



LOGIQ P6 Pro

TruScan Imaging Technology

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Product Description

The LOGIQ P6 PRO is a high end, highly mobile and easy to use, multipurpose color Doppler imaging system, designed for Obstetrics, Gynecology, Cardiology, Musculoskeletal, Vascular, Urological, Small Parts, Superficial, Pediatric, Neonatal, Transcranial, and Abdominal applications.

System Architecture

TruScan Architecture – GE's exclusive, software-intensive platform provides unsurpassed computational power, image-manipulation capabilities, real time 4D capabilities, workflow flexibility and product upgrade-ability.

Image Quality unmatched Image Quality is achieved by leveraging features such as Phase Inversion Harmonics, CrossXBeam, SRI-HD, and unique Coded Technologies paired with world-class transducers.

Raw Data is GE's-exclusive technology that allows a virtual rescan on archived images by applying the same scan controls available during the original exam.

SmartScan utilizes new advances in operating algorithms and system operations to improve image acquisition and patient throughput while increasing diagnostic confidence and exam consistency.

ComfortScan, our most advanced ergonomic designed software suite ever, helps maximizing productivity. It simplifies every exam you perform.

General Specifications

Dimensions and Weight

- Height:
 - Max 1525/1465 mm
 - Min. 1360/1300 mm



- Width: 430mm
- Depth: 640mm
- Weight: approx. 80 kg (176 lb.)

Electrical Power

- Voltage: 100-120Vac or 220-240Vac
- Frequency: 50/60 Hz
- Power: Max. 950 VA with Built-in and On-Board Peripherals

Console Design

- 3 Active Probe Ports
- Integrated HDD (Capacity : 120GB)
- Integrated DVD-R/W Drive
- On-board Storage for Peripherals(Max 3 peripherals)
 - B/W-printer, color printer, DVD video recorder
- Wheels
 - Wheel diameter: 12.5cm
 - Integrated locking mechanism that provides rolling lock and optional caster swivel lock
- Probe Holders, Removable for Cleaning and Washing

- Gel Holder, Removable for Cleaning and Washing
- Air Filters, Easily Removable
- Front Handle
- Attachable Remote Controller (option)
- Optional rear handle, Probe Cable Hanger, Drawer, Endo Probe holder.

User Interface

Operator Keyboard

- Width: 43cm
- Height: 84/90cm
- 17mm spacing Alphanumeric Keyboard
- Ergonomic Hard Key Operations
- Indicator Lights Identify Activated Keys
- Integrated Recording Keys for Remote Control of Up to 2 Peripheral Devices and DICOM Devices
- 8 TGC Pods, with Re-mapping Functionality at Any Depth

Monitor

- 17 inch TFT LCD,
- XGA Format:
 - Display size: 1024 x 768
- Tilt/Rotate/Translate
 - Tilt Angle +40° - -90°
 - Rotate Angle: +/-90°
 - Translate Horizontal +/- 442 mm
 - Translate Vertical 165 mm
- Digital Brightness/Dim Bright/Contrast Adjustment

System Overview

Applications

- Abdominal
- Obstetrical
- Gynecological
- Cardiac
- Musculoskeletal
- Vascular
- Urological
- Small Parts and Superficial
- Breast

- Pediatric and Neonatal
- Transcranial
- Endocavitary
- Intraoperative
- Orthopedic

Scanning Methods

- Electronic Sector
- Electronic Convex
- Electronic Linear
- Real Time 4D Volume Sweep

Transducer Types

- Sector Phased Array
- Convex Array
- Microconvex Array
- Linear Array
- Single CW (Pencil) Probes
- Bi-plane Microconvex Arrays
- Volume Probes (4D)

Operating Modes

- B-Mode
- Coded Harmonic Imaging
- M-Mode
- Color Flow Mode (CFM)
- Power Doppler Imaging (PDI) with Directional Map
- PW Doppler with High PRF
- M-Color Flow Mode
- Anatomical M-Mode (option)
- Anatomical M-Color Mode (option)
- B-Flow Mode (option)
- B-Flow Color Mode (option)
- CW Doppler Mode (option)
- PFD Mode (option)
- Tissue Velocity Imaging (TVI) Mode (option)
- Elastography Mode (option)
- 3D/4D Volume Modes (option)
- 3D Static
- 4D Realtime

System Standard Features

- Hard Disk for image storage (50GB)
- Realtime Triplex mode at any depth and any PRF
- Automatic Optimization
- ATO : Auto Tissue Optimization
- Auto TGC
- ASO : Auto Spectrum Optimization
- ACO : Auto Color Optimization
- Coded Harmonic Imaging
- Coded Excitation
- Virtual Convex
- Patient Information Database

- Image Archive on CD/DVD and Hard Drive
- Easy Backup to Media for data security
- TruAccess, Raw Data Processing and Analysis
- Realtime Automatic Doppler Calcs
- OB Calcs
- Fetal Trending
- Multi Gestational Calcs
- Hip Dysplasia Calcs
- Gynecological Calcs
- Vascular Calcs
- Urological Calcs
- Renal Calcs
- InSite Capability
- On-board electronic documentation (CHM/XPS format)
- MPEGVue
- Key macro
- Network Storage
- Quick Save
- B-Steer
- CrossXBeam
- SRI (speckle reduction imaging)

System Options

- Easy 3D
- Advanced 3D, with 3D Landscape
- DICOM 3.0 Connectivity
- LOGIQView
- B-Flow, and B-Flow Color
- Anatomical M-Mode
- Report Designer
- Real Time 4D
- ECG
- Steering CW/Single CW Assy
- Rear Handle
- Drawer
- Probe Cable Hanger
- Urology Probe Holder
- Stress Echo Package
- PFD (Pulsatile Flow Detection)
- Tissue Velocity Imaging (TVI), with Q-Analysis
- Remote Control Switch
- On-board electronic documentation (PDF Format)
- Elastography
- Auto IMT

