

Dynamic Range
Frequency
Focus Num
Steer
Depth
Zoom
Ellipse
Body Pattern
AO
B

ATO (Auto Tissue Optimization)



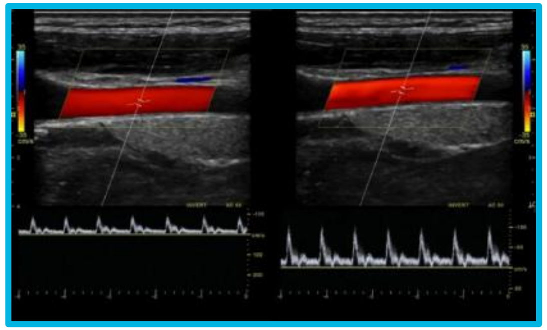
Optimize B-Mode image to help improve contrast resolution

Auto TGC



Continuous 2D auto TGC control

ASO (Auto Spectral Optimization)



Baseline and scale (PRF)

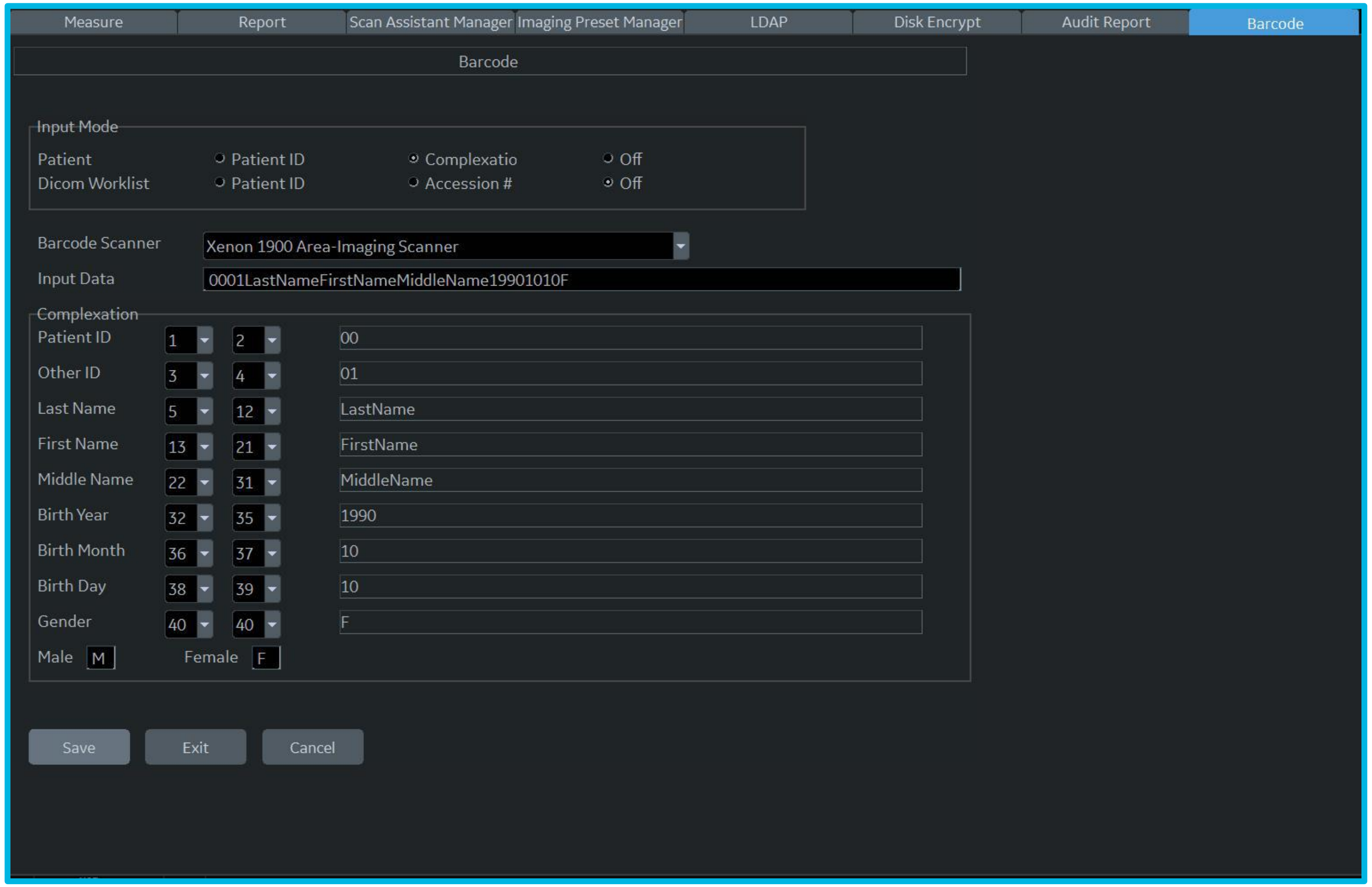
Barcode reader

Help streamline exams

Barcode reader helps to:

- Simplify patient entry

0001LastNameFirstNameMiddleName19901010F


Measure
Report
Scan Assistant Manager
Imaging Preset Manager
LDAP
Disk Encrypt
Audit Report
Barcode
Barcode
Save
Exit
Cancel

Input Mode

Patient ○ Patient ID ● Complexatio ○ Off

Dicom Worklist ○ Patient ID ○ Accession # ● Off

Barcode Scanner: Xenon 1900 Area-Imaging Scanner

Input Data: 0001LastNameFirstNameMiddleName19901010F

Complexation

Patient ID	1	2	00
Other ID	3	4	01
Last Name	5	12	LastName
First Name	13	21	FirstName
Middle Name	22	31	MiddleName
Birth Year	32	35	1990
Birth Month	36	37	10
Birth Day	38	39	10
Gender	40	40	F

Male: M Female: F

Scan Assistant[1]

- The personal assistant to user’s exam
- Up to 63% time reduction[2]
- Up to 87% keystroke reduction[2]
- Help increase exam consistency
- Compatible with LOGIQ™ E9, LOGIQ S8 and LOGIQ S7 workflows

Feature highlights

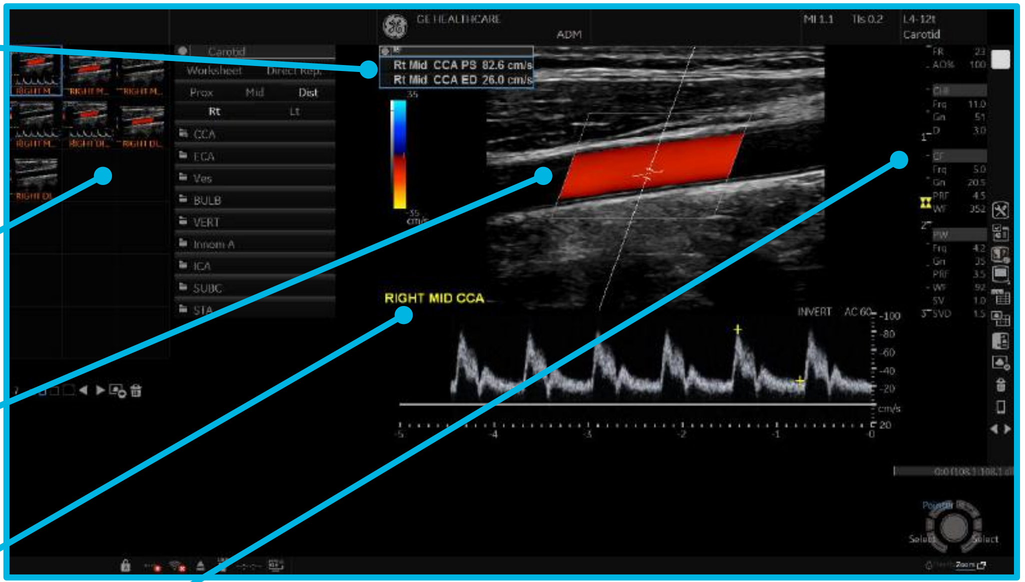
Initiates and completes user selected required measurements

Automatically reorders images to reader’s preference

Automatically steers Color Doppler

Automatically inserts comments

Automatically sets up Imaging controls and modes


GE HEALTHCARE
ADM
Carotid
Worksheet
Direct Rep.
Prox
Mid
Dist
Rt
Lt
CCA
ECA
Ves
BULB
VERT
Innom A
ICA
SUBC
STA
RIGHT MID CCA
INVERT

Rt Mid CCA PS 82.6 cm/s
Rt Mid CCA ED 26.0 cm/s

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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.
2. Internal GE engineering study using standardized protocols for an abdominal exam compared with prior version GE LOGIQ P6 ultrasound system.

Compare Assistant[1]

Help streamline comparison to prior exams

Opportunity

Many ultrasound exams are follow ups to prior ultrasound or other modality exams

Goal

Drive productivity for acquiring and reading the exam by designing a workflow that uses prior exam data

Result

A quick image comparison or a replicated prior exam

GE Healthcare
LOGIQ
SONY

---

[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

Compare Assistant[1]

Help streamline comparison to prior exams

At the scanner…

Easy access to past exam data on the scanner

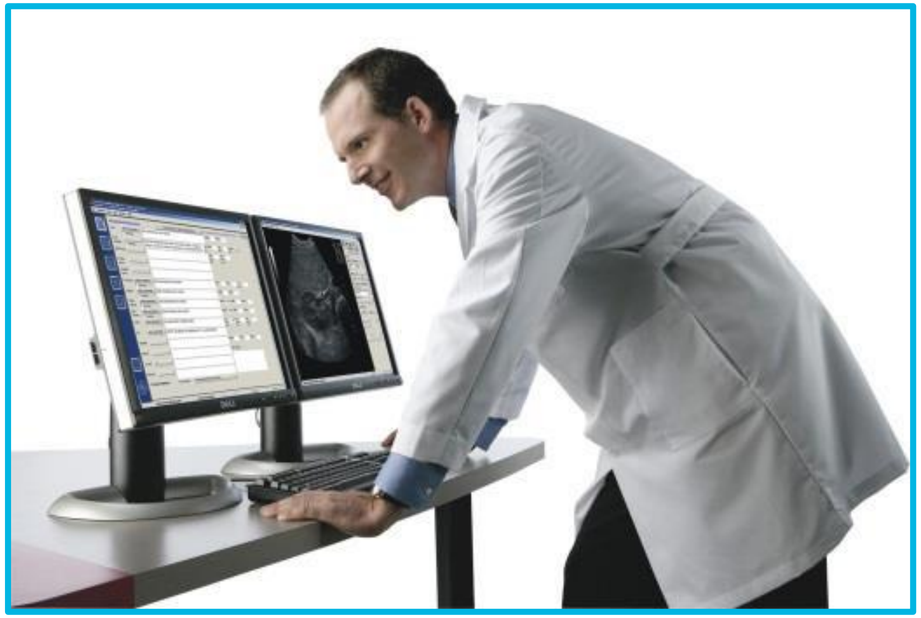
Side-by-side compare and store past exam image to today's image

Set image setting of live scanning to match past exam image[2]

