



LOGIQ Fortis R3.x HDU

Product Specification Sheet

Last updated on: Thursday, January 13, 2022

1	General Specifications	
2	Dimensions and Weight (Dimensions given with floating keyboard stowed and display tilted for transport)	
3	Depth	885 mm, 34.8"
4	Height	1250 – 1800 mm, 49 – 71"
5	Weight	85 kg (187.4 lb)
6	Width	530 mm, 20.9" (Caster), 565 mm, 22.2" (Monitor)
7	Electrical Power	
8	Voltage: 100 – 240 Vac	
9	Frequency: 50/60 Hz	
10	Power consumption maximum of 0.9 kVA with peripherals	
11	Console Design	
12	4 active probe ports	
13	1 inactive probe storage port	
14	Integrated SSD (1 TB)	
15	Integrated DVD-R Multi Drive	
16	On-board storage of thermal printer	
17	Integrated speaker	
18	Integrated locking mechanism that provides rolling lock and caster swivel lock	
19	Integrated cable management	
20	Front and rear handles	
21	Easily removable air filters	
22	Windows 10 64-bit	
23	User Interface	
24	Operator Keyboard	
25	Operating keyboard adjustable in height and rotation	
26	Ergonomic hard key layout	
27	Interactive back-lighting	
28	Integrated recording keys for remote control of up to 4 peripheral devices or DICOM® devices	
29	Integrated gel warmer	
30	Touch Screen	
31	12.1" High-resolution, color, touch, display screen	
32	Interactive dynamic software menu	
33	Brightness adjustment	
34	User-configurable layout	
35	Monitor	
36	23.8" Wide screen high-resolution HDU display	
37	Display translation (independent of console)	
38	350 mm, (13.7 in) horizontal (both directions)	
39	150 mm, (5.9 in) vertical	
40	90° swivel (both directions)	
41	Fold-down and lock mechanism for transportation	
42	Resolution: 1920 X 1080	
43	Anti-glare	
44	Viewing angle 89/89/89/89°	
45	Contrast Ratio: >20,000:1	
46	System Overview	
47	Applications	
48	Abdominal	
49	Obstetrical	
50	Gynecological	
51	Breast	

52	Small Parts
53	Peripheral Vascular
54	Transcranial (adult and neonatal)
55	Pediatric and neonatal
56	Musculoskeletal (general and superficial)
57	Urological
58	Cardiac (adult and pediatric)
59	Interventional
60	Pleural
61	Operating Modes
62	B-Mode
63	M-Mode
64	Color Flow Mode (CFM)
65	B-Flow (Option)
66	Extended Field of View (LOGIQView)
67	Power Doppler Imaging (PDI)
68	PW Doppler
69	CW Doppler (Option)
70	Volume Modes (3D/4D) (Option)
71	Anatomical M-Mode
72	Coded Contrast Imaging (Option)
73	Strain elastography (Option)
74	B Steer+ (Option)
75	Shear wave elastography (Option)
76	UGAP (Option) - Ultrasound Guided Attenuation Parameter Imaging
77	Scanning Methods
78	Electronic sector
79	Electronic convex
80	Electronic linear
81	Mechanical volume sweep
82	Probe Types
83	Sector phased array
84	Convex array
85	Microconvex array
86	Linear array
87	Matrix array
88	Volume probes (4D)
89	Split crystal
90	System Standard Features
91	Advanced user interface with high-resolution 12.1" display touch panel
92	Automatic optimization
93	CrossXBeam™ compounding
94	Speckle Reduction Imaging (SRI-HD, Advanced SRI Type 1)
95	Fine angle steer
96	Coded harmonic imaging
97	Virtual convex
98	Patient information database
99	Image archive on integrated CD/DVD and hard drive
100	Advanced 3D
101	Raw data analysis
102	Real-time automatic Doppler calculations
103	OB calculations
104	Fetal trending
105	Multi gestational calculations
106	Hip dysplasia calculations
107	Gynecological calculations
108	Vascular calculations
109	Urological calculations
110	Renal calculations
111	Cardiac calculations
112	InSite™ capability
113	On-board electronic documentation
114	Auto Doppler Assist

115	Privacy and security, including user and rights management	
116	LOGIQView	
117	External USB printer connection	
118	Network printer support	
119	HDMI output (available for compatible devices)	
120	System Options	
121	Tricefy®	
122	DICOM	
123	B-Flow	
124	Compare Assistant	
125	Auto IMT	
126	Scan Assistant	
127	Breast productivity package	
128	Thyroid productivity package	
129	OB measure assistant	
130	Quantitative Flow Analysis available with Color Flow/PDI	
131	Breast Measure Assistant	
132	B Steer+	
133	Strain elastography	
134	Elastography Quantification	
135	Advanced privacy and security (vulnerability scan)	
136	Power assistant and scan on battery	
137	Storage bins	
138	Shear wave Elastography	
139	Volume Navigation	
140	UGAP	
141	Hepatic Assistant	
142	Coded Contrast Imaging	
143	Stress echo	
144	Cardiac Strain (Automatic Function Imaging)	
145	On-board reporting	
146	TVI	
147	Wireless LAN	
148	CW	
149	DVR	
150	Table tools	
151	Advanced probes	
152	Breast Assistant, Powered by Koios DS™	
153	SonoNT SonoIT	
154	Advanced SRI Type 2	
155	Peripheral Options	
156	Integrated Option for Digital Color thermal Printer	
157	Digital A6 color thermal printer	
158	Foot switch, with programmable functionality	
159	CRF-200U card reader support (Japan Only)	
160	Console protective cover	
161	LOGIQ smart device apps	<ul style="list-style-type: none"> • Photo Assistant • Remote Control
162	Display Modes	
163	Live and stored display format	<ul style="list-style-type: none"> • Full size and split screen – both w/ thumbnails. For still and CINE
164	Review image format	<ul style="list-style-type: none"> • 4x4, and thumbnails. For still and CINE
165	Time line display	<ul style="list-style-type: none"> • Independent Dual B or CrossXBeam/PW Display • CW • Display formats top/bottom selectable format • Side/side selectable format
166	Virtual convex	
167	Simultaneous capability	
168	B or CrossXBeam/PW	
169	B or CrossXBeam/CW (Option)	
170	B or CrossXBeam/CFM or PDI	
171	B/M	
172	B/CrossXBeam	
173	B-Flow/PW	