Media & Peripheral Options

- Integrated Mounting Kits and Remote Controls Provided for
 - B/W Digital thermal printer
 - Digital Color A6 Digital thermal printer

- DVD Video Recorder

Display Modes

- Live and Stored Display Format: Full size and split screen - both w/ thumbnails. For Still and CINE
- Review Image Format: 4x4, and "thumbnails". For Still and CINE
- Simultaneous Capability
 - B/PW
 - B/CFM or PDI
 - B/M
 - B + CFM/M
 - Realtime Triplex Mode (B + CFM or PDI/PW)
 - B-Flow + PW (option)
 - Dual B (B/B)
 - Dual B + CFM or PDI
 - B/PFD (option)
- Selectable Alternating Modes
 - B/M
 - B/PW
 - B + CFM/M
 - B + CFM (PDI)/PW
 - B-Flow + PW (option)
 - 3D – Mode
 - 3D – Color Mode (option)
 - B/CW (option)
- Simultaneous Up/Down Display with Bi-plane probe
 - B
 - B/CFM
 - Multi Image Split Screen
 - Live and/or frozen
 - B + B/CFM or PDI
 - B+B/PFD (option)
 - Independent CINE playback
 - Quad screen format
 - Zoom: Write/Read/Pan
 - Colorized Image
 - Colorized B
 - Colorized M
 - Colorized PW
 - Time line Display
 - Independent Dual B/PW Display
 - Display Formats:
 - Top/ Bottom selectable format (Size: 1/2:1/2; 1/3:2/3; 2/3:1/3)
 - Side/Side selectable format (1/2:1/2; 1/3:2/3; 0:1) Switchable after freeze
- Virtual Convex
- CrossXBeam (option)
- Tissue Velocity Imaging (TVI) Mode (option)
- Elastography Mode (option)

Display Annotation

- Patient Name: First, Last, & Middle combination name can store 62 characters.
- Patient ID: Patient ID can store 31 characters. Up to 22 total characters displayed.
- Age, Sex and Birth Date (optional)
- Hospital Name: 23 characters.
Date: 3 Types selectable
MM/DD/YY, DD/MM/YY, YY/MM/DD
- Time: 2 types selectable
24 hours, 12 hours
- Gestational Age from LMP/EDD/GA/BBT
- Probe Name
- Gray Map names
- Probe Orientation
- Depth Scale Marker
- Lateral Scale Marker
- Focal Zone Markers
- Image Depth
- Zoom Depth
- B-Mode
 - Gain
 - Dynamic Range
 - Imaging Frequency
 - Edge Enhance
 - Frame Averaging
 - Gray Map
 - ATO On/Off
- M-Mode
 - Gain
 - Dynamic Range
 - Time Scale
- Doppler Mode
 - Gain
 - Angle
 - Sample Volume Depth and Width
 - Wall Filter
 - Velocity and/or Frequency Scale
 - Spectrum Inversion
 - Time Scale
 - PRF
 - Doppler Frequency
- Color Flow Mode
 - Line Density
 - Frame Averaging
 - Packet Size
 - Color Scale
 - Color Velocity Range and Baseline
 - Color Threshold Marker
 - Color Gain
 - PDI
 - Color Scale Inversion
 - Color Doppler Frequency
- TGC Curve
- Acoustic Frame Rate
- Cine Frame Number

- VCR Counter
- VCR Status
- VCR Playback Counter
- Body Pattern
- Application Name
- Measurement Results
- Operator Message
- Displayed Acoustic Output
 - TIS: Thermal Index Soft Tissue
 - TIC: Thermal Index Cranial (Bone)
 - TIB: Thermal Index Bone
 - MI: Mechanical Index
- % of Power output
- Biopsy Guide Line and/or Zone
- Heart Rate

General System Parameters

System Setup

- Pre-programmable Categories
- User Programmable Preset Capability
- Factory Default Preset Data
- Languages: English, French, German, Spanish, Italian, Portuguese, Russian, Greek, Swedish, Danish, Dutch, Finnish, Norwegian, Japanese
- OB Report Format: 5 Types, Tokyo Univ., Osaka Univ., USA, Europe, and ASUM
- EFBW: 10 types, Japan, USA and Europe (Tokyo Univ., Osaka Univ., Tokyo Shinozuka, JSUM, German, Shephard, Merz, Hadlock/Shephard, Williams, Brenner)
- Pre-defined Annotations and User Programmable Libraries/Annotations
- Body Patterns: 173 human types plus 14 animal types
- Customized Comment Home Position

Complete User Manual available on board through Help (F1)

User Manual is included on CD with each system. A printed Manual is available upon request.