Create entire new exam to match old exam

At the reading station…

Help reduce the time spent to find, open, sort, compare to prior exams



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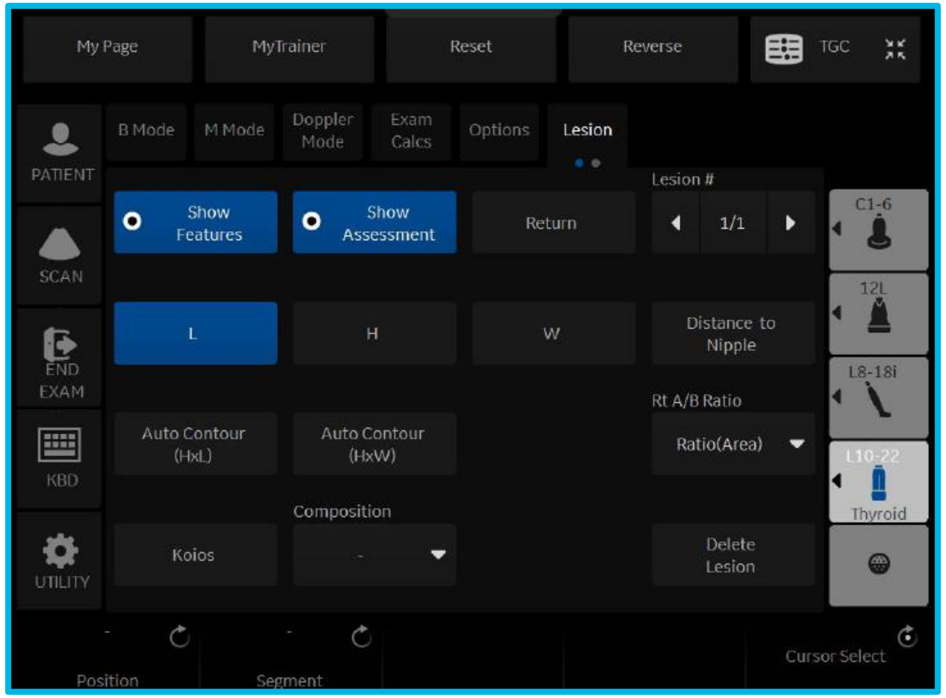
1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.
2. Automated when LOGIQ P9 XDclear data is used.

Breast Productivity[1]

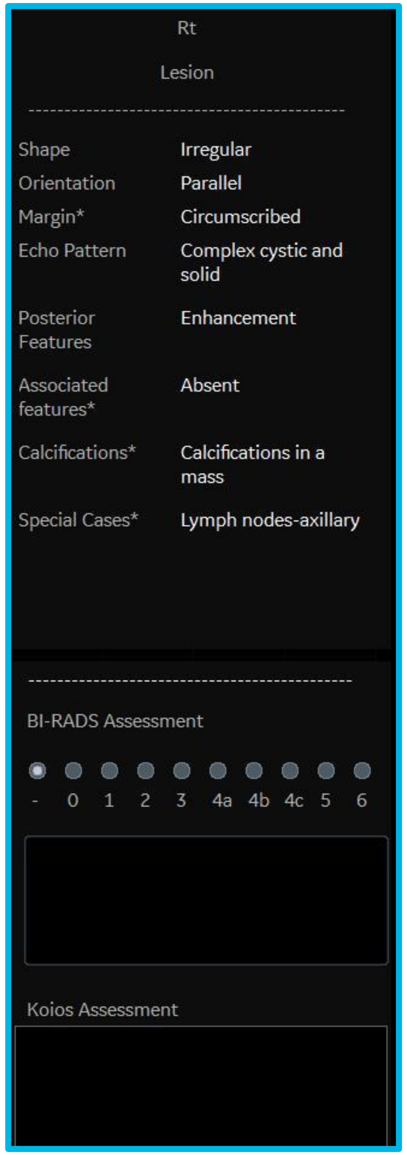
Measurement package

A dedicated breast-specific measurement package that allows user to:

- Make labeling, measuring and describing lesion easy
- Leverage the BI-RADS® lexicon criteria/assessment
- Organizes multiple measurements into a convenient worksheet
- Send results via DICOM® SR


My Page
MyTrainer
Reset
Reverse
TGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
B Mode
M Mode
Doppler Mode
Exam Calcs
Options
Lesion
Lesion #
Show Features
Show Assessment
Return
1/1
C1-6
12L
L8-18i
L10-22
Thyroid
L
H
W
Distance to Nipple
Rt A/B Ratio
Ratio(Area)
Auto Contour (HxL)
Auto Contour (HxW)
Composition
-
Koios
Delete Lesion
Position
Segment
Cursor Select

Directly from BI-RADS lexicon


Rt

Lesion

Shape	Irregular
Orientation	Parallel
Margin*	Circumscribed
Echo Pattern	Complex cystic and solid
Posterior Features	Enhancement
Associated features*	Absent
Calcifications*	Calcifications in a mass
Special Cases*	Lymph nodes-axillary

BI-RADS Assessment

● - ○ 0 ○ 1 ○ 2 ○ 3 ○ 4a ○ 4b ○ 4c ○ 5 ○ 6

Koios Assessment

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1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

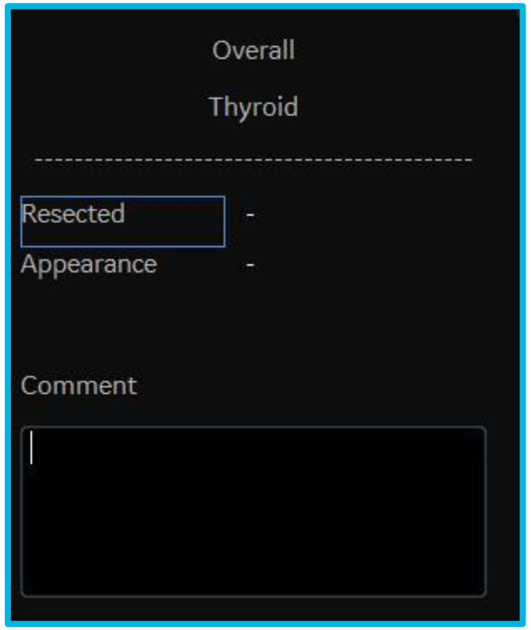
BI-RADS is a trademark of American College of Radiology. DICOM is a registered trademark of the National Electrical Manufacturers Association.

Thyroid Productivity[1]

Measurement package

Thyroid-specific measurement package

- Enables labeling, measuring and describing nodules, lymph nodes and parathyroids
- Multiple measurements can be organized into a convenient worksheet and sends results via DICOM® SR
- TI-RADS® compatible



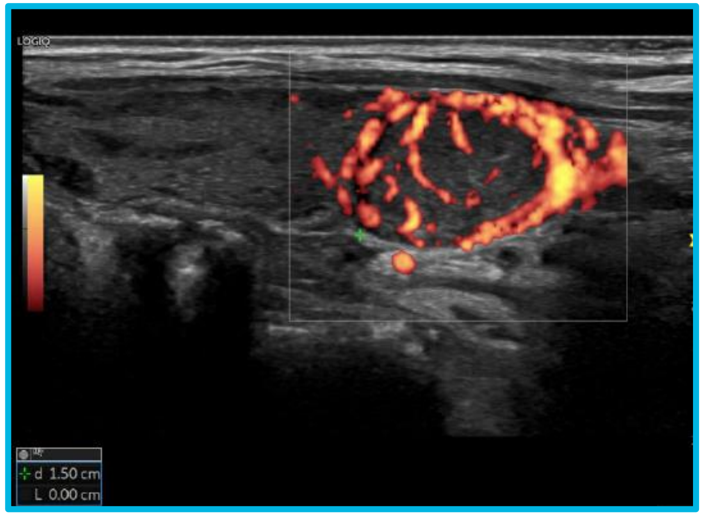
Overall

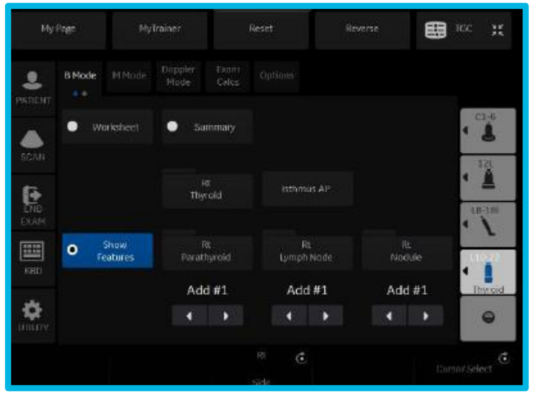
Thyroid

Resected -

Appearance -

Comment


LOGIQ
d 1.50 cm
L 0.00 cm


My Page
MyTrainer
Reset
Reverse
IGC
PATIENT
SCAN
END EXAM
KBD
UTILITY
B Mode
M Mode
Doppler Mode
Exam Calcs
Options
Worksheet
Summary
Rt Thyroid
Isthmus AP
Show Features
Rt Parathyroid
Rt Lymph Node
Rt Nodule
Add #1
Add #1
Add #1
C1-6
12L
L10-22
Thyroid
Rt
Side
Cursor Select

Show features

---

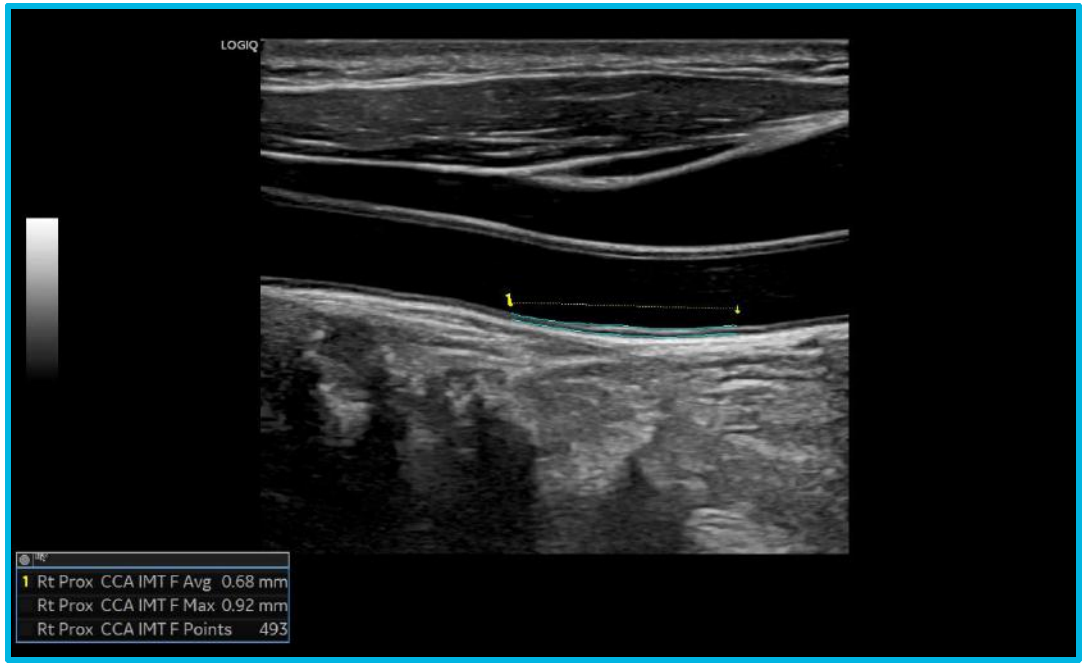
[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

DICOM is a registered trademark of the National Electrical Manufacturers Association.
TI-RADS is a registered trademark of the American College of Radiology.