174	Real-time Triplex Mode - B or CrossXBeam + CFM or PDI/PW	
175	Selectable alternating modes	
176	B or CrossXBeam/PW	
177	B or CrossXBeam + CFM (PDI)/PW	
178	B/CW (Option)	
179	Multi-image (split/quad screen)	
180	Live and/or frozen	
181	B or CrossXBeam + B or CrossXBeam/CFM or PDI or B-Flow (Option)	
182	PW/M	
183	Independent Cine playback	
184	Display Annotation	
185	Patient name: first, last and middle	
186	Patient ID	
187	Alternate patient ID	
188	Age, sex and date of birth	
189	Hospital name	
190	Date format: three types selectable	<ul style="list-style-type: none"> • MM/DD/YY • DD/MM/YY • YY/MM/DD
191	Time format: 2 types selectable	<ul style="list-style-type: none"> • 24 hours • 12 hours
192	Gestational age from	<ul style="list-style-type: none"> • LMP • GA • EDD • BBT
193	Probe name	
194	Map names	
195	Probe orientation	
196	Depth scale marker	
197	Lateral scale marker	
198	Focal zone markers	
199	Image depth	
200	Zoom depth	
201	B-Mode	<ul style="list-style-type: none"> • Gain • Dynamic range • Imaging frequency • Frame averaging • Gray map • SRI
202	M-Mode	<ul style="list-style-type: none"> • Gain • Dynamic range • Time scale
203	Doppler Mode	<ul style="list-style-type: none"> • Gain • Angle • Sample volume depth and width • Wall filter • Velocity and/or frequency scale • Spectrum inversion • Time scale • PRF • Doppler frequency
204	Color Flow Doppler Mode	<ul style="list-style-type: none"> • Line density • Frame averaging • Color scale, 3 types: Power, directional PDI and symmetrical velocity imaging • Color velocity range and baseline • Color threshold marker • Color gain • PDI • Spectrum inversion • Doppler frequency
205	Digital TGC with 8 independent controls	
206	Acoustic frame rate	

207	CINE gage, image number/frame number	
208	Body pattern: multiple human and animal types	
209	Application name	
210	Measurement results	
211	Operator message	
212	Displayed acoustic output	<ul style="list-style-type: none"> • TIS: Thermal Index Soft Tissue • TIC: Thermal Index Cranial (Bone) • TIB: Thermal Index Bone • MI: Mechanical Index
213	% of maximum power output	
214	Biopsy guide line and zone	
215	Heart rate	

216	General System Parameters	
217	System Setup	
218	Pre-programmable categories	
219	User programmable preset capability	
220	Factory default preset data	
221	Languages: English, French, German, Spanish, Italian, Brazilian, Portuguese, Russian, Greek, Swedish, Danish, Dutch, Finnish, Norwegian	
222	OB Report Formats including Tokyo Univ., Osaka Univ., USA, Europe and ASUM and WHO	
223	User defined annotations	
224	Body patterns	
225	Customized comment home position	
226	EZ Imaging: Simplified user interface for high volume workflow	
227	Complete user manual available on board through Help (F1)	
228	User manual and service manual are included in USB stick with each system. A printed manual is available upon request.	
229	CINE Memory/Image Memory	
230	1 GB of CINE memory	
231	Selectable CINE sequence for CINE review	
232	Prospective CINE mark	
233	Measurements/calculations and annotations on CINE playback	
234	Scrolling timeline memory	
235	Dual Image CINE display	
236	Quad Image CINE display	
237	CINE gauge and CINE image number display	
238	CINE review loop	
239	CINE review speed	
240	Image Storage	
241	On-board database of patient information from past exams	
242	Storage formats: DICOM	<ul style="list-style-type: none"> • Compressed/uncompressed • Single/multi-frame • Enhanced (3D/4D) • With/without raw data
243	Export JPEG, JPEG 2000, WMV (MPEG 4) formats	
244	Storage devices:	<ul style="list-style-type: none"> • USB memory stick: 64 MB to 64 GB (for exporting individual images/clips) • CD-R storage: 700 MB • DVD storage: -R (4.7 GB) • Hard drive image storage: ~830GB
245	Compare previous exam images with current exam	
246	Reload of archived date sets	
247	Network storage support for import, export, DICOM read, SaveAs, MPEGVue	
248	Connectivity	
249	Ethernet network connection	
250	Wireless LAN 802.11ac/a/b/g/n (Option)	
251	DICOM 3.0	<ul style="list-style-type: none"> • Verify • Print • Store • Modality worklist • Storage commitment • Modality performed procedure step (MPPS) • Media exchange • Off network/mobile storage queue • Query/retrieve
252	Public SR template	
253	Structured Reporting – compatible with vascular and OB, cardiac and breast standard	
254	InSite capability	
255	Advanced privacy and security (Option)	