CINE Memory/Image Memory

- CINE Memory: 192MB
- Dual Image CINE Display
- Quad Image CINE Display
- CINE Gauge and CINE Image Number Display
- CINE Review Loop
- CINE Review Speed: 20 steps (10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 150, 200, 300, 400, 500, 600, 700, 800, 900, 1000%)

- Selectable CINE Sequence for CINE Review
- Measurements, Calculations and Annotations on CINE Playback
- Scrolling Timeline Memory
- Cine Capture Function
- Digital Continuous CINE Capture for Stress Echo (option)

Image Storage

- On-board database of patient information from past exams
- Storage Format: DICOM/Raw Data
- DICOM Still Image Storage:
 - Gray Image
 - Color Image
- Multiframe
- Display Format: Full size, 4x4, and "thumbnails"
- Live image and stored image side-by-side display
- CD-R storage: 700 MB
- DVD storage: -R (4.7GB)
- Conversion to JPEG, AVI (SaveAs) and WMV file formats
- Internal Hard Drive Image Storage: 50 GB
- External USB 2.0 Hard Drive support for Import, Export, DICOM Read, SaveAs and MPEGVue
- USB 1.1 / 2.0 Memory Stick support for SaveAs and MPEGVue
- Network Storage support for Import, Export, DICOM Read, SaveAs, MPEGVue

Connectivity

- Ethernet network connection
- DICOM 3.0 (option)
 - Verify
 - Print
 - Store
 - Modality Worklist
 - Storage Commitment
 - Modality Performed Procedure Step (MPPS)
 - Media Exchange
 - Query/Retrieve; supported on Centricity and other compatible vendors
 - Structured Reporting; compatible with LOGIQworks
 - Public SR Template

Scanning Parameters

- Digital Beam former
- 7168 processing channels

- Frame Rate: Max 1,600F/s
- Minimum Depth of Field: 1 cm (probe dependent)
- Maximum Depth of Field: 30 cm (probe dependent)
- Transmission Focus
 - 1 – 8 Focus Points selectable (probe and application dependent)
- Dual Beam forming in B-Mode
- Multi-Frequency
- Frequency Range dependent on probe
- 256 Shades of Gray
- Dynamic Range
- Adjustable Field of View (FOV) up to 170 degree depending on probe
- Image Reverse: Right/Left
- Image Rotation: 5 steps
 - Rotation: 0°, 90°, 180°, 270°, 360°

B-Mode

- B/M Acoustic Output
- Image Reverse: Right/ Left
- B Color
- Thermal Index: TIC, TIS, TIB
- Focus Number
- Focus Width
- Compression
- Line Density
- Suppression
- Frame Average
- Edge Enhance
- Scanning Size (FOV or Angle): probe dependent, see probe specifications
- Gray Scale Map
- Gain
- Dynamic Range
- Depth: 2 – 30 cm, depend on probe.
- Rejection
- Frequency
- Dual Beam: On/Off pre-settable
- Auto Line Density: On/Off pre-settable
- Steered Linear

Color Flow Mode

- Base Line: 0 – 100 %, 10 % step
- Invert: On/Off
- CF/PDI Focus Depth
- CF/PDI Flash Suppression
- CF/PDI Acoustic Output: 0 – 100%
- CF/PDI Angle Steer
- Packet Size
- Line Density: 5 steps
- Frame Average: 7 steps
- PRF
- Spatial Filter
- Gain: 0 – 40 dB, 0.5 dB step
- Wall Filter
- CF/PDI Vertical Size (mm) of ROI
- CF/PDI Center Depth (mm) of ROI
- CF/PDI Frequency
- Color Map

- Transparency Map
- Color Threshold: 0 – 100 %, 5 % step
- Accumulation

Power Doppler Imaging

- PDI Map
- CF/PDI Flash Suppression
- CF/PDI Focus Depth
- CF/PDI Acoustic Output: 0 – 100%
- CF/PDI Angle Steer
- Packet Size
- Spatial Filter
- Frame Average
- PRF
- Power Threshold
- Gain
- Wall Filter
- CF/PDI Frequency
- Transparency Map
- Invert: On/Off

M-Mode

- Sweep Speed
- M Color
- M/PW Display Format: V-1/3B, V-1/2B, V-2/3B, H-1/2B, H-1/4B, TL only
- B/M Acoustic Output
- Rejection
- Dynamic Range
- Edge Enhance
- Gray Scale Map
- M Gain

Anatomical M-Mode (option)

- M-mode cursor adjustable at any plane
- Can be activated from a CINE loop from a live or stored image
- Available with Color Mode

PW/CW-Mode

- Adjust Velocity scales
- Gray Scale Map: 4 types
- Base Line: 5 – 95 %
- SV Gate: 1 – 16 mm
- Angle Correct: +/- 90°, 1° step
- Spectral Color: 6 types
- PW Sweep Speed: 8 steps
- Invert: On/Off
- M/PW Display Format: V-1/3B, V-1/2B, V-2/3B, H-1/2B, H-1/4B, TL only
- Duplex: On/Off (PW only)
- PW Acoustic Output: 0 – 100 %
- Time Resolution
- Gain
- Wall Filter
- PW Angle Steer
- PRF
- Sample Volume Depth
- CW-Mode (option) is Available on the Following Probes

- 3S
- 5S
- 7S
- 3Sp
- 5Sp
- P2D
- P6D

Elastography Mode (option)

- Elasto Acoustic Output: 0 – 100%
- Line Density
- Elasto Frequency
- Frame Average
- Axial Smoothing
- Later Smoothing
- Window
- Frame Reject
- Noise Reject
- Transparency Map
- Color and Gray Map
- Soft Compress
- Hard Compress
- Quality Graph : On/Off
- Available on the following Probes
 - 11L

Coded Harmonic Imaging

- Available on the Following Probes
 - 4C
 - 5CS
 - E8C
 - E8CS
 - 8C
 - ERB
 - BE9C
 - BE9CS
 - 3S
 - 5S
 - 7S
 - 3Sp
 - 5Sp
 - 8L
 - 9L
 - 11L
 - i12L
 - i739
 - T739
 - 4D3C-L
 - 4D5C-L
 - 4DE7C
 - 4D8C
- Line Density
- Suppression
- Edge Enhance
- Gray Scale Map
- Gain
- Dynamic Range
- Rejection
- Auto Line Density: On/Off pre-settable
- Frequency: depend on probe