Auto IMT[1]

Auto IMT is an automated method of measuring the intima media thickness of the CCA or ICA from multiple samples across a user defined length.

- Simple and easy to operate
- Direct export of measurements to a worksheet and report page
- Including ECG trigger to help increase consistency and reliability
- Save offset distance and IMT measurement lengths to help increase reproducibility



1 Rt Prox CCA IMT F Avg 0.68 mm
Rt Prox CCA IMT F Max 0.92 mm
Rt Prox CCA IMT F Points 493

An efficient, reproducible method of carotid artery analysis

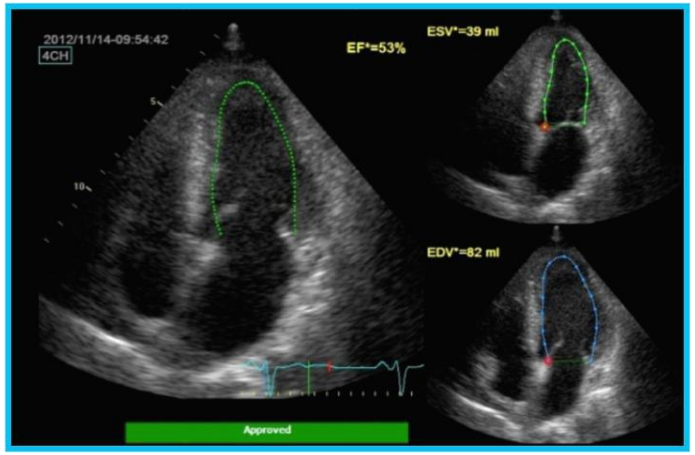
---

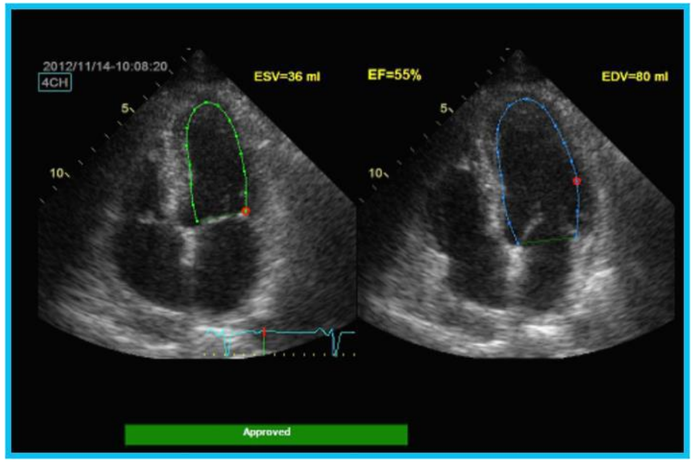
[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

Auto EF[1]

Automated Ejection Fraction (AutoEF) is a semi-automatic measurement tool used for measurement of the global EF (Ejection Fraction).

- The AutoEF tool tracks and calculates the myocardial tissue deformation based on feature tracking on
- B-Mode cine loops
- AutoEF is performed on either one or both apical
- 4-chamber or 2-chamber views, in any order
- Result is presented as Ejection Fraction value for each view and average Ejection Fraction for the whole LV. All values are stored to the worksheet after the results are approved


2012/11/14-09:54:42
4CH
EF*=53%
ESV*=39 ml
EDV*=82 ml
5
10
Approved


2012/11/14-10:08:20
4CH
ESV=36 ml
EF=55%
EDV=80 ml
5
10
5
10
Approved

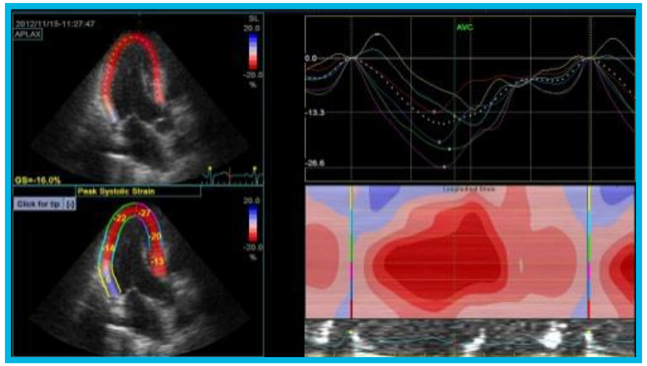
---

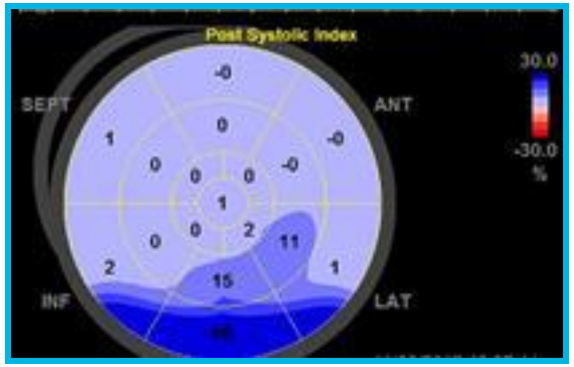
1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

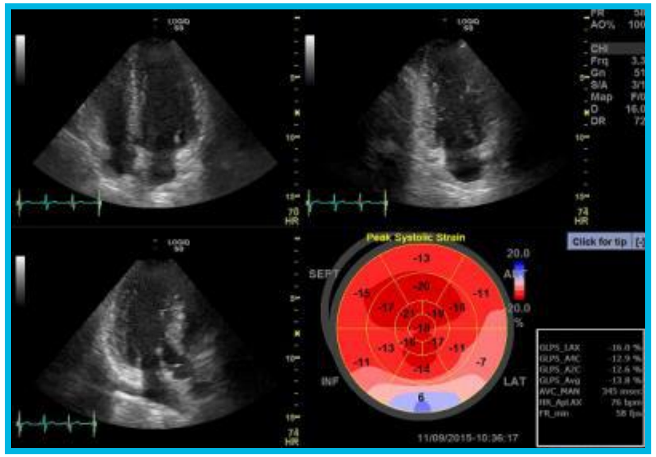
Cardiac Strain[1]

Cardiac Strain is the support tool for evaluation of the wall motion of the entire left ventricle or local region.

- Reduce exam time with easy workflow
- Wall motion tracing in 2D view from Apex (APLAX, 4-Ch, 2-Ch)
- Display strain graph, Parametric imaging and Anatomical M mode for each plane
- Bull’s eye is provided from 3 plane
- Display Peak Systolic Strain and Post Systolic Index


APLAX
AVC
GS=-16.0%
Peak Systolic Strain
Click for tip


Post Systolic Index
SEPT
ANT
INF
LAT
30.0
-30.0
%


Peak Systolic Strain
SEPT
INF
LAT
20.0
-20.0
%
Click for tip
11/09/2015-10:36:17

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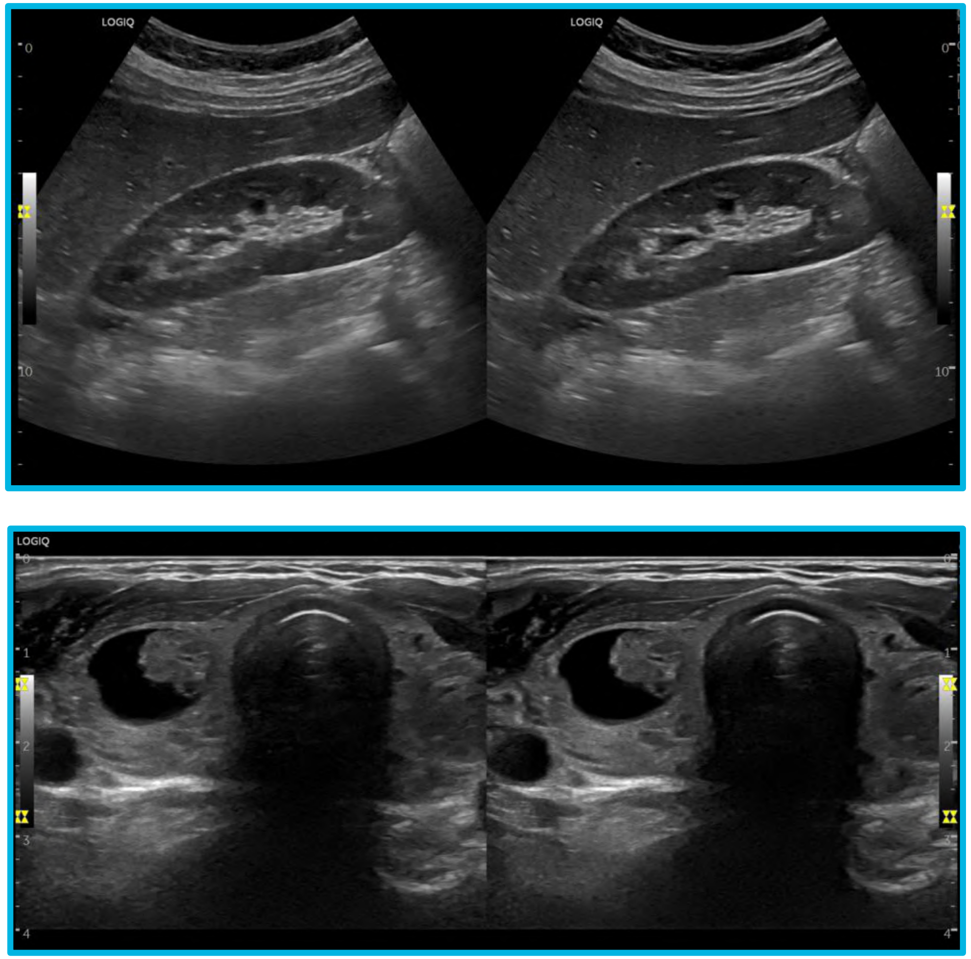
[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