256	Physiological input panel (Option)	
257	Physiological input	<ul style="list-style-type: none"> • ECG, 1 channel • PCG, 1 channel • AUX, 1 channel • Dual R-Trigger • Pre-settable ECG R delay time • Pre-settable ECG position • Adjustable ECG gain control • Pre-settable PCG position • Adjustable PCG gain control • Pre-settable AUX position • Adjustable AUX gain control
258	Automatic heart rate display	
259	Auto Ejection Fraction	
260	Report writer (Option)	
261	On-board reporting package automates report writing	
262	Formats various exam results into a report suitable for printing or reviewing on a standard PC	
263	Exam results include patient info, exam info, measurements, calculations, images, and comments Standard templates provided	
264	Customizable templates	
265	Scanning Parameters	
266	cSound™ Imageformer: Infinite number of effective channels	
267	Frame rate: 9,675 Hz maximum	
268	Displayed imaging depth: 0 – 100 cm	
269	Minimum depth of field: 0 – 2 cm (zoom) (probe dependent)	
270	Maximum depth of field: 0 – 100 cm (probe dependent)	
271	Continuous dynamic receive focus	
272	Continuous dynamic receive aperture	
273	Adjustable dynamic range, infinite upper level	
274	Adjustable field of view (FOV)	
275	System Frequency Range: 0.7-24 MHz	
276	Image reverse: right/left	
277	Image rotation of 0°, 90°, 180°, 270°	
278	8 bits stored per color	
279	256 shades of gray	
280	256 color tones	
281	Digital B-Mode	
282	Adjustable	<ul style="list-style-type: none"> • Acoustic power • Gain • Dynamic range • Frame averaging • Gray scale map • Frequency • Speed of sound (application dependent) • Framerate • Scanning size (FOV or Angle) <ul style="list-style-type: none"> – Depending on the probe, see probe specifications • CrossXBeam • B colorization • Reject • Suppression • SRI
283	Digital M-Mode	
284	Adjustable	<ul style="list-style-type: none"> • Acoustic power • Gain • Dynamic range • Gray scale map • Frequency • Sweep speed • M colorization • M display format • Rejection
285	Anatomical M-Mode	
286	M-mode cursor adjustable at any plane	

287	Can be activated from a CINE loop from a live or stored image	
288	M & A capability	
289	Available with Color Flow Mode	
290	Digital Spectral Doppler Mode	
291	Adjustable	<ul style="list-style-type: none"> • Acoustic power • Gain • Dynamic range • Gray scale map • Transmit frequency • Wall filter • PW colorization • Velocity scale range • Sweep speed • Sample volume length • Angle correction • Steered linear • Spectrum inversion • Trace method • Baseline shift • Doppler auto trace • Time resolution • Compression • Trace direction • Trace sensitivity
292	Digital Color Flow Mode	
293	Adjustable	<ul style="list-style-type: none"> • Acoustic power • Color maps, including velocity-variance maps • Gain • Velocity scale range • Wall filter • Packet size • Line density • Spatial filter • Steering angle • Baseline shift • Frame average • Threshold • Auto ROI placement and steering on linear • Accumulation mode • Flash suppression • Shortcuts
294	Digital Power Doppler Imaging	
295	Adjustable	<ul style="list-style-type: none"> • Acoustic power • Color maps, velocity-variance maps • Gain including • Velocity scale range • Wall filter • Packet size • Line density • Spatial filter • Steering angle • Frame average • Threshold • Accumulation mode • Flash suppression • Shortcuts
296	Continuous Wave Doppler (Option)	
297	Available on M5Sc-D, 6S-D, 6Tc-RS, P2D and P6D probes	
298	Steerable CW mode included	

299	Adjustable	<ul style="list-style-type: none"> • Acoustic power • Gain • Dynamic range • Gray scale map • Transmit frequency • Wall filter • CW colorization • Velocity scale range • Sweep speed • Angle correction • Spectrum inversion • Trace method • Baseline shift • Doppler auto trace • Compression • Trace direction • Trace sensitivity
300	Automatic Optimization	
301	Optimize B-Mode image to help improve contrast resolution with one button press	
302	Selectable amount of contrast resolution improvement (low, medium, high)	
303	CTO (Continuous Tissue Optimization) – continuously adjusts B-Mode axial and lateral gain uniformity and overall gain level suppressing the noise	
304	Auto-spectral optimize – adjusts baseline, invert, PRF (on live image), and angle correction with one button press	
305	Auto CF and PW positioning – adjusts ROI position, sample volume position and steering with one button press	
306	Coded Harmonic Imaging	
307	Available on all 2D and 4D probes	
308	B-Flow (Option)	
309	Available on the following probes: C1-6-D, C1-6VN-D, C2-7-D, C2-7VN-D, C2-9-D, C2-9VN-D, C3-10-D, L2-9-D, L2-9VN-D, L3-12-D, L6-24-D, ML6-15-D, M5Sc-D, L8-18i-D	
310	Background	
311	Sensitivity/PRI	
312	Acoustic power	
313	Frequency	
314	Line density	
315	Frame average	
316	Gray scale map	
317	Tint map	
318	Dynamic range	
319	Rejection	
320	Gain	
321	Suppression	
322	SRI	
323	Accumulation	
324	Visualization	
325	Radiantflow™	
326	Easy, fast visualization of tiny vessels, displaying as a 3D effect	
327	Available in Color Doppler, Power Doppler and MVI	
328	B Steer+ (Option)	
329	Available on the following probes: L2-9-D, ML6-15-D, L8-18i-D, L3-12-D, L2-9VN-D	
330	Coded contrast imaging (Option)	
331	Available on the following probes: C1-6-D, C1-6VN-D, C2-9-D, C2-9VN-D, C2-7-D, C2-7VN-D, C3-10-D, IC5-9-D, L2-9-D, L2-9VN-D, L3-12-D, M5Sc-D, ML6-15-D, RAB6-D, RIC5-9-D, L6-24-D	
332	2 contrast timers	
333	Timed updates: 0.05 – 10 seconds	
334	Accumulation mode, seven levels	
335	Maximum enhance mode	
336	Flash	
337	Time intensity curve (TIC) analysis	
338	Parametric imaging	
339	Ability to save still image during clip acquisition	