Coded Excitation

- Available on the following probes the Following Probes
 - 11L
 - 8C
 - E8C
 - E8CS
 - ERB
 - BE9C
 - BE9CS

Virtual Convex

- Available on the Following Probes
 - 8L
 - 9L
 - 11L
 - i12L
 - T739
 - i739
 - 3S
 - 5S
 - 7S
 - 3Sp
 - 5Sp
 - ERB - Linear
 - 4C
 - 5CS
 - 4D3C-L
 - 4D5C-L

Automatic Optimization

- Optimize B-Mode, B-Flow image to improve contrast resolution.
- Auto-TGC in B-Mode and Color – adjusts overall and axial gain
- Optimize Spectral Waveform – adjusts baseline, invert, PRF (on live image), and angle correction
- Algorithm works on focal zone/ number and depth changes
- Available on stored or live image
- Available in B-Mode, B-Flow, PW Doppler, and Color Doppler

B-Flow (option)

- Available on 8L, 9L, 11L, i739, T739, 4C, 5CS and 4D3C-L, 4D5C-L Probes
- Background: On/Off
- Sensitivity/PRI
- Line Density
- Edge Enhance
- Frame Average
- Gray Scale Map
- Dynamic Range
- Gain
- Auto Line Density: On/Off pre-settable
- Dual Beam: On/Off pre-settable
- B-Flow Color
- Accumulation

LOGIQView (option)

- Available on all probes
- Extended Field of View Imaging
- For use in B-Mode
- LOGIQView Status
- Auto detection of scan direction
- Pre or post-process zoom up to 10X
- Rotation
- Measurements in B-Mode

Advanced 3D (option)

- Acquisition of Color data
- Automatic rendering
- 3D Landscape technology
- 3D Movie
- Main Planes Mode

CrossXBeam

- Provides Spatial Compounding
- Available on the linear and convex probes
 - 4C
 - 5CS
 - 8C
 - E8C
 - E8CS
 - 8L
 - 9L
 - 11L
 - i739
 - T739
 - i12L
 - BE9C
 - BE9CS
 - 4D3C-L
 - 4D5C-L
 - 4DE7C
 - 4D8C
 - ERB

- Compatible with Side by Side Display
- Compatible with: Color mode, PW Mode, SRI-HD, Coded Harmonic Imaging, Virtual Convex

Stress Echo Package (option)

- Advanced and flexible stress-echo examination capabilities
- Provides exercise and pharmacological protocol templates
 - 6 default templates
- Template editor for user configuration of existing templates or creation of new templates
- Reference scan display during acquisition for stress level comparison (dual screen)
 - Baseline level/Previous level

selectable

- Raw data continuous capture
- Wall motion scoring (bulls-eye and segmental)

PFD (option)

- Available on all probes
- CF/PDI/PFD Focus Depth
- CF/PDI/PFD Acoustic Output: 0 – 100
- CF/PDI/PFD Angle Steer: 0, +/- 10°, +/- 20°
- Packet Size:
- Spatial Filter
- Frame Average: 7 steps
- PRF:
- Power Threshold: 0 – 100 %, 5 % step
- Gain: 0 – 40 dB, 0.5 dB step
- Wall Filter:
- CF/PDI/PFD Frequency
- Transparent: 5 steps
- Invert: On/Off

SRI-HD

- High Definition Speckle Reduction Imaging
- Provides 6 levels of speckle reduction
- Available on all probes
- Compatible with ALL scanning modes
- Compatible with Side by Side Display

TVI (option)

- Myocardial Doppler Imaging with color overlay on tissue image
- Available on all sector probes
- Tissue color overlay can be removed to show just the 2D image, still retaining the tissue velocity information
- Anatomical M-mode: generated from the cursor independent from the axial plane
- Q-Analysis: Multiple Time -Motion trace display from selected points in the myocardium

Real Time 4D (option)

- Acquisition Modes:
 - Realtime 4D mode
 - Static 3D mode
- Visualization Modes:
 - 3D Rendering (diverse surface and intensity projection modes)
 - Sectional Planes (3 Section planes perpendicular to each other)
- Render Mode:
 - Surface texture, Surface Smooth, max-, min- and X-ray (average intensity projection), Mix Mode of two render Modes
- Curved 3point Render start
- Scalpel: 3D Cut tool
- Display Format:

- Quad: A-/B-/C-Plane/3D
- Dual: A-Plane/3D
- Single: 3D or A- or B- or C-Plane

Pre-Processing

- Write Zoom up to 8x
- B/M-Mode
 - Gain
 - TGC
 - Acoustic Output
 - Transmission Focus Position
 - Transmission Focus Number
 - Transmission Focus Width
 - Imaging Frequency
 - Edge Enhancement
 - Line Density Control
 - Live Anatomical M-mode
- PW/CW-Mode
 - Gain
 - Compression
 - Acoustic Output
 - Doppler Frequency
 - Velocity Scale (PRF)
 - PW/CF Ratio
 - Wall Filter
 - Time Resolution
 - Sample Volume Gate for PW-Mode
 - Length
 - Depth
- Color Flow Mode
 - CFM Gain
 - CFM Velocity Scale (PRF), or PFD Scale (PRF)
 - Acoustic Output
 - CFM Frequency
 - Wall Filter
 - Packet Size
 - CFM Spatial Filter
 - CFM Line Density
 - CFM Regression Filter
 - Accumulation

Post-Processing w/ TruAccess (Raw Data)