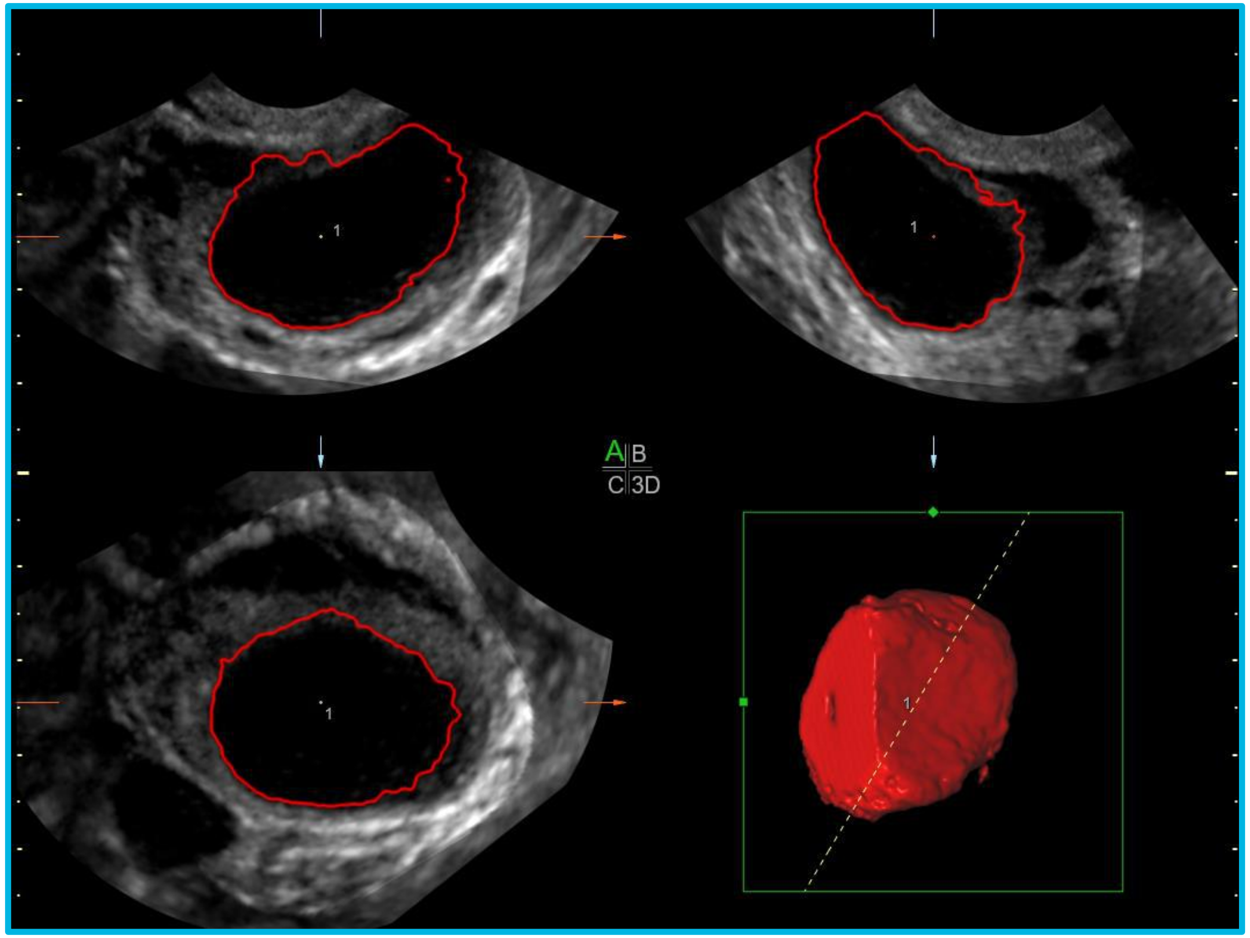
Speckle Reduction Imaging (SRI)

- New algorithms to enhance border differentiation, contrast resolution, improve tendon visualization, removes unwanted speckle and improves tissue homogeneity
- Available on all LOGIQ P9 transducers and models



SonoAVC

Automatic Volume Calculation - helps to identify and measure follicles and cystic areas within a 3D volume. It standardizes the process of follicular assessment and decreases inter-observer and intra-observer variability.



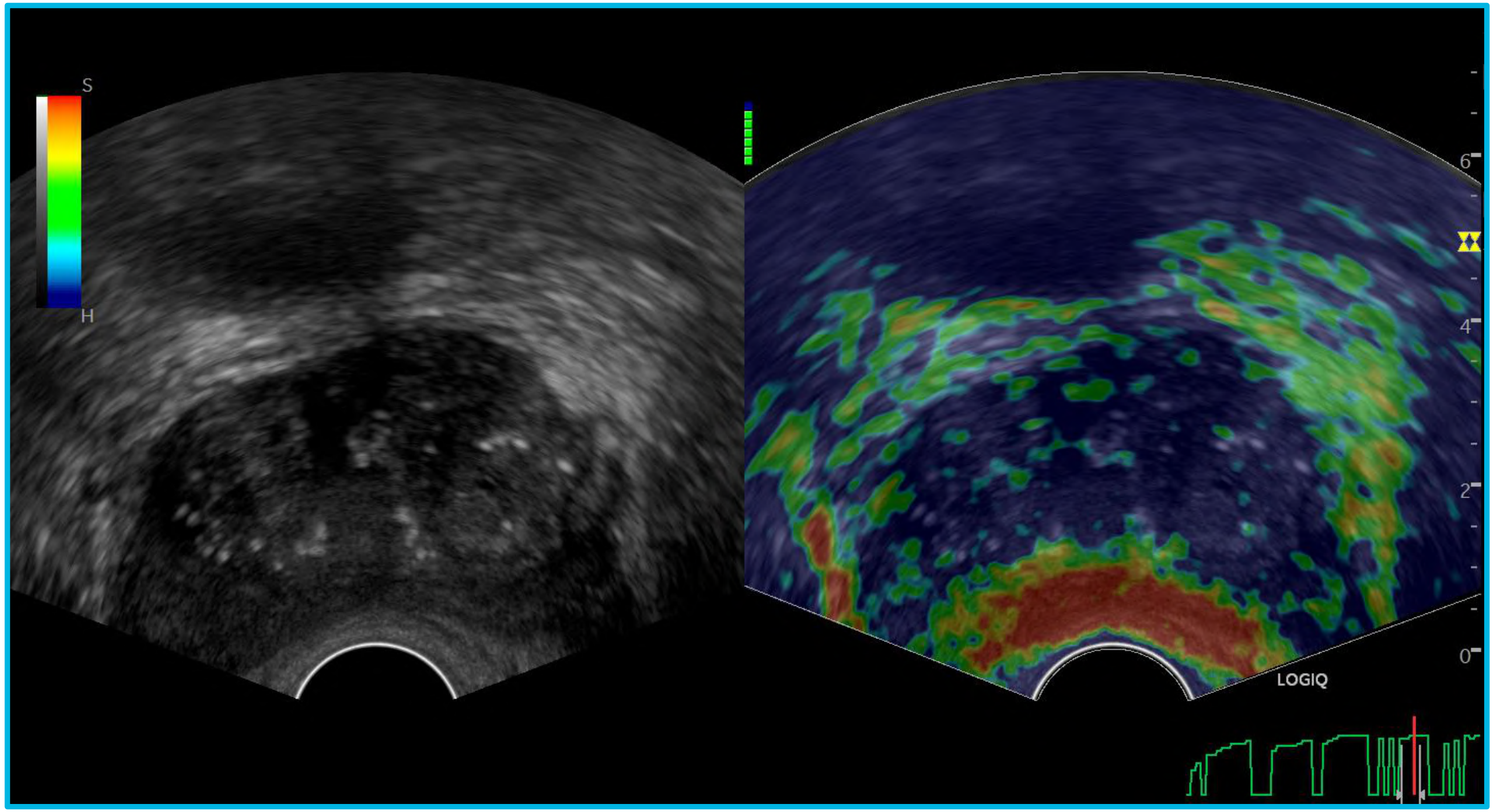
Urology Enhancement

IC9-RS features

- 2D Shear Wave Elastography
- Strain Elastography
- CEUS

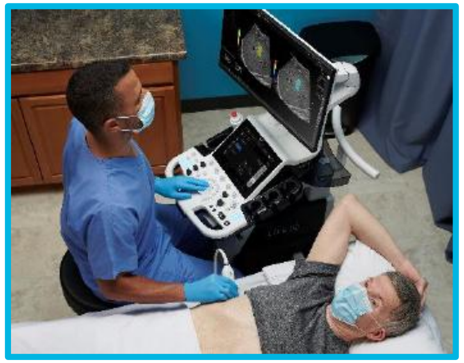
BE9CS-RS

- Strain Elastography
- CEUS

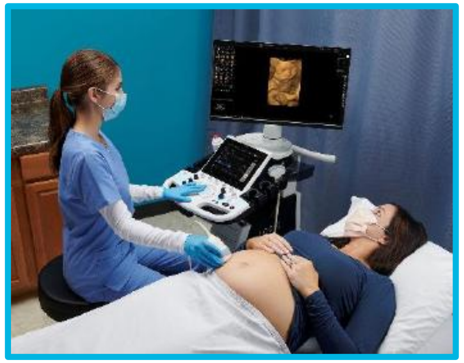


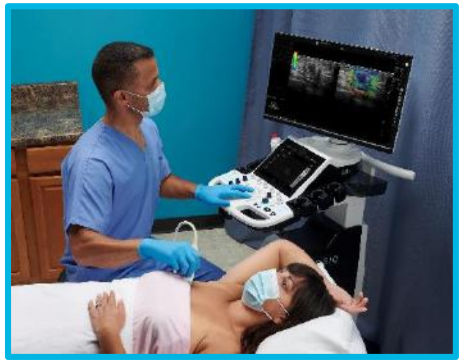
Multi-purpose capabilities for a diverse workload

Designed with your patients in mind:

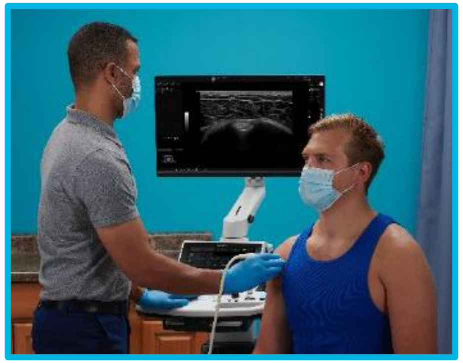

Liver

Cardiac


OB/GYN


Breast

Thyroid


Musculoskeletal

Urology

Vascular

Pediatrics

Power Assistant[1]

Power Assistant is an innovative solution that provides the system battery power during transport to help decrease system shut-down and reboot time – helping achieve excellent productivity for excellent portable exams.

Highlights

- Prompt in & out of battery operation mode to help improve system's portability
- Simple plug in and out operation
- System safely shuts down automatically before battery runs out
- Wireless LAN capability
- Always ready to scan with Power Assist battery operation
- External battery enables up to one hour of offline scanning

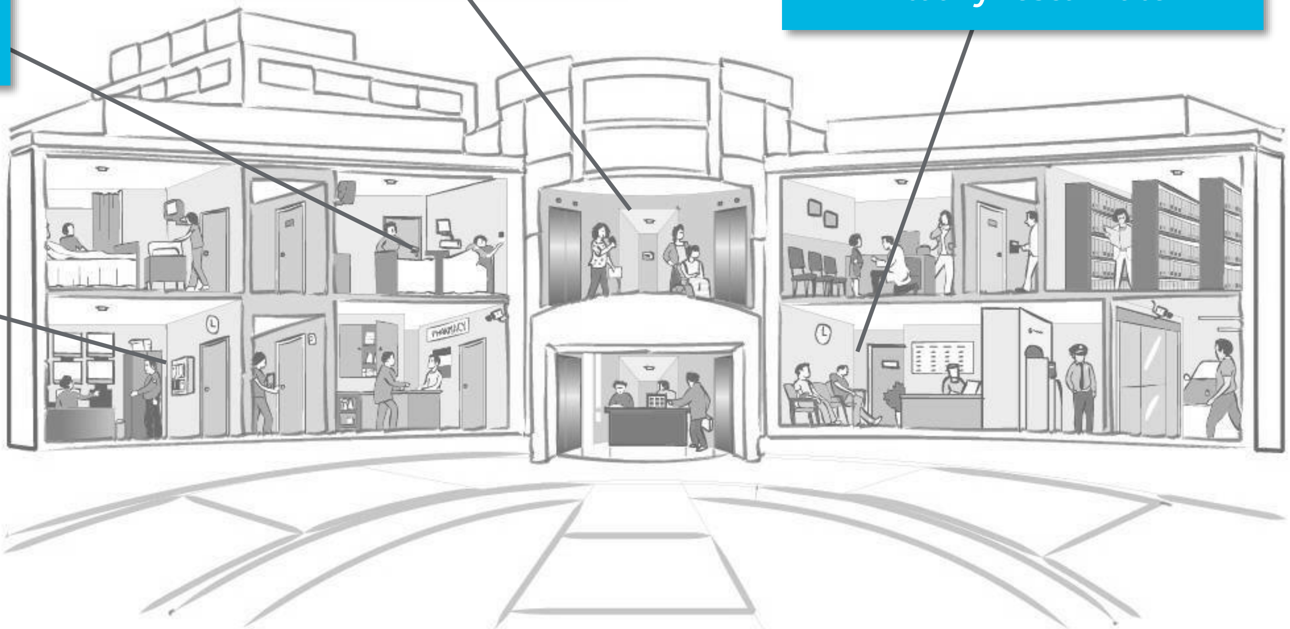
---

1. Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

Raw Data

The foundation for simplified workflow

Raw Data capture enables to build a thorough exam while helping reduce scan time. *This* ***proprietary raw data format*** from GE Healthcare captures data earlier in the image processing chain enabling users to make changes to the data during or even after the exam has ended.