340	The LOGIQ Fortis is designed for compatibility with most 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.	
341	LOGIQView	
342	Extended field of view Imaging	
343	Up to 160 cm (63") scan length	
344	Available on all 2D imaging probes	
345	For use in B-Mode	
346	CrossXBeam is available on linear probes	
347	Auto detection of scan direction	
348	Pre-or post-process zoom	
349	Rotation	
350	Auto best fit on monitor	
351	Measurements in B-Mode	
352	3D	
353	Allows unlimited rotation and planar translation	
354	3D reconstruction from CINE sweep	
355	Easy 3D available on all probes	
356	Advanced 3D	
357	Acquisition of color data	
358	Automatic rendering	
359	3D landscape technology	
360	3D movie	
361	Real-time 4D (Option)	
362	Acquisition modes	<ul style="list-style-type: none"> • Real Time 4D • Spatio-Temporal Image Correlation (Option) • Static 3D
363	Visualization modes	<ul style="list-style-type: none"> • 3D rendering (diverse surface and intensity projection modes) • Sectional planes (3 section planes perpendicular to each other) • Omniview (Option) • Volume contrast imaging – Static (Option) • Volume contrast imaging – Omniview (Option) • Tomographic ultrasound imaging (Option) • Volume Analyses <ul style="list-style-type: none"> – VOCAL: semi-auto/manual segmentation tool (segmentation using touch screen) (Option) – 3D Static only – Threshold Volume: measure volume below and above a threshold
364	Render mode	<ul style="list-style-type: none"> • Surface texture, surface smooth, max-, min- and X-ray (average intensity projection), mix mode of two render modes • HD<i>live</i>™
365	SonoRender <i>live</i>	
366	Curved 3 point Render start	
367	3D Movie	
368	Scalpel: 3D cut tool	
369	Display format:	<ul style="list-style-type: none"> • Quad: A-/B-/C-Plane/3D • Dual: A-Plane/3D • Single: 3D or A- or B- or C-Plane
370	Automated Volume Calculation – VOCAL II	
371	Betaview	
372	Volume navigation (Option)	
373	Available on the following probes: C1-6VN-D, C2-9VN-D, C2-7VN-D, C3-10-D, L2-9VN-D, ML6-15-D, IC5-9-D, L8-18i-D, M5Sc-D	
374	Sensor-based acquisition	
375	Position markers	
376	Needle tip tracking	
377	Virtual tracking	
378	Auto image registration	
379	Tru3D feature includes	
380	Render modes: gray surface, texture, min-, max-, average-intensity	

381	Measurements: distance, angle, area, volume
382	3D Movie
383	Scan assistant (Option)
384	Factory programs
385	User-defined programs
386	Steps include image annotations, mode transitions, basic imaging controls and measurement initiation
387	Compare Assistant (Option)
388	Allows side-by-side comparison of previous ultrasound and other modality exams during live scanning
389	Breast productivity package
390	Auto measurement
391	Worksheet summary includes measurements and locations for lesions and lymph nodes
392	Feature assessment
393	BI-RADS™ assessment
394	User editable
395	Thyroid productivity package (Option)
396	Auto measurement
397	Worksheet summary includes measurements and locations for nodule, parathyroid and lymph nodes
398	Feature assessment
399	BI-RADS™ assessment
400	User editable
401	Start Assistant
402	Automatically select category, probe, preset, or scan assistant from worklist exam description
403	Learn the category, probe, preset, and scan assistant based on exam description
404	Shear Wave Elastography (Option)
405	Available on the following probes: C1-6-D, C1-6VN-D, L2-9-D, L2-9VN-D, IC5-9-D, L8-18i-D, ML6-15-D, L3-12-D
406	User programmable measurement display in kPa and meters per second
407	Single and dual view display
408	Applications: Abdominal, Breast, Musculoskeletal, Small Parts, Prostate
409	Strain elastography (Option)
410	Available on the following probes: ML6-15-D, L2-9-D, L2-9VN-D, L3-12-D, IC5-9-D, C2-9-D, C2-9VN-D, C1-6-D, C1-6VN-D, L8-18i-D, BE9CS-D
411	Relative analysis tool
412	Applications: Abdominal, Breast, Musculoskeletal, Small Parts, Prostate, Thyroid
413	UGAP (Option)
414	Available on the following probes: C1-6-D, C1-6VN-D, C2-9-D, C2-9VN-D
415	Measures liver attenuation* (attenuation coefficient [dB/cm/MHz]) by auto measure algorithm with reference B-mode
416	Simple and 2D color map (attenuation color map and Measurement Position Indicator Map)
417	Quantitative flow analysis (Option)
418	Available in color and power Doppler
419	TVI (Option)
420	Available on the following probes: M5Sc-D, 6Tc-RS, 6S-D probes
421	Myocardial Doppler imaging with color overlay on tissue image
422	Tissue color overlay can be removed to show just the 2D image, still retaining the tissue velocity information
423	Curved anatomical M-Mode: free (curved) drawing of M-Mode generated from the cursor independent from the axial plane
424	Q-Analysis: multiple time-motion trace display from selected points in the myocardium
425	Stress echo (Option)
426	Advanced and flexible stress echo examination capabilities
427	Provides exercise and pharmacological protocol templates
428	6 default templates
429	Template editor for user configuration of existing templates or creation of new templates
430	Reference scan display during acquisition for stress level comparison (dual screen)
431	Baseline level/previous level selectable
432	Raw data continuous capture
433	Over 100 sec. available
434	Wall motion scoring (bulls-eye and segmental)
435	Smart stress: Automatically set up various scanning parameters (e.g. geometry, frequency, gain) according to same projection on previous level
436	Auto EF (Option)
437	Allows semi-automatic measurement of the global EF (Ejection Fraction)
438	User editable
439	Cardiac AFI (Option)
440	Allows assessment of the complete left ventricle with all segments at a glance by combining three longitudinal views into one comprehensive bulls-eye view
441	2D strain based data moves into clinical practice