- SRI-HD – Selectable level of Speckle Reduction Imaging
- Max Read Zoom to 8x
- B/M-Mode
 - ATO (Auto Tissue Optimization)
 - Image Reverse
 - Image Rotation
 - Gray Map
 - Colorized B and M
 - Gain
 - Dynamic Range
 - TGC
 - Compression
 - Rejection
 - Frame Averaging
 - Suppression

- Sweep Speed for M-Mode
- Anatomical M Mode
- PW/CW-Mode
 - ASO (Auto Spectral Optimization)
 - Base Line Shift
 - Gray Map
 - Compression
 - Rejection
 - Colorized D
 - Display Format
 - Sweep Speed
- Color Flow Mode
 - ACO (Auto Color Optimization)
 - Base Line Shift
 - Color Map
 - Frame Averaging
 - CFM Display Threshold
 - Angle Correct (PW mode)
 - Quick Angle Correct (PW mode)
 - Auto Angle Correct (PW mode)
 - Spectral Invert for Color and Doppler
- 3D reconstruction from a stored CINE loop
- Anatomical M-Mode
- Accumulation
- Cine Capture

Physiological Input Panel (Option)

- Physiological Input
 - ECG, 1 channel
- Adjustable ECG Gain Control
- Automatic Heart Rate Display

Measurements / Calculations

General B-Mode

- Depth & Distance
- Circumference (Ellipse / Trace)
- Area (Ellipse / Trace)
- Volume (Ellipsoid)
- % Stenosis (Area or Diameter)
- Angle between two lines

General M-Mode

- M-Depth
- Distance
- Time
- Slope
- Heart Rate

General Doppler Measurements/Calculations

- Velocity
- Time
- A/B Ratio (Velocities / Frequency Ratio)
- PS (Peak Systole)
- ED (End Diastole)
- PS/ED (PS/ED Ratio)
- ED/PS (ED/PS Ratio)

- AT (Acceleration Time)
- ACCEL (Acceleration)
- TAMAX (Time Averaged Maximum Velocity)
- Volume Flow (TAMEAN and Vessel Area)
- Heart Rate
- PI (Pulsatility Index)
- RI (Resistivity Index)

Real-time Doppler Auto Measurements / Calculations

- PS (Peak Systole)
- ED (End Diastole)
- MD (Minimum Diastole)
- PI (Pulsatility Index)
- RI (Resistivity Index)
- AT (Acceleration Time)
- ACC (Acceleration)
- PS/ED (PS/ED Ratio)
- ED/PS (ED/PS Ratio)
- HR (Heart Rate)
- TAMAX (Time Averaged Maximum Velocity)
- PVAL (Peak Velocity Value)
- Volume Flow (TAMEAN and Vessel Area)

OB Measurements/Calculations

- Gestational Age by:
 - GS (Gestational Sac)
 - CRL (Crown Rump Length)
 - FL (Femur Length)
 - BPD (Biparietal Diameter)
 - AC (Abdominal Circumference)
 - HC (Head Circumference)
 - APTD x TTD (Anterior/Posterior Trunk Diameter by Transverse Trunk Diameter)
 - LV (Length of Vertebra)
 - FTA (Fetal Trunk Cross-sectional Area)
 - HL (Humerus Length)
 - BD (Binocular Distance)
 - FT (Foot Length)
 - OFD (Occipital Frontal Diameter)
 - TAD (Transverse Abdominal Diameter)
 - TCD (Transverse Cerebellum Diameter)
 - THD (Thorax Transverse Diameter)
 - TIB (Tibia Length)
 - ULNA (Ulna Length)
- Estimated Fetal Weight (EFW) by:
 - AC, BPD
 - AC, BPD, FL
 - AC, BPD, FL, HC
 - AC, FL
 - AC, FL, HC
 - AC, HC
- Calculations and Ratios
 - FL/BPD
 - FL/AC
 - FL/HC
 - HC/AC

- CI (Cephalic Index)
- AFI (Amniotic Fluid Index)
- Measurements / Calculations by: Jeanty, Merz, Tokyo University, Mercer, Hansmann, Erickson, Hill, Shephard, Hadlock, Hohler, Campbell
- Fetal Graphical Trending
- Growth Percentiles
- Multi-Gestational Calculations (4)
- Fetal Qualitative Description (Anatomical survey)
- Fetal Environmental Description (Biophysical profile)
- Programmable OB Tables
- Over 20 selectable OB Calcs
- Expanded Worksheets

GYN Measurements/Calculations

- Right Ovary Length, Width, Height
- Left Ovary Length, Width, Height
- Uterus Length, Width, Height
- Ovarian Volume
- ENDO (Endometrial thickness)
- Ovarian RI
- Uterine RI
- Follicular measurements
- Summary Reports

Vascular

Measurements/Calculations

- SYS DCCA (Systolic Distal Common Carotid Artery)
- DIAS DCCA (Diastolic Distal Common Carotid Artery)
- SYS MCCA (Systolic Mid Common Carotid Artery)
- DIAS MCCA (Diastolic Mid Common Carotid Artery)
- SYS PCCA (Systolic Proximal Common Carotid Artery)
- DIAS PCCA (Diastolic Proximal Common Carotid Artery)
- SYS DICA (Systolic Distal Internal Carotid Artery)
- DIAS DICA (Systolic Distal Internal Carotid Artery)
- SYS MICA (Systolic Mid Internal Carotid Artery)
- DIAS MICA (Diastolic Mid Internal Carotid Artery)
- SYS PICA (Systolic Proximal Internal Carotid Artery)
- DIAS PICA (Diastolic Proximal Internal Carotid Artery)
- SYS DECA (Systolic Distal External Carotid Artery)
- DIAS DECA (Diastolic Distal External Carotid Artery)
- SYS PECA (Systolic Proximal External Carotid Artery)