Room too bright?
Adjust gain later

Difficult vascular patient?
Adjust baseline shift, sweep speed later

Forgot annotations?
Easily add them later

Delicate NICU patient?
Acquire quickly then virtually rescan later

Powerful Support

LOGIQ™ Apps

Remote Control

Remotely operate the system from tablet or phone that that has LOGIQ Smart App loaded

- Focused on ergonomics
- Includes:
  - Major modes
  - Freeze/print
  - Depth
  - Gain
  - ROI placement
  - Dual Image

LOGIQ is a trademark of GE..

LOGIQ™ Apps

Photo Assistant

A picture is worth a 1000 words

- Photograph relevant anatomy and include photos with the clinical images
- Provides value context for documentation and comparison after a procedure
- Utilizes Android™ tablet or phone

LOGIQ is a trademark of GE.
Android is a trademark of Google, LLC.

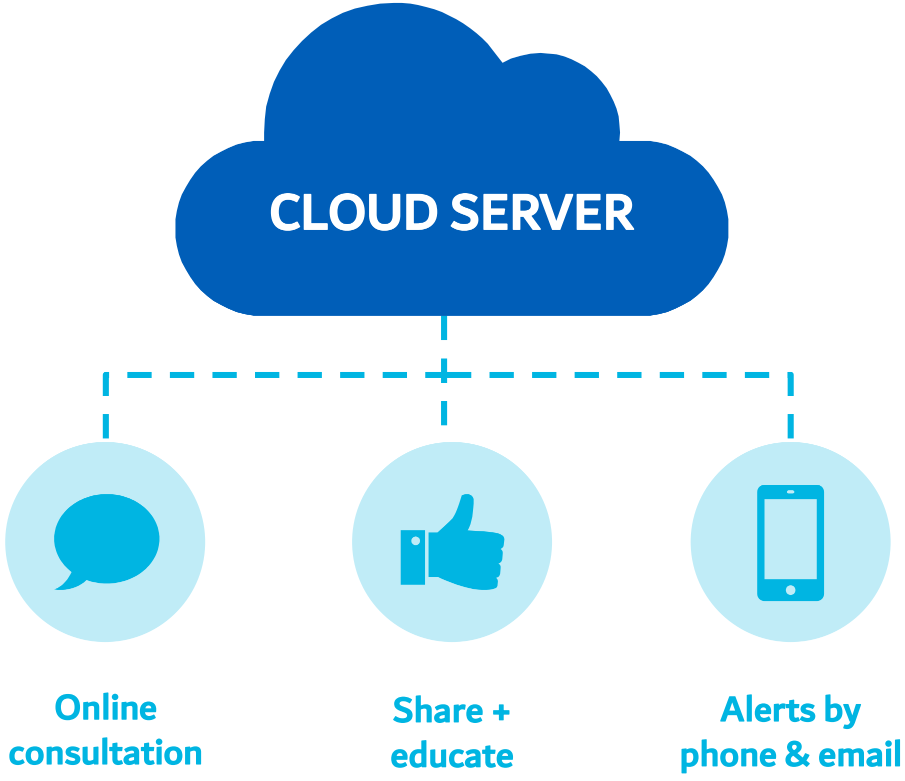
LOGIQ™ P9 XDclear™ and Trice® – Sharing ultrasound images

Clinical communication

- Ultrasound lab sends images, reports for consultation before referring the patient
- Ultrasound lab shares examination results for second opinion
- Ultrasound lab shares examination results with surgeon for treatment and surgery planning
- Sharing cases with medical community, accreditation support
- Routing of studies from remote sites

Doctor-patient communication

- Sharing exam results with patients


CLOUD SERVER
Online consultation
Share + educate
Alerts by phone & email

LOGIQ and XDclear are trademarks of GE.
Trice is a trademark of Trice Imaging, Inc.

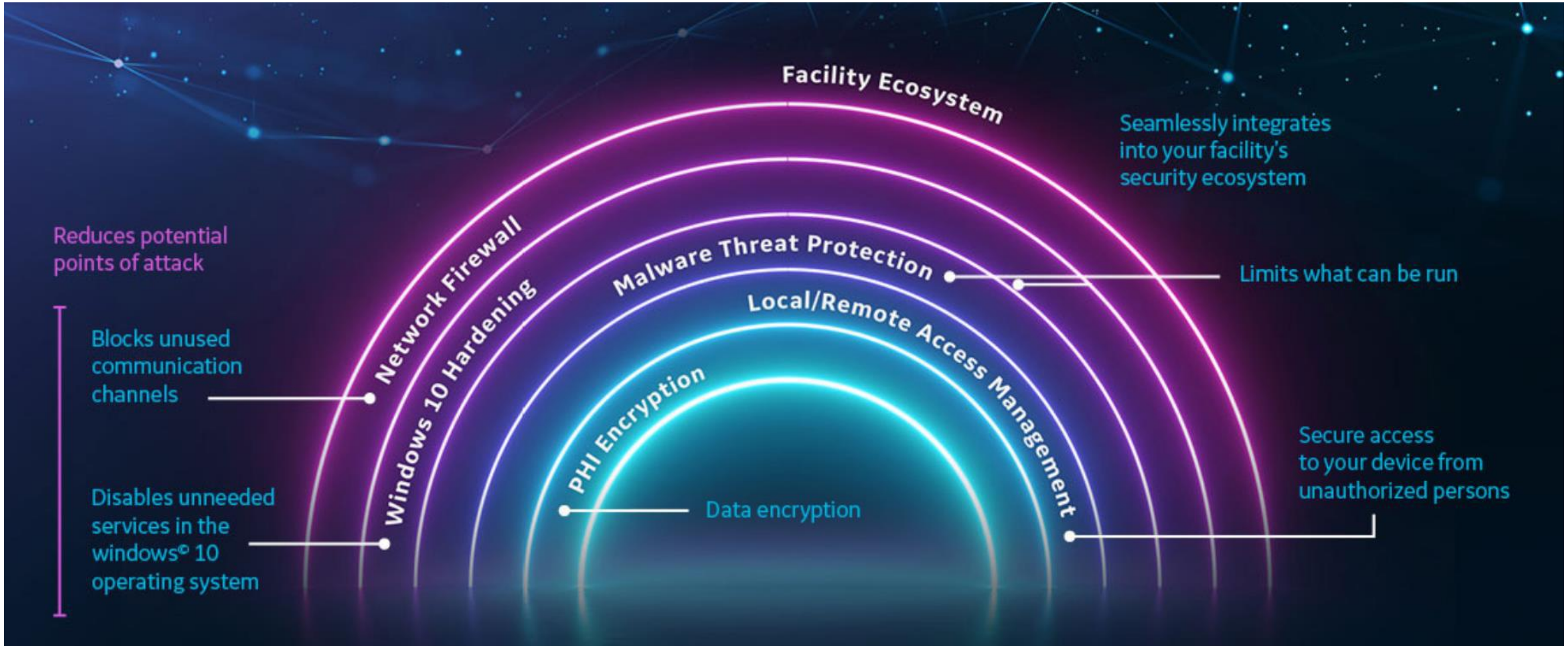
SECURITY

SonoDefense

ADVANCED CYBERSECURITY AND DATA PRIVACY PROTECTION

SonoDefense is designed to:

- Keep the ultrasound machine safe and functional in the face of cyberthreats
- Protect patient data on the machine from unauthorized access
- Enable you to successfully implement patient data and security policies, while still managing product daily workflows


Facility Ecosystem
Network Firewall
Windows 10 Hardening
Malware Threat Protection
Local/Remote Access Management
PHI Encryption

Reduces potential points of attack

Blocks unused communication channels

Disables unneeded services in the windows© 10 operating system

Seamlessly integrates into your facility's security ecosystem

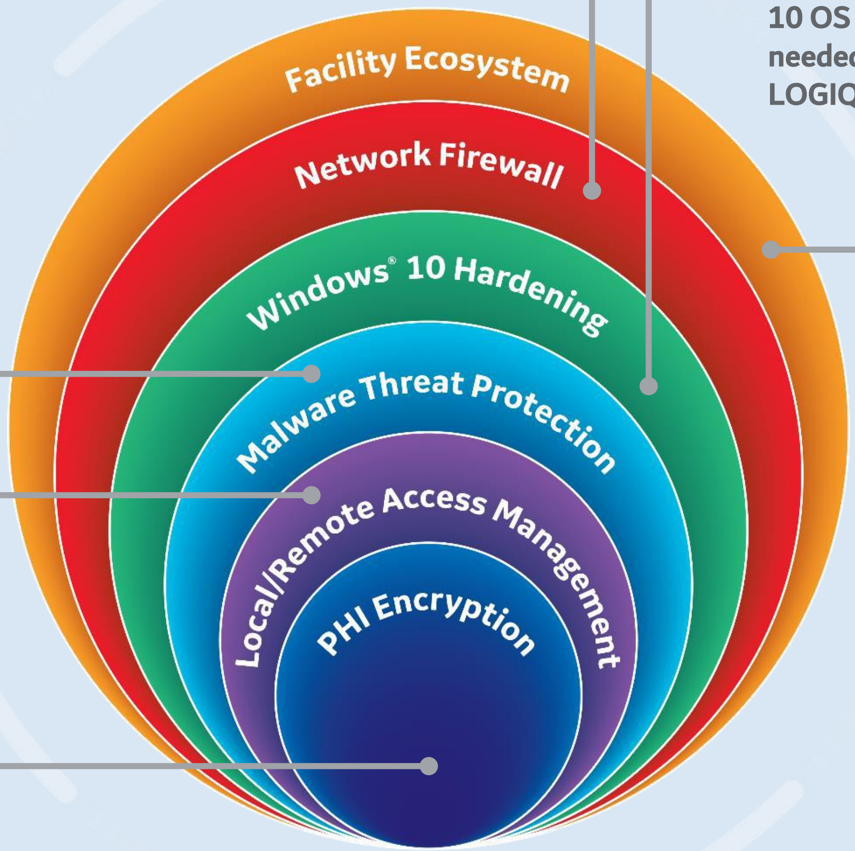
Limits what can be run

Secure access to your device from unauthorized persons

Data encryption

Defense-in-depth strategy

SonoDefense is designed for maximum security protection with a defense-in-depth strategy that incorporates security controls deployed in multiple layers. This approach enhances security by protecting the system against any particular attack using several independent methods.