442	Virtual Convex	
443	Provides a convex field of view	
444	Compatible with CrossXBeam	
445	Available on all linear and sector probes	
446	SRI-HD and Advanced SRI	
447	Speckle reduction imaging	
448	Provides multiple levels of speckle reduction	
449	Compatible with side-by-side DualView display	
450	Advanced SRI: two types selectable	<ul style="list-style-type: none"> • Type 1 <ul style="list-style-type: none"> - Compatible with all linear, convex and sector probes • Type 2 (Option) <ul style="list-style-type: none"> - Compatible with OB/GYN application
451	CrossXBeam	
452	Provides variable angle spatial compounding	
453	Live side-by-side DualView display	
454	Compatible with	<ul style="list-style-type: none"> • Color mode • PW • SRI • Coded harmonic imaging • Virtual convex
455	Available on all curved and linear probes	
456	Controls available while “live”	
457	Magnification Zoom: Magnifies the entire image on the screen without zoom ROI, 20x maximum zoom factor	
458	Pan Zoom: Magnifies the display of the data within the ROI	
459	HD Zoom: Magnifies the image within the zoom ROI, with higher spatial resolution than original images	
460	B/M/CrossXBeam-Mode	<ul style="list-style-type: none"> • Gain • TGC • Dynamic range • Acoustic output • Framerate control • Sweep speed for M-Mode • CrossXBeam angle
461	PW-Mode	<ul style="list-style-type: none"> • Gain • Dynamic range • Acoustic output • Transmission frequency • PRF • Wall filter • Spectral averaging • Sample volume gate: length, depth • Velocity scale
462	Color Flow-Mode	<ul style="list-style-type: none"> • CFM gain • CFM velocity range • Acoustic output • Wall echo filter • Packet size • Frame rate control • CFM spatial filter • CFM frame averaging • CFM line resolution • Frequency/velocity baseline shift
463	Controls available on “freeze” or recall	
464	Automatic optimization	
465	SRI	
466	CrossXBeam – display non-compounded and compounded image simultaneously in split screen	
467	3D reconstruction from a stored CINE loop	
468	B/M/CrossXBeam-Mode	<ul style="list-style-type: none"> • Gray map optimization • TGC • Colorized B and M • Frame average (loops only) • Dynamic range
469	Anatomical M-Mode	
470	Magnification zoom	
471	Pan zoom	
472	Maximum read zoom to 8x	

473	Baseline shift	
474	Sweep speed	
475	PW mode	<ul style="list-style-type: none"> • Gray map • Post gain • Baseline shift • Sweep speed • Invert spectral wave form • Compression • Rejection • Colorized spectrum • Display format • Doppler audio • Angle correct • Quick angle correct • Auto angle correct
476	Color flow	<ul style="list-style-type: none"> • Overall gain (loops and stills) • Color map • Transparency map • Frame averaging (loops only) • Flash suppression • CFM display threshold • Spectral invert for color/Doppler
477	Anatomical M-Mode on cine loop	
478	4D	<ul style="list-style-type: none"> • Gray map, colorize • Post gain • Change display – single, dual, quad sectional or rendered
479	Measurements/Calculations	
480	General B-Mode	
481	Depth and distance	
482	Circumference (ellipse/trace)	
483	Area (ellipse/trace)	
484	Volume (ellipsoid)	
485	% Stenosis (area or diameter)	
486	Angle between two lines	
487	Dual B-mode capability	
488	General M-Mode	
489	M-Depth	
490	Distance	
491	Time	
492	Slope	
493	Heart rate	
494	General Doppler measurements/calculations	
495	Velocity	
496	Time	
497	A/B ratio (velocities/frequency ratio)	
498	PS (Peak Systole)	
499	ED (End Diastole)	
500	PS/ED (PS/ED Ratio)	
501	ED/PS (ED/PS Ratio)	
502	AT (Acceleration Time)	
503	ACCEL (Acceleration)	
504	TAMAX (Time Averaged Maximum Velocity)	
505	Volume flow (TAMEAN and vessel area)	
506	Heart rate	
507	PI (Pulsatility Index)	
508	RI (Resistivity Index)	
509	Real-time Doppler Auto Measurements/Calculations	
510	PS (Peak Systole)	
511	ED (End Diastole)	
512	MD (Minimum Diastole)	
513	PI (Pulsatility Index)	
514	RI (Resistivity Index)	
515	AT (Acceleration Time)	

516	ACC (Acceleration)	
517	PS/ED (PS/ED Ratio)	
518	ED/PS (ED/PS Ratio)	
519	HR (Heart Rate)	
520	TAMAX (Time Averaged Maximum velocity)	
521	PVAL (Peak Velocity value)	
522	Volume flow (TAMEAN and vessel area)	
523	Abdominal measurements/calculations	
524	Shear Elasto velocity	
525	Shear Elasto stiffness	
526	Attenuation rate	
527	Attenuation coefficient	
528	Summary reports	
529	Small Parts measurements/calculations	
530	Breast Lesion	
531	Thyroid	
532	Parathyroid	
533	Lymph Node	
534	Nodule	
535	Isthmus AP	
536	Shear Elasto velocity	
537	Shear Elasto stiffness	
538	Summary reports	
539	OB measurements/calculations	
540	Gestational age by	<ul style="list-style-type: none"> • GS (Gestational Sac) • CRL (Crown Rump Length) • FL (Femur Length) • BPD (Biparietal Diameter) • AC (Abdominal Circumference) • HC (Head Circumference) • APTD x TTD (Anterior/Posterior Trunk Diameter by Transverse Trunk Diameter) • FTA (Fetal Trunk Cross-sectional Area) • 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) • OOD (Outer Orbital Diameter) • IOD (Inner Orbital Diameter) • FIB (Fibula length) • Radius (Radius length) • LV (Lateral Ventricle width) (= SL)
541	Estimated Fetal Weight (EFW) by:	<ul style="list-style-type: none"> • AC, BPD • AC, BPD, FL • AC, BPD, FL, HC • AC, FL • AC, FL, HC • AC, HC • BPD, APTD, TTD, FL • BPD, APTD, TTD, SL
542	Fetal graphical trending	
543	Growth percentiles	
544	Multi-gestational calculations (4)	
545	Fetal qualitative description (anatomical survey)	
546	Fetal environmental description (biophysical profile)	
547	Programmable OB tables	
548	Over 20 selectable OB calculations	
549	Expanded worksheets	
550	Summary Reports	