- DIAS PECA (Diastolic Proximal External Carotid Artery)
- VERT (Systolic Vertebral Velocity)
- SUBCLAV (Systolic Subclavian Velocity)
- Summary Reports
- Mean IMT Measurement Tools
- Automated IMT Measurement

Cardiac

Measurements/Calculations

- Cardiac calculation package including extensive measurements and display of multiple repeated measurements
- Parameter annotation follow ASE standard

Report Writer (Option)

- On-board reporting package automates report writing
- Formats various exam results into a report suitable for printing to a windows printer or reviewing on a standard PC
- Exam results include patient info, exam info, measurements, calculations, images, comments and diagnosis
- Standard templates provided
- Customizable templates

Probes

- 4C Wide Band Convex Probe
 - Applications: Abdomen, OB Gyn, Urology, Vascular
 - Probe Band Width : 1.55 – 4.6 MHz
 - Number of Element: 128
 - Convex Radius : 60 mmR
 - FOV (Max) : 58°
 - Physical Foot Print : 61 x 13 mm
 - B-mode Imaging Frequency : 2.0, 3.0, 4.0, 5.0 MHz
 - Harmonic Frequency : 4.0, 5.0, 5.2, 5.5 MHz
 - Doppler Frequency : 2.5, 3.3 MHz
 - Biopsy Guide Available : Multi Angle, Reusable
- 5CS Convex Probe
 - Applications: Abdomen, OB Gyn, Urology
 - Probe Band Width : 1.9 – 5.58MHz
 - Number of Element : 128
 - Convex Radius : 60 mmR
 - FOV (Max) : 58°
 - Physical Foot Print : 61 x 11 mm
 - B-mode Imaging Frequency : 2.0, 3.0, 4.0, 5.0 MHz
 - Harmonic Frequency : 4.0, 5.0, 5.5, 6.0

MHz

- Doppler Frequency : 2.5, 3.3 MHz
- Biopsy Guide Available : Multi Angle, Reusable
- E8C Wide Band Microconvex Probe
 - Applications : OB Gyn, Urology, Endocavity
 - Probe Band Width : 3.5 – 11.4 MHz
 - Number of Element : 128
 - Convex Radius : 11 mmR
 - FOV (Max) : 133°
 - Physical Foot Print : 26 x 5 mm
 - B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
 - Harmonic Frequency : 8.0, 10.0 MHz
 - Doppler Frequency : 4.0, 5.0 MHz
 - Biopsy Guide Available : Single Angle, Disposable and Reusable
- E8CS Wide Band Microconvex Probe
 - Applications : OB Gyn, Urology, Endocavity
 - Probe Band Width : 3.35 – 10 MHz
 - Number of Element : 128
 - Convex Radius : 8.7 mmR
 - FOV (Max) : 168°
 - Physical Foot Print : 26 x 4.3 mm
 - B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
 - Harmonic Frequency : 8.0, 10.0 MHz
 - Doppler Frequency : 4.0, 5.0 MHz
 - Biopsy Guide Available : Single Angle, Disposable and Reusable
- 8C Wide Band Microconvex Probe
 - Applications : Neonatal, Pediatrics
 - Probe Band Width : 3.5 – 11.4 MHz
 - Number of Element : 128
 - Convex Radius : 11 mmR
 - FOV (Max) : 133°
 - Physical Foot Print : 26 x 5 mm
 - B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
 - Harmonic Frequency : 8.0, 10.0 MHz
 - Doppler Frequency : 4.0, 5.0 MHz
 - Biopsy Guide Available : None
- 3S Wide Band Phased Array Sector Probe
 - Applications : Cardiac, Transcranial, Abdomen
 - Probe Band Width : 1.37 – 3.25 MHz
 - Number of Element : 64
 - FOV (Max) : 90°
 - Physical Foot Print : 19 x 12 mm
 - B-mode Imaging Frequency : 2.0, 2.5, 3.0 MHz
 - Harmonic Frequency : 2.8, 3.0, 3.2, 3.6 MHz
 - Doppler Frequency : 1.7, 2.0, 2.2 MHz