Facility Ecosystem
Network Firewall
Windows® 10 Hardening
Malware Threat Protection
Local/Remote Access Management
PHI Encryption

Blocks unused communication channels

Disables services in the Windows® 10 OS that are not needed by the LOGIQ P9 XDclear

Reduces potential points of attack

Seamlessly integrates into your facility's security ecosystem

Limits what can be run on the LOGIQ™ P9 XDclear™

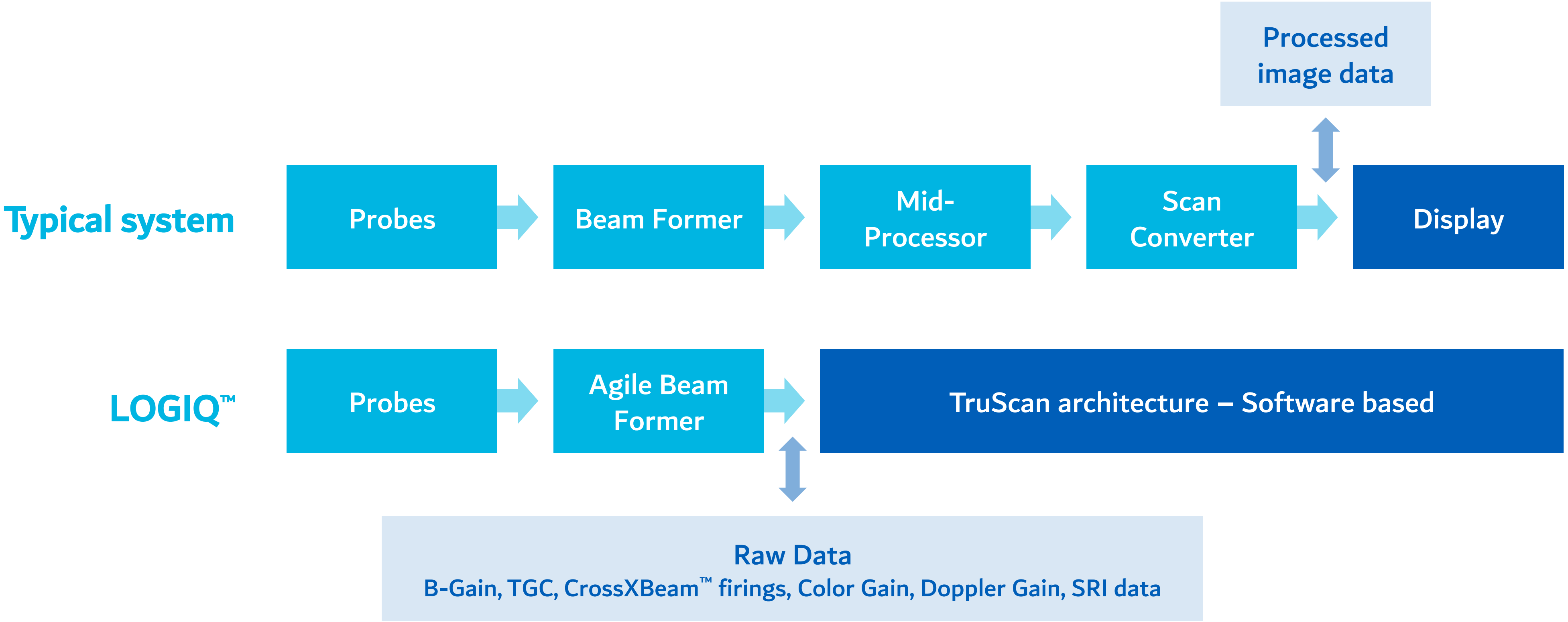
- **Customizable, role-based access**
- **Federated Identity Management**
- **Session management**
- **Auditing**
- **Secure remote access**

- **Customizable patient data encryption**
- **Enterprise wireless encryption**
- **IPv6 Internet Protocol address standard**

LOGIQ and XDclear are trademarks of GE.
Windows is a registered trademark of Microsoft Corporation.

Raw Data

TruScan™ architecture | Capturing raw data early in the image chain



Processed image data

Typical system

Probes

Beam Former

Mid-Processor

Scan Converter

Display

LOGIQ™

Probes

Agile Beam Former

TruScan architecture – Software based

Raw Data

B-Gain, TGC, CrossXBeam™ firings, Color Gain, Doppler Gain, SRI data

Raw data processing with TruScan architecture enabling "virtual rescanning"

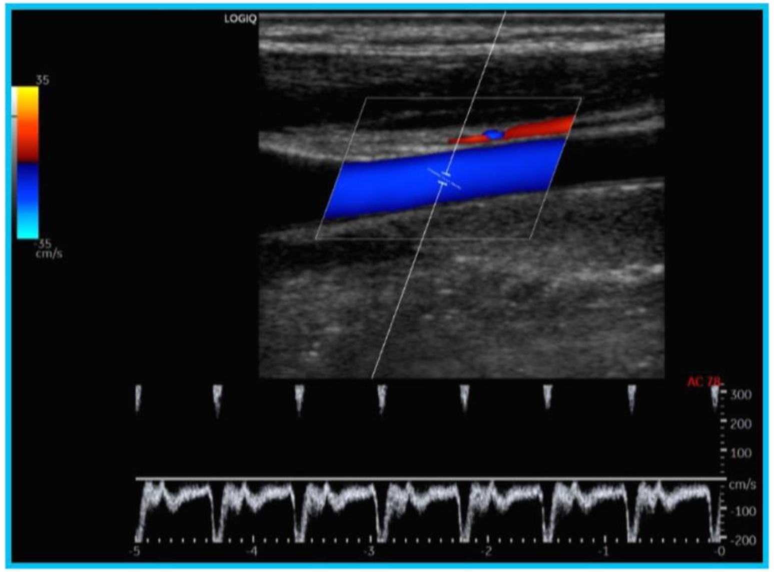
TruScan, LOGIQ, and CrossXBeam are trademarks of GE.

Raw Data Processing

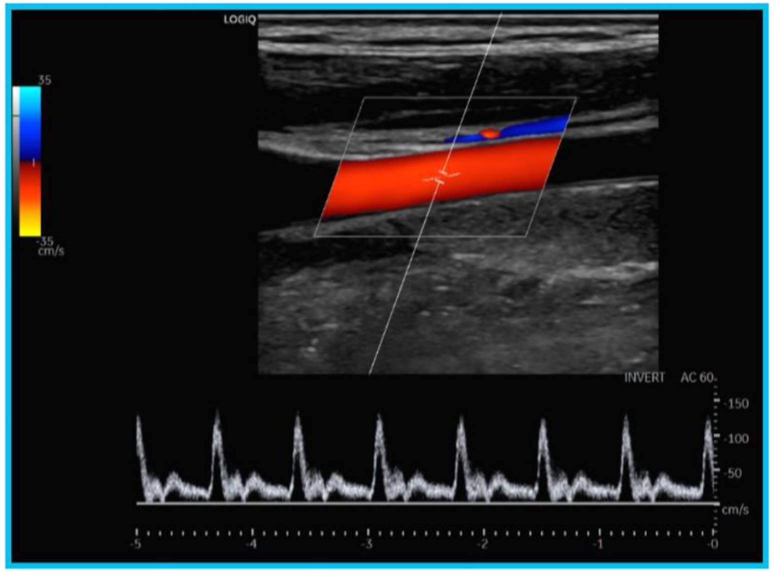
Original Acoustic Data are stored before scan converting in a GE “raw” format to be easily accessed and re-processed any time after the exam completion.

Highlights:

- Sub-optimal studies can be optimized
- Measurements can be re-done and reports regenerated
- All Imaging control parameters can be changed as:
  - B-Mode: Gain, DR, AO, Zoom, SRI…
  - CFM: Gain, Threshold, DualView…
  - PW: Baseline, Invert, Angle, Gain…


LOGIQ
35
-35
cm/s
AC 78
300
200
100
cm/s
-100
-200

Carotid Raw Data before 9L-RS


LOGIQ
35
-35
cm/s
INVERT
AC 60
150
100
50
cm/s

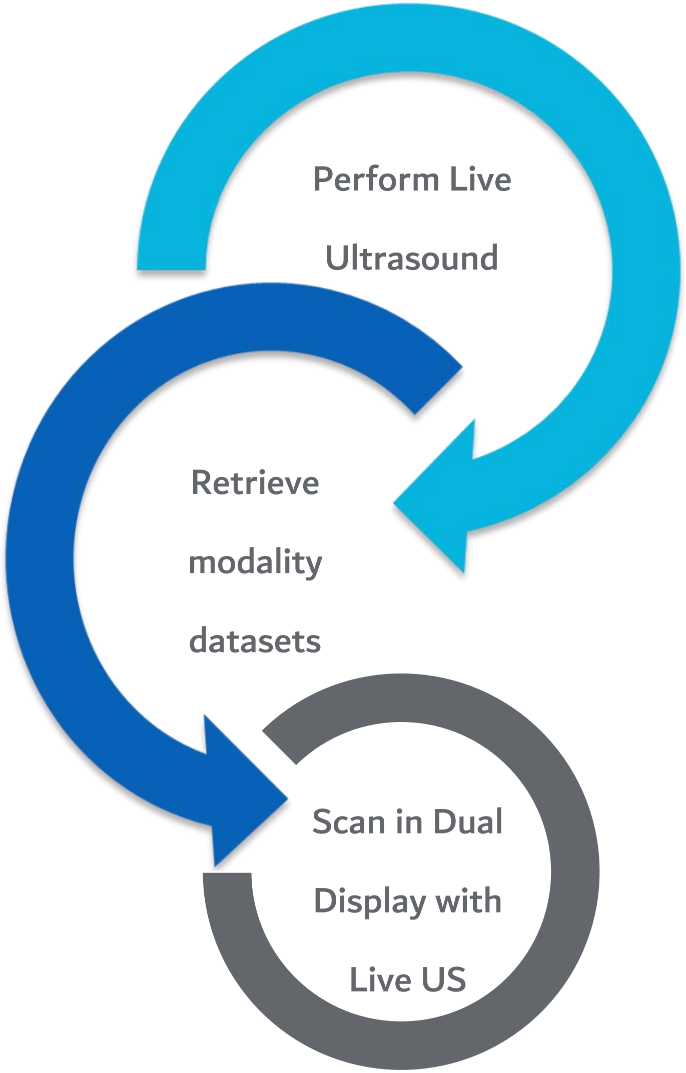
Carotid Raw Data after 9L-RS

Multi-modality Query Retrieve[1]