551	OB Calculations and ratios
552	FL/BPD
553	FL/AC
554	FL/HC
555	HC/AC
556	CI (Cephalic Index)
557	AFI (Amniotic Fluid Index)
558	CTAR (Cardio-Thoracic Area Ratio)
559	Measurements/calculations by: Alexander, ASUM, ASUM 2001, Bahlmann, Baschat, Berkowitz, Bertagnoli, Brenner, Campbell, CFEF, Chervenak, Chitty, Doubilet, Ebing, Eik-Nes Goldstein, Hadlock, Hansmann, Hellman, Hill, Hohler, Jeanty, JSUM, Kramer, Kurmanavicius, Kurtz, Mari, Mayden, Mercer, Merz, Moore, Nelson, Osaka University, Paris, Pexsters, Rempen, Robinson, Shepard, Shepard/Warsoff, Sonek, Tokyo University, Tokyo/Shinozuka, WHO, Williams, Yarkoni
560	OB measure assistant
561	Allows automatic measurement of BPD, HC, FL and AC
562	User editable
563	SonoNT and SonoIT
564	SonoNT measures the contour detection of the NT border
565	SonoIT is a system supported measurement for Intracranial Translucency
566	GYN measurements/calculations
567	Right ovary length, width, height
568	Left ovary length, width, height
569	Uterus length, width, height
570	Cervix length, trace
571	Ovarian volume
572	ENDO (Endometrial thickness)
573	Ovarian RI
574	Uterine RI
575	Follicular measurements
576	Fibroid measurements
577	Qualitative description (anatomical survey)
578	Mean Uterine Artery (Gomez) Doppler Measurement
579	Summary reports
580	Vascular measurements/calculations
581	SYS DCCA (Systolic Distal Common Carotid Artery)
582	DIAS DCCA (Diastolic Distal Common Carotid Artery)
583	SYS MCCA (Systolic Mid Common Carotid Artery)
584	DIAS MCCA (Diastolic Mid Common Carotid Artery)
585	SYS PCCA (Systolic Proximal Common Carotid Artery)
586	DIAS PCCA (Diastolic Proximal Common Carotid Artery)
587	SYS DICA (Systolic Distal Internal Carotid Artery)
588	DIAS DICA (Diastolic Distal Internal Carotid Artery)
589	SYS MICA (Systolic Mid Internal Carotid Artery)
590	DIAS MICA (Diastolic Mid Internal Carotid Artery)
591	SYS PICA (Systolic Proximal Internal Carotid Artery)
592	DIAS PICA (Diastolic Proximal Internal Carotid Artery)
593	SYS DECA (Systolic Distal External Carotid Artery)
594	DIAS DECA (Diastolic Distal External Carotid Artery)
595	SYS PECA (Systolic Proximal External Carotid Artery)
596	DIAS PECA (Diastolic Proximal External Carotid Artery)
597	VERT (Systolic Vertebral Velocity)
598	SUBCLAV (Systolic Subclavian Velocity)
599	Auto IMT (Option)
600	Summary reports
601	Urological measurements/calculations
602	Bladder volume
603	Prostate volume
604	Left/right renal volume
605	Generic volume
606	Post-void bladder volume
607	Pelvic floor measurements
608	Summary reports
609	TCD measurements/calculations
610	MCA, ACA, PCA, ICA
611	ACoM, PCom A
612	Vert

613	Basilar	
614	MCA/ICA Ratio	
615	Summary reports	
616	Pediatric and Neonatal measurements/calculations	
617	Hip angle	
618	Hip orientation	
619	Summary reports	
620	Probes (All Optional)	
621	6S-D, sector probe	
622	Applications	Pediatric cardiac, pediatric abdomen
623	Bandwidth	2.0 – 8.0 MHz
624	Number of elements	96
625	Field of view (max.)	115°
626	Physical foot print	15 x 9 mm
627	B-Mode frequency	4.0, 4.2, 5.0, 5.5, 6.5 MHz
628	Harmonic frequency	4.7, 4.9, 5.3, 5.7, 6.1, 6.3 MHz
629	PW Doppler frequency	2.8, 3.1, 3.6, 4.2 MHz
630	Color Doppler frequency	2.7, 3.1, 4.2, 5.0 MHz
631	6Tc-RS, trans-esophageal probe	
632	Applications	Adult cardiac
633	Bandwidth	2.0 – 8.0 MHz
634	Number of elements	64
635	Field of view (max.)	90°
636	Physical foot print	37 x 13 x 10 mm
637	B-Mode frequency	5.0, 6.0, 6.5 MHz
638	Harmonic frequency	6.0 MHz
639	PW Doppler frequency	3.1, 3.6, 4.2, 5.0, 6.3 MHz
640	Color Doppler frequency	3.3, 4.1, 4.7, 5.5 MHz
641	BE9CS-D	
642	Applications	Urology
643	Biopsy guide	Single angle, disposable (E8387M); Single angle, reusable (E8387MA)
644	Bandwidth	3.0 - 12.0 MHz
645	Number of elements	64
646	Field of view (max.)	133°
647	Physical foot print	19 x 19 mm
648	B-Mode frequency	6.0, 7.0, 8.0, 9.0 MHz
649	Harmonic frequency	7.0, 8.0, 9.0, 10.0 MHz
650	PW Doppler frequency	4.2, 5.0, 6.3 MHz
651	Color Doppler frequency	4.3, 6.3, 8.2 MHz
652	C1-6-D, XDclear™ convex probe	
653	Applications	Abdomen, OB/GYN, pediatric, peripheral vascular, general musculoskeletal
654	Biopsy guide	Multi-angle, disposable with a reusable bracket (H4917VB)
655	Bandwidth	1.0 – 6.0 MHz
656	Number of elements	192
657	Field of view (max.)	80°
658	Physical foot print	67 x 11 mm
659	B-Mode frequency	2.0, 2.5, 3.0, 4.0 MHz
660	Harmonic frequency	1.5, 2.5, 3.0, 4.5, 6.0, 6.5 MHz
661	PW Doppler frequency	1.7, 2.1, 2.5, 3.6 MHz
662	Color Doppler frequency	1.8, 2.1, 2.5, 2.8, 3.0 MHz
663	C1-6VN-D, VNav inside XDclear convex probe	
664	VNav sensor inside probe for Volume Navigation tracking without sensor cables	
665	Applications	Abdomen, OB/GYN, pediatric, peripheral vascular, general musculoskeletal
666	Biopsy guide	Multi-angle, disposable with a reusable bracket (H4917VB)
667	Bandwidth	1.0 – 6.0 MHz
668	Number of elements	192
669	Field of view (max.)	80°
670	Physical foot print	67 x 11 mm
671	B-Mode frequency	2.0, 2.5, 3.0, 4.0 MHz
672	Harmonic frequency	1.5, 2.5, 3.0, 4.5, 6.0, 6.5 MHz
673	PW Doppler frequency	1.7, 2.1, 2.5, 3.6 MHz
674	Color Doppler frequency	1.8, 2.1, 2.5, 2.8, 3.0 MHz