- CW Doppler Frequency : 2.0 MHz
- Biopsy Guide Available : Multi Angle, Reusable
- 5S Wide Band Phased Array Sector Probe
 - Applications : Cardiac, Transcranial, Abdomen
 - Probe Band Width : 2.18 – 5.3MHz
 - Number of Element : 96
 - FOV (Max) : 90°
 - Physical Foot Print : 19 x 11 mm
 - B-mode Imaging Frequency : 3.0, 4.0, 5.0 MHz
 - Harmonic Frequency : 4.0, 5.0 MHz
 - Doppler Frequency : 2.5, 3.3 MHz
 - CW Doppler Frequency : 2.5MHz
 - Biopsy Guide Available: Multi Angle, Reusable
- 7S Wide Band Phased Array Sector Probe
 - Applications: Cardiac, Pediatrics, Abdomen
 - Probe Band Width : 2.88 – 8.3 MHz
 - Number of Element : 96
 - FOV (Max) : 90°
 - Physical Foot Print : 14 x 7 mm
 - B-mode Imaging Frequency : 5.0, 6.0, 7.0 MHz
 - Harmonic Frequency : 6.0, 7.0, 8.0, 8.5 MHz
 - Doppler Frequency : 4.0, 5.0 MHz
 - CW Doppler Frequency : 4.0 MHz
 - Biopsy Guide Available : None
- 3Sp Wide Band Phased Array Sector Probe
 - Applications : Cardiac, Transcranial, Abdomen
 - Probe Band Width : 1.4 – 5.0 MHz
 - Number of Element : 64
 - FOV (Max) : 90°
 - Physical Foot Print : 16 x 14 mm
 - B-mode Imaging Frequency : 2.0, 3.0, 4.0, 5.0 MHz
 - Harmonic Frequency : 3.0, 3.5, 4.0, 5.0, 5.5 MHz
 - Doppler Frequency : 1.8, 2.0, 2.5, 3.3, 4.0 MHz
 - CW Doppler Frequency : 2.0 MHz
 - Biopsy Guide Available: Multi Angle, Reusable
- 5Sp Wide Band Phased Array Sector Probe
 - Applications : Cardiac, Transcranial, Abdomen
 - Probe Band Width : 2.3– 8.4 MHz
 - Number of Element : 64
 - FOV (Max) : 90°
 - Physical Foot Print : 10 x 10 mm
- B-mode Imaging Frequency : 4.0, 5.0, 6.7, 8.0 MHz
- Harmonic Frequency : 5.0, 6.0, 8.0, 10.0 MHz
- Doppler Frequency : 2.7, 3.1, 3.3, 4.0, 5.0 MHz
- CW Doppler Frequency : 2.5 MHz
- Biopsy Guide Available: Multi Angle, Reusable
- 8L Wide Band Linear Probe
 - Applications : Vascular, Small Parts
 - Probe Band Width : 3.4 – 9.9MHz
 - Number of Element : 128
 - FOV (Max) : 38 mm
 - Physical Foot Print : 38 x 4 mm
 - B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
 - Harmonic Frequency : 8.0, 10.0, 12.0 MHz
 - Doppler Frequency : 5.0, 6.7 MHz
 - Steered Angle : 0, +/- 10, 20°
 - Biopsy Guide Available : Multi Angle, Reusable
- 9L Wide Band Linear Probe
 - Applications: Vascular, Small Parts
 - Probe Band Width : 2.7 – 7.8MHz
 - Number of Element : 192
 - FOV (Max) : 44 mm
 - Physical Foot Print : 44 x 6 mm
 - B-mode Imaging Frequency : 5.0, 7.0, 9.0 MHz
 - Harmonic Frequency : 8.0, 10.0 MHz
 - Doppler Frequency : 4.0, 5.0 MHz
 - Steered Angle : 0, +/- 10, 20°
 - Biopsy Guide Available : Multi Angle, Reusable
- 11L Wide Band Linear Probe
 - Applications : Small Parts, Vascular, Neonatal, Pediatrics
 - Probe Band Width : 3.42 – 10.85 MHz
 - Number of Element : 192
 - FOV (Max) : 38.4 mm
 - Physical Foot Print : 38 x 4 mm
 - B-mode Imaging Frequency : 7.0, 10.0, 12.0 MHz
 - Harmonic Frequency : 10.0, 12.0, 13.0 MHz
 - Doppler Frequency : 5.0, 6.7 MHz
 - Steered Angle : 0, +/- 10, 20°
 - Biopsy Guide Available : Multi Angle, Reusable
- i12L Intraoperative Wide Band Linear Probe
 - Applications : Intraoperative, Small Parts, Vascular, Pediatrics
 - Probe Band Width : 4.45 – 11.5MHz
 - Number of Element : 96
- FOV (Max) : 25 mm
- Physical Foot Print : 25 x 7 mm
- B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
- Harmonic Frequency : 10.0, 12.0MHz
- Doppler Frequency : 5.0, 6.7 MHz
- Steered Angle : 0, +/- 10, 20°
- Biopsy Guide Available : None
- T739 Intraoperative Wide Band Linear Probe
 - Applications : Intraoperative, Small Parts, Vascular, Pediatrics
 - Probe Band Width : 3.5 – 9.5MHz
 - Number of Element: 192
 - FOV (Max) : 39 mm
 - Physical Foot Print : 39 x 5 mm
 - B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
 - Harmonic Frequency : 8.0, 10.0, 12.0 MHz
 - Doppler Frequency : 5.0, 6.7 MHz
 - Steered Angle : 0, +/- 10, 20°
 - Biopsy Guide Available : Multi Angle, Reusable
- I739 Intraoperative Wide Band Linear Probe
 - Applications : Intraoperative, Small Parts, Vascular, Pediatrics
 - Probe Band Width : 3.5 – 9.5MHz
 - Number of Element: 192
 - FOV (Max) : 39 mm
 - Physical Foot Print : 39 x 5 mm
 - B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
 - Harmonic Frequency : 8.0, 10.0, 12.0 MHz
 - Doppler Frequency : 5.0, 6.7 MHz
 - Steered Angle : 0, +/- 10, 20°
 - Biopsy Guide Available : None
- BE9C Wide Band Biplane Microconvex Probe
 - Applications: Urology, Endocavity
 - Probe Band Width : 3.9 – 11.4 MHz
 - Number of Element : 96 x 2
 - Convex Radius : 9 mmR
 - FOV (Max) : 127°
 - Physical Foot Print : 20 x 5 mm
 - B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
 - Harmonic Frequency : 8.0, 10.0 MHz
 - Doppler Frequency : 4.0, 5.0 MHz
 - Biopsy Guide Available: Single Angle Reusable (stainless steel), Disposable
- BE9CS Wide Band Biplane Microconvex Probe
 - Applications: Urology, Endocavity
 - Probe Band Width : 3.9 – 11.4 MHz