Volume Navigation Import

View real-time ultrasound with retrieved Ultrasound, Mammo, CT or MR datasets

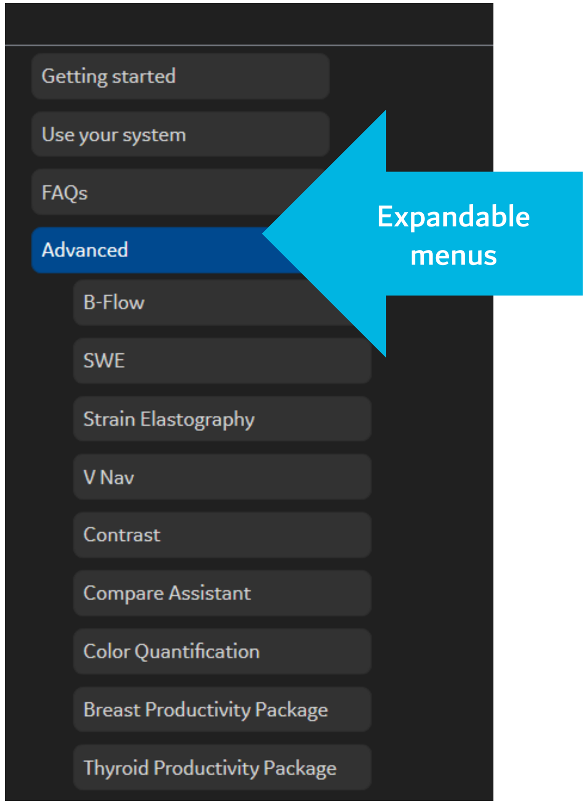
- Potential time saver
- Simplified workflow
- Complementarity of information
  - Volume data set retrieval
  - Select desired image plane by scrolling
- Helps improve diagnostic confidence


Perform Live Ultrasound
Retrieve modality datasets
Scan in Dual Display with Live US

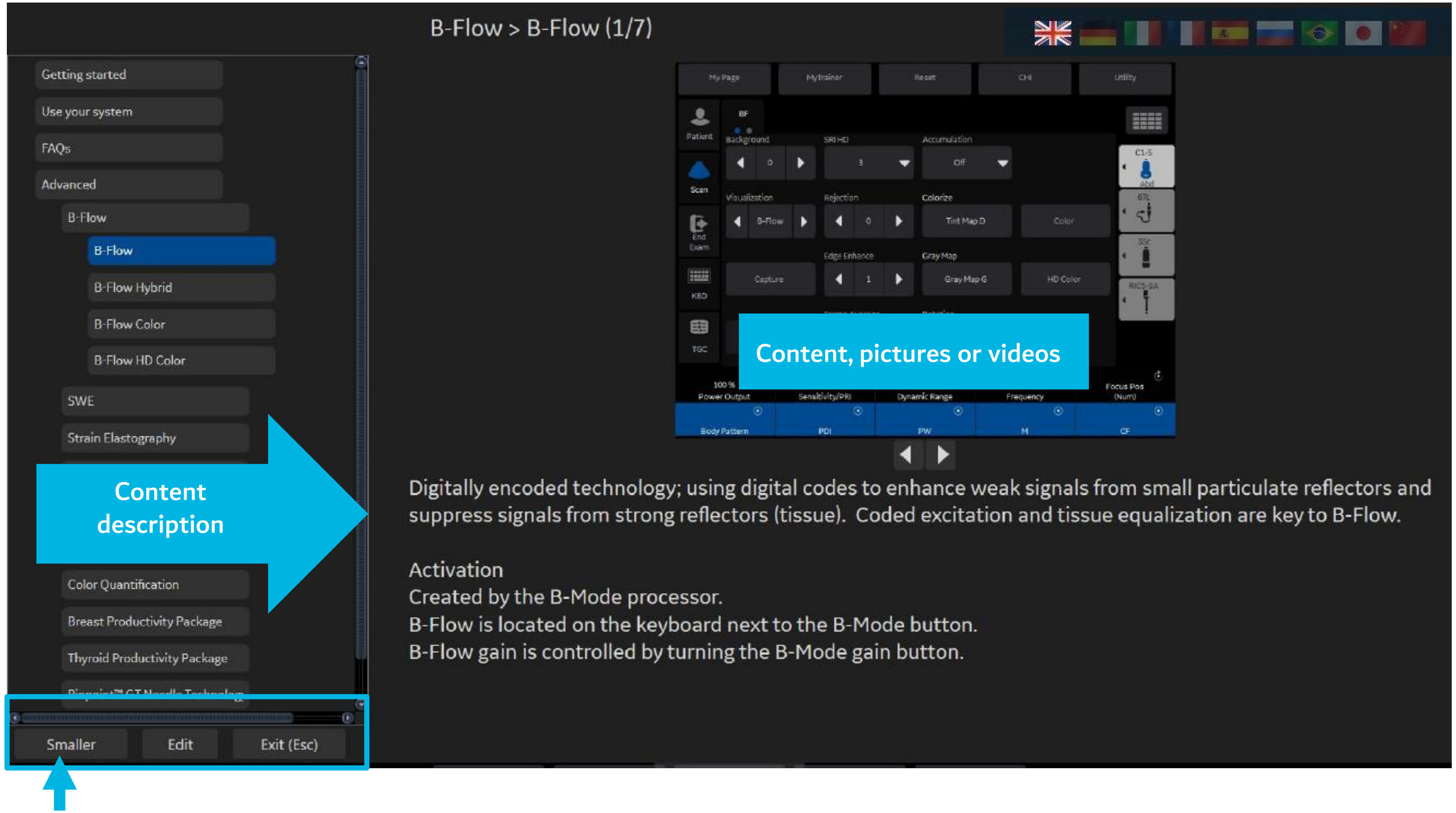
---

[1] Refer to the LOGIQ P9 XDclear Product Data Sheet for a list of purchasable options.

My Trainer on-board training modules


Getting started
Use your system
FAQs
Advanced
B-Flow
SWE
Strain Elastography
V Nav
Contrast
Compare Assistant
Color Quantification
Breast Productivity Package
Thyroid Productivity Package

Expandable menus


B-Flow > B-Flow (1/7)
Getting started
Use your system
FAQs
Advanced
B-Flow
B-Flow
B-Flow Hybrid
B-Flow Color
B-Flow HD Color
SWE
Strain Elastography
Color Quantification
Breast Productivity Package
Thyroid Productivity Package
Smaller
Edit
Exit (Esc)
My Page
MyTrainer
Reset
CHI
Utility
Background
SRI HD
Accumulation
Visualization
Rejection
Colorize
Edge Enhance
Gray Map
Power Output
Sensitivity/PRI
Dynamic Range
Frequency
Focus Pos
Body Pattern
PDI
PW
M
CF

Content description

Content, pictures or videos

Digitally encoded technology; using digital codes to enhance weak signals from small particulate reflectors and suppress signals from strong reflectors (tissue). Coded excitation and tissue equalization are key to B-Flow.

Activation
Created by the B-Mode processor.
B-Flow is located on the keyboard next to the B-Mode button.
B-Flow gain is controlled by turning the B-Mode gain button.

Smaller: reduces the size of the My Trainer display
Edit: allows you to remove content that is not required
Exit (Esc): close My Trainer

LOGIQ™ Club users community

www.LOGIQClub.net

Access to the Club websites

- Local contents, events
- Clinical courses in your country
- Application tips & tracks
- Publications and cases & papers
- Clinical cases & technical presentations
- Downloadable educational materials and DVD
- Online education

Personalized mailings & newsletters

- Be first to learn about new ultrasound products and software upgrades

User days and VIP lounges

- Learn about best practices from specialists around the globe
- Discuss and exchange information with ultrasound users worldwide

LOGIQ is a trademark of GE.

LOGIQ™ Club users community

Education highlights

Online education

- GE White Papers
- Application videos
- Clinical tutorials
- Video tutorials on advanced features
- Access to peer-to-peer reviewed papers
- International Academy of Medical Education (IAMU) at http://iamu.logiqclub.net

Residential education

- Volume Navigation training schools in:
  - –Abdominal, Interventional
  - –Musculoskeletal
  - –Breast
  - –Urology

Mobile app – now available

Watch course videos and product tutorials directly on your smartphone

GE Healthcare
LOGIQ Club
IAMU Courses
App Store
News
Login
Courses
Course

Welcome to the LOGIQ Club

PRODUCT EDUCATION AT YOUR FINGERTIPS

STAR

Augmented reality

- All ULS products
- 6 languages
- IOS version
- Knobology support

Back
Education
Vivid™ S60N/S70N
Vivid Club
GE Healthcare
Quick Card
Vivid S60 / S70

Loyalty clubs

- Bridge to Clubs
- Education program
- Product content

Quick cards

- All ULS products
- Printable version

Getting started videos

- All ULS products
- 6 videos tutorials
- Knobology support

Remote support

- Access to call center
- Phone number
- GE remote laptop view
- Customer phone view
- Knobology support
- Settings optimization
- Configuration support

Download on the App Store

GET IT ON Google Play

EXPERT LIVE SUPPORT

Expert Live Support
What is it?

Unlimited* remote access to our **technical and clinical** experts

How to contact us?

- Service center: number in the STAR app
- STAR: augmented reality mobile app for console education with an access to our experts
- Directly on your ultrasound system with the button « Contact GE » located at the bottom of your screen

To benefit the best from this offer, the ultrasound system needs to be connected to GE back-office.

** Depending on the countries*

Expert Live Support
through GE back-office connection

- Get an answer to all your questions by reaching out to GE experts during the lifetime of your console
- Fast access to GE experts whenever customers need it thanks to remote connection
- One service center for technical & application support

30 %

of issues on a ultrasound system are repaired remotely and often

3 times quicker*

If your ultrasound cannot be repaired remotely,

90 %

of issues are resolved on the 1st visit.*

*GE internal data

FLEET PERFORMANCE MANAGEMENT

HOW TO maximize your operational ultrasound fleet performance?

iCenter

Maintenance management of your ultrasound fleet

Access data & analytics on maintenance status of your ultrasound fleet*, including:

- **Transparency & service reliability** thanks to the Business Review Dashboard on the technical status of your ultrasound equipment
- **Traceability**: availability to download service report for compliance purposes
- History and Planning of your maintenance activity
- Available online and via mobile app