675	C2-7-D, micro convex biopsy probe	
676	Applications	Abdomen, pediatric
677	Biopsy guide	Multi-angle, disposable with a reusable bracket (H40482LK), Multi-Angle, reusable stainless bracket (H40482LL)
678	Bandwidth	1.0 – 6.0 MHz
679	Number of elements	144
680	Field of view (max.)	110°
681	Physical foot print	31 x 10 mm
682	B-Mode frequency	2.5, 4.0, 6.0 MHz
683	Harmonic frequency	3.0, 4.0, 5.0, 6.0 MHz
684	PW Doppler frequency	1.8, 2.1, 2.5, 3.1 MHz
685	Color Doppler frequency	2.1, 2.4, 3.1, 3.7 MHz
686	C2-7-VN-D, VNav inside XDclear convex probe	
687	VNav sensor inside probe for Volume Navigation tracking without sensor cables	
688	Applications	Abdomen, pediatric
689	Biopsy guide	Multi-angle, disposable with a reusable bracket (H40482LK), Multi-Angle, reusable stainless bracket (H40482LL)
690	Bandwidth	1.0 – 6.0 MHz
691	Number of elements	144
692	Field of view (max.)	110°
693	Physical foot print	31 x 10 mm
694	B-Mode frequency	2.5, 4.0, 6.0 MHz
695	Harmonic frequency	3.0, 4.0, 5.0, 6.0 MHz
696	PW Doppler frequency	1.8, 2.1, 2.5, 3.1 MHz
697	Color Doppler frequency	2.1, 2.4, 3.1, 3.7 MHz
698	C2-9-D, XDclear convex probe	
699	Applications	Abdomen, OB/GYN, pediatric, peripheral vascular, neonatal, neonatal transcranial, general musculoskeletal
700	Biopsy guide	Multi-angle, disposable with a reusable bracket (H4913BA)
701	Bandwidth	2.0 – 9.0 MHz
702	Number of elements	192
703	Field of view (max.)	80°
704	Physical foot print	52 x 9 mm
705	B-Mode frequency	3.0, 4.5, 6.0, 7.0 MHz
706	Harmonic frequency	2.5, 3.5, 5.0, 7.0, 9.0 MHz
707	PW Doppler frequency	2.5, 3.1, 3.6, 4.2, 5.0, 6.3 MHz
708	Color Doppler frequency	3.1, 4.2, 4.6, 5.4 MHz
709	C2-9-VN-D, VNav inside XDclear convex probe	
710	VNav sensor inside probe for Volume Navigation tracking without sensor cables	
711	Applications	Abdomen, OB/GYN, pediatric, peripheral vascular, neonatal, neonatal transcranial, general musculoskeletal
712	Biopsy guide	Multi-angle, disposable with a reusable bracket (H4913BA)
713	Bandwidth	2.0 – 9.0 MHz
714	Number of elements	192
715	Field of view (max.)	80°
716	Physical foot print	52 x 9 mm
717	B-Mode frequency	3.0, 4.5, 6.0, 7.0 MHz
718	Harmonic frequency	2.5, 3.5, 5.0, 7.0, 9.0 MHz
719	PW Doppler frequency	2.5, 3.1, 3.6, 4.2, 5.0, 6.3 MHz
720	Color Doppler frequency	3.1, 4.2, 4.6, 5.4 MHz
721	C3-10-D, XDclear micro convex probe	
722	Applications	Abdomen, neonatal, pediatric, peripheral vascular, neonatal transcranial, small part
723	Bandwidth	2.0 – 11.0 MHz
724	Number of elements	192
725	Field of view (max.)	95°
726	Physical foot print	26 x 5 mm
727	B-Mode frequency	4.0, 6.0, 8.0 MHz
728	Harmonic frequency	6.0, 8.0, 10.0 MHz
729	PW Doppler frequency	3.1, 4.2, 6.3, 7.1 MHz
730	Color Doppler frequency	3.9, 5.3, 6.6 MHz
731	IC5-9-D, micro convex probe	
732	Applications	OB/GYN, urology
733	Biopsy guide	Single angle, disposable with a disposable bracket (E8385MJ) or reusable bracket (H40412LN)