- Number of Element : 96 x 2
- Convex Radius : 9 mmR
- FOV (Max) : 127°
- Physical Foot Print : 20 x 5 mm
- B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
- Harmonic Frequency : 8.0, 10.0 MHz
- Doppler Frequency : 4.0, 5.0 MHz
- Biopsy Guide Available : Single Angle Reusable (stainless steel), Disposable

- ERB Wide Band Biplane Probe

- Applications: Urology
- Probe Band Width:
 - ERB Linear: 3.5 – 12MHz
 - ERB Convex: 3.5 – 9.5 MHz
- Number of Element: 128
- FOV (Max) :
 - ERB Linear: 51mm
 - ERB Convex: 123°
- Physical Foot Print:
 - ERB Linear: 51 x 5 mm
 - ERB Convex: 17 x 5.5 mm
- B-mode Imaging Frequency: 6.0, 8.0, 10.0 MHz
- Harmonic Frequency: 8.0, 10.0 MHz
- Doppler Frequency: 5.0, 6.7 MHz
- Biopsy Guide Available: Multi Angle, Grid Reusable

- 4D3C-L Convex Volume Probe

- Applications : Abdomen, OB Gyn
- Probe Band Width : 2.0 – 5.0 MHz
- Number of Element: 192
- Convex Radius : 39.1 mmR
- Volume Sweep Radius: 19.8 mmR
- FOV: 87° Volume 85° x 80°
- Physical Foot Print : 60 x 13 mm
- B-mode Imaging Frequency : 3.0, 4.0, 5.0 MHz
- Harmonic Frequency : 4.0, 4.5, 4.8, 5.0 MHz
- Doppler Frequency : 2.5, 3.3 MHz
- Biopsy Guide Available : Single Angle, Reusable (stainless steel, plastic)

- 4D5C-L Convex Volume Probe

- Applications : Abdomen, OB Gyn
- Probe Band Width : 2.5 – 7 MHz
- Number of Element: 192
- Convex Radius : 39.1 mmR
- Volume Sweep Radius: 19.8 mmR
- FOV: 87° Volume 85° x 80°
- Physical Foot Print : 60 x 13 mm
- B-mode Imaging Frequency : 4.0, 5.0, 6.0 MHz
- Harmonic Frequency : 5.0, 6.0, 6.5, 7.0 MHz
- Doppler Frequency : 2.5, 3.3 MHz
- Biopsy Guide Available : Single Angle, Reusable (stainless steel, plastic)

- 4D8C Micro Convex Volume Probe

- Applications : Neonatal, Pediatrics
- Probe Band Width : 3.3 – 9.1MHz
- Number of Element: 192
- Convex Radius : 14.0 mmR
- Volume Sweep Radius: 80 mm
- FOV: 120° Volume 37.4 mm x 29°
- Physical Foot Print : 30 x 50 mm
- B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
- Harmonic Frequency : 8.0, 10.0, 11.0 MHz
- Doppler Frequency : 4.0, 5.0 MHz
- Biopsy Guide Available : Single Angle Reusable(stainless steel, plastic)

- 4DE7C Convex Volume Probe

- Applications : OB Gyn, Urology
- Probe Band Width : 3.75 – 9.25MHz
- Number of Element: 192
- Convex Radius: 10.1 mmR
- Volume Sweep Radius: 11.6 mmR
- FOV: 133° Volume 146° x 90°
- Physical Foot Print : 27 x 6 mm
- B-mode Imaging Frequency : 6.0, 8.0, 10.0 MHz
- Harmonic Frequency : 8.0, 10.0, 11.0 MHz
- Doppler Frequency : 4.0, 5.0 MHz
- Biopsy Guide Available : Single Angle, Reusable (stainless steel)

- P2D Non-imaging Single CW Doppler Pencil Probe

- Applications : Cardiac
- Frequency: 2.0 MHz

- P6D Non-imaging Single CW Doppler Pencil Probe

- Applications : Cardiac, Vascular, Pediatric
- Frequency: 6.0 MHz

- Footswitch
- USB for BW printer
- USB for Color Printer
- USB for remote control
- USB for DMC
- Additional USB
- Ethernet

Safety Conformance

The LOGIQ P6 PRO are:

- Listed to UL 60601-1 by a Nationally Recognized Test Lab
- Certified to CAN/CSA C22.2 601.1 by an SCC accredited Test Lab
- CE Marked to Council Directive 93/42/EEC on Medical Devices
- Conforms to the following standards for safety:
 - IEC/EN 60601-1 Medical Electrical equipment, General requirement for Safety
 - IEC/EN 60601-1-1 Safety requirements for Medical Electrical Systems
 - IEC/EN 60601-1-2 Electromagnetic compatibility
 - IEC/EN 60601-2-37 Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment
 - IEC 61157 Declaration of acoustic output
 - ISO 10993 Biological evaluation of medical devices
 - NEMA UD3 Acoustic output display (MI, TIS, TIB, TIC)

Inputs and Outputs

- Video In
 - S-Video
 - Composite Color
- Video Out
 - S-Video
 - Analog VGA
 - Composite Color
- Audio Stereo In
- Audio Stereo Out
- External Microphone In
- Connectors

GE LOGIQ P6 PRO are designed for compatibility with commercially available ultrasound contrast agents. Because the availability of these agents is subject to government regulation and approval, product features intended for use with these agents may not be commercially marketed nor made available before the contrast agent is cleared for use. Contrast related product features are enabled only on systems for delivery to an authorized country or region of use. GE Healthcare makes no claims concerning the safety or effectiveness of contrast agents.

Not all features or specifications described in this document may be available in all probes and/or modes.

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