GET MORE

VISIBILITY & TRANSPARENCY

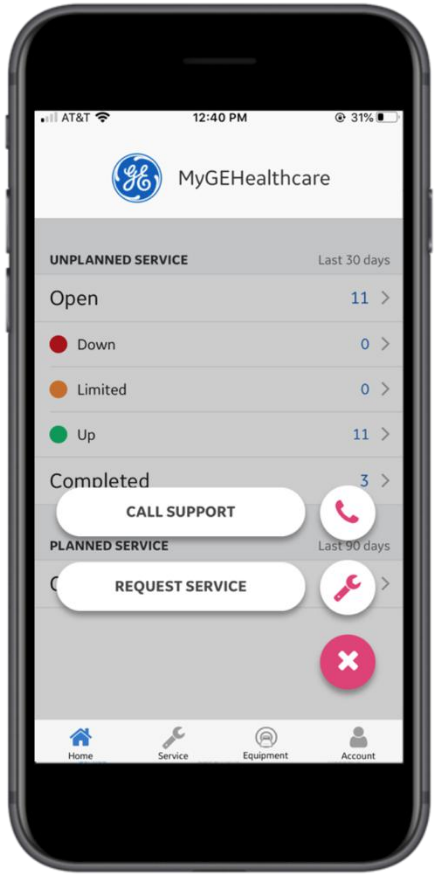
*under GE contract

MyGEHealthcare App

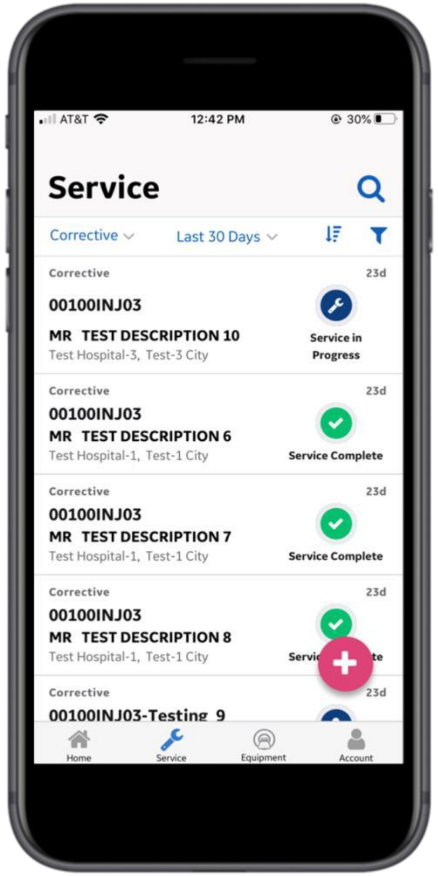
SERVICE REQUESTS MADE EASY

Clinical engineers or technology managers can't always be near a PC, which is a challenge when a service request needs to be made on the go!
GE Healthcare is bringing iCenter's asset management and service request tools right to your mobile device: giving you access to the resources you need, anywhere you need them

- Create and track service requests to completion
- View service request history and upcoming planned service
- Access engineer debrief data
- Get real-time push notifications for every step of the service process


AT&T
12:40 PM
31%
MyGEHealthcare
CALL SUPPORT
REQUEST SERVICE
Home
Service
Equipment
Account

UNPLANNED SERVICE Last 30 days
Open 11
● Down 0
● Limited 0
● Up 11
Completed 3
PLANNED SERVICE Last 90 days


AT&T
12:42 PM
30%
Corrective
Last 30 Days
Home
Service
Equipment
Account

Service

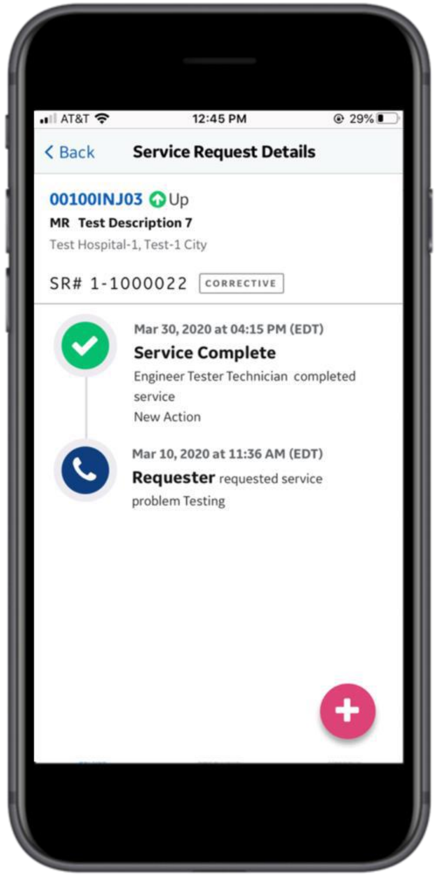
Corrective 23d
00100INJ03
MR TEST DESCRIPTION 10
Test Hospital-3, Test-3 City
Service in Progress

Corrective 23d
00100INJ03
MR TEST DESCRIPTION 6
Test Hospital-1, Test-1 City
Service Complete

Corrective 23d
00100INJ03
MR TEST DESCRIPTION 7
Test Hospital-1, Test-1 City
Service Complete

Corrective 23d
00100INJ03
MR TEST DESCRIPTION 8
Test Hospital-1, Test-1 City

Corrective 23d
00100INJ03-Testing 9


AT&T
12:45 PM
29%
Back

Service Request Details

00100INJ03 Up
MR Test Description 7
Test Hospital-1, Test-1 City
SR# 1-1000022 CORRECTIVE

Mar 30, 2020 at 04:15 PM (EDT)
Service Complete
Engineer Tester Technician completed service
New Action

Mar 10, 2020 at 11:36 AM (EDT)
Requester requested service
problem Testing

GET IT ON Google Play

Download on the App Store

ULTRASOUND EXCELLENCE

The concept | What it is ?

Our «Ultrasound Excellence» offer is based on 2 pillars:

Ultrasound data intelligence & Human expertize

DICOM

Imaging Insights

122 317
41%
85%
0

+

Consulting services

Connect
Audit & Connect your ultrasound installed base

Measure
Collect data & measure current state

Optimize
Interpret data, define objectives & actions

Ultrasound Excellence | What it is ?

Use data from your all your ultrasound equipment (GE & Non-GE) to feed customized indicators on a neutral and multimodalities analytics platform.

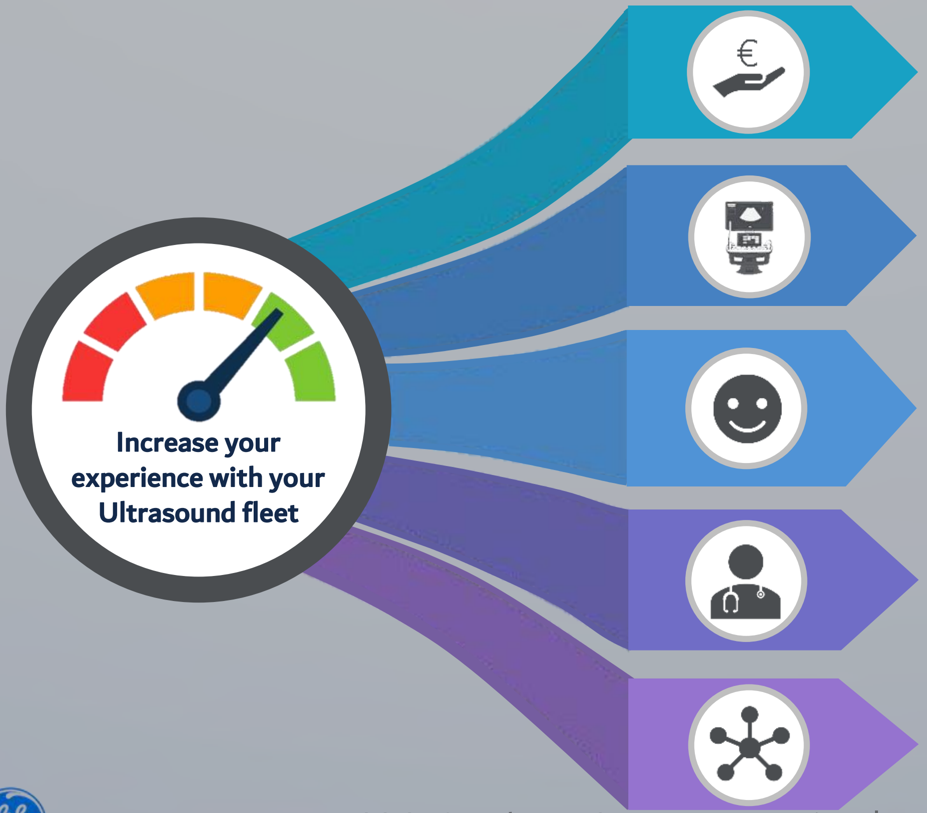
Benefit from the human expertise provided by our specialist teams in interpreting these indicators, defining your priorities and objectives, and setting up action plans to monitor and achieve your aims operationnaly, clinically and financially.

Applied Intelligence
26.7%
53.3%
31.1%
Enterprise overview
Exam volume
135 672
% of active scan time
39%
On-time start %
84%

Ultrasound Excellence | Consulting's added value ?

Helping you make confident decisions

Our neutral and multi-modalities analytics platform, brings together machine data across your hospital into powerful, intuitive dashboards. Getting this visibility helps you make data-driven operational and financial decisions with confidence.



Increase your experience with your Ultrasound fleet

Optimize your **INVESTMENT** based on your activity

Have the **RIGHT AMOUNT, CONFIGURATION and PLACE** of devices

Improve the **PATIENT and USER EXPERIENCE** by workflow optimization

TRAIN YOUR TEAMS to use devices at their best of their capabilities

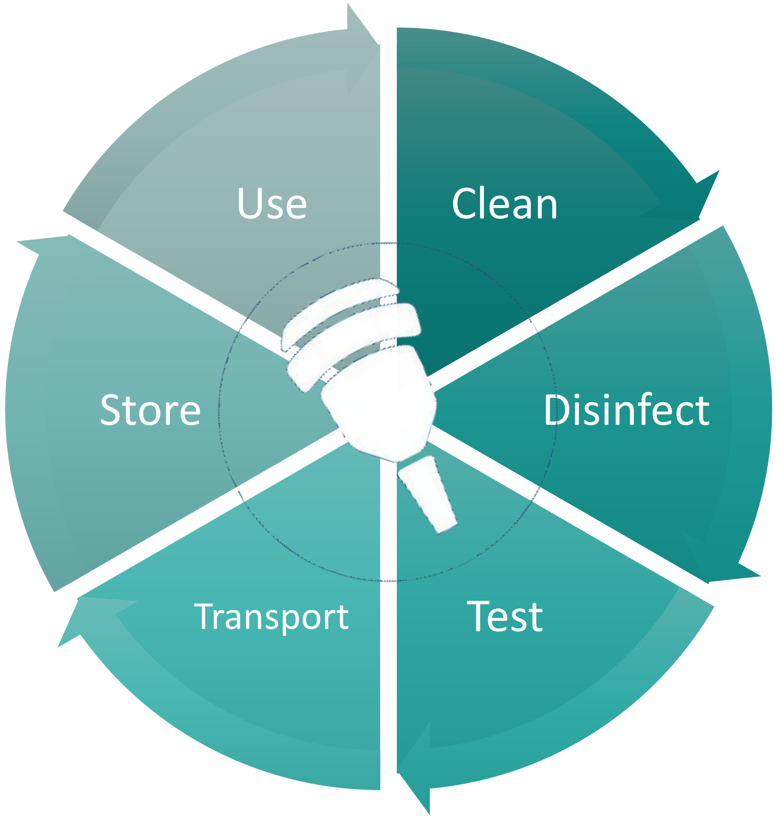
Improve your **DIGITAL EFFICIENCY** with U/S Digital solutions

CARE & HYGIENE

HOW TO protect patients and caregivers against biological hazard?

CARE & HYGIENE

Accompany the EU healthcare professionals in their ultrasound daily activities to guarantee an optimal care for their patients



Use

Clean

Disinfect

Test

Transport

Store

UMONIUM NEUTRALIS TISSUES
Tristel Duo
for Ultrasound