734	Bandwidth	3.0 – 10.0 MHz
735	Number of elements	192
736	Field of view (max.)	180°
737	Physical foot print	26 x 6 mm
738	B-Mode frequency	4.5, 5.0, 5.5, 6.0, 7.0, 8.0 MHz
739	Harmonic frequency	6.0, 6.5, 7.0, 9.0 MHz
740	PW Doppler frequency	3.6, 4.2, 5.0 MHz
741	Color Doppler frequency	4.6, 5.9, 6.7 MHz
742	L2-9-D, XDclear linear probe	
743	Applications	Peripheral vascular, pediatric, abdomen, OB/GYN, general musculoskeletal, superficial musculoskeletal, neonatal, neonatal transcranial and small parts including breast, thyroid and scrotal
744	Biopsy guide	Multi-angle, disposable with a reusable bracket (H44901AM)
745	Bandwidth	2.0 – 10.0 MHz
746	Number of elements	192
747	Field of view (max.)	44 mm
748	Physical foot print	53 x 14 mm
749	B-Mode frequency	4.0, 4.5, 5.0, 6.0, 7.0 MHz
750	Harmonic frequency	5.0, 6.0, 7.0, 8.0, 9.0, 9.4 MHz
751	PW Doppler frequency	2.5, 2.8, 3.1, 3.6, 4.2, 5.0 MHz
752	Color Doppler frequency	3.1, 4.0, 4.6, 5.3 MHz
753	L2-9VN-D, VNav inside XDclear linear probe	
754	VNav sensor inside probe for Volume Navigation tracking without sensor cables	
755	Applications	Peripheral vascular, pediatric, abdomen, OB/GYN, general musculoskeletal, superficial musculoskeletal, neonatal, neonatal transcranial and small parts including breast, thyroid and scrotal
756	Biopsy guide	Multi-angle, disposable with a reusable bracket (H44901AM)
757	Bandwidth	2.0 – 10.0 MHz
758	Number of elements	192
759	Field of view (max.)	44 mm
760	Physical foot print	53 x 14 mm
761	B-Mode frequency	4.0, 4.5, 5.0, 6.0, 7.0 MHz
762	Harmonic frequency	5.0, 6.0, 7.0, 8.0, 9.0, 9.4 MHz
763	PW Doppler frequency	2.5, 2.8, 3.1, 3.6, 4.2, 5.0 MHz
764	Color Doppler frequency	3.1, 4.0, 4.6, 5.3 MHz
765	L3-12-D, linear probe	
766	Applications	Abdomen, OB, general musculoskeletal, superficial musculoskeletal, neonatal, neonatal transcranial, small parts, vascular
767	Biopsy guide	Multi-angle, disposable with a reusable bracket (H78652PA)
768	Bandwidth	3.0 – 11.0 MHz
769	Number of elements	256
770	Field of view (max.)	51 mm
771	Physical foot print	51 x 4 mm
772	B-Mode frequency	6.0, 8.0, 10.0, 12.0 MHz
773	Harmonic frequency	4.0, 6.0, 8.0, 10.0, 12.0 MHz
774	PW Doppler frequency	4.2, 5.0, 6.3, 8.3 MHz
775	Color Doppler frequency	4.3, 4.9, 5.4, 6.1, 7.2, 8.0 MHz
776	L6-24-D, linear probe	
777	Applications	General musculoskeletal, superficial musculoskeletal, pediatrics, thyroid
778	Bandwidth	6.0 – 20.0 MHz
779	Number of elements	192
780	Field of view (max.)	26 mm
781	Physical foot print	26 x 2 mm
782	B-Mode frequency	12.0, 16.0, 21.0 MHz
783	Harmonic frequency	12.0, 18.0, 24.0 MHz
784	PW Doppler frequency	8.3, 10.0, 12.5 MHz
785	Color Doppler frequency	9.2, 11.2, 12.2 MHz
786	L8-18i-D, linear probe	
787	Applications	Small parts, peripheral vascular, neonatal, neonatal transcranial, general musculoskeletal, superficial musculoskeletal, intraoperative
788	Bandwidth	4.0 – 15.0 MHz
789	Number of elements	168

790	Field of view (max.)	25 mm
791	Physical foot print	35 x 10 mm
792	B-Mode frequency	7.0, 9.0, 13.0, 16.0 MHz
793	Harmonic frequency	14.0, 16.0, 18.0 MHz
794	PW Doppler frequency	5.0, 6.3, 7.1, 8.3 MHz
795	Color Doppler frequency	6.3, 6.7, 9.6, 10.5 MHz
796	M5Sc-D, XDclear sector probe	
797	Applications	Adult cardiac, pediatric cardiac, adult cephalic, abdominal
798	Biopsy guide	Multi-angle, disposable with a reusable bracket (H45561FC)
799	Bandwidth	1.0 – 5.0 MHz
800	Number of elements	288
801	Field of view (max.)	120°
802	Physical foot print	28 x 17 mm
803	B-Mode frequency	2.0, 2.5, 3.5, 4.5 MHz
804	Harmonic frequency	2.4, 3.0, 3.2, 3.3, 3.7, 4.0, 4.5 MHz
805	PW Doppler frequency	1.6, 1.7, 1.8, 1.9, 2.1, 2.5, 3.1, 3.6 MHz
806	Color Doppler frequency	1.7, 1.8, 1.9, 2.2, 2.4, 2.5, 3.0, 3.1, 3.7, 3.8 MHz
807	ML6-15-D, matrix array linear probe	
808	Applications	Abdomen, peripheral vascular, neonatal, pediatric, neonatal transcranial, general musculoskeletal, superficial musculoskeletal and small parts including breast, thyroid and scrotal
809	Biopsy guide	Multi-angle, disposable with a reusable bracket (H40432LJ)
810	Bandwidth	4.0 – 16.0 MHz
811	Number of elements	1008
812	Field of view (max.)	50 mm
813	Physical foot print	50 x 10 mm
814	B-Mode frequency	7.0, 9.0, 10.0, 11.0, 12.0, 15.0 MHz
815	Harmonic frequency	10.0, 12.0, 14.0, 15.0 MHz
816	PW Doppler frequency	5.0, 6.3, 8.3 MHz
817	Color Doppler frequency	5.1, 6.1, 7.3, 8.2, 9.2, 10.3, 11.4, 12.4 MHz
818	P2D, CW split crystal probe	
819	Applications	Adult cardiac, pediatric cardiac, peripheral vascular, adult cephalic
820	Frequency	2.1 MHz
821	P6D, CW split crystal probe	
822	Applications	Adult cardiac, pediatric cardiac, peripheral vascular, adult cephalic
823	Frequency	6.3 MHz
824	RAB6-D, convex volume probe	
825	Applications	Abdomen, OB/GYN, pediatric, neonatal
826	Biopsy guide	Single angle, reusable bracket (H46701AE)
827	Bandwidth	2.0 – 8.0 MHz
828	Number of elements	192
829	Field of view (max.)	80°
830	Physical foot print	62 x 34 mm
831	B-Mode frequency	3.5, 5.0, 8.0 MHz
832	Harmonic frequency	4.0, 5.0, 6.5, 8.0 MHz
833	PW Doppler frequency	3.1, 4.2, 5.0 MHz
834	Color Doppler frequency	2.8, 3.5, 3.8 MHz
835	RIC5-9-D, convex volume probe	
836	Applications	OB/GYN, urology
837	Biopsy guide	Single angle, reusable (H46721R)
838	Bandwidth	3.0 – 10.0 MHz
839	Number of elements	192
840	Field of view (max.)	180°
841	Physical foot print	32 x 27 mm
842	B-Mode frequency	5.0, 5.5, 6.0, 6.5, 7.0, 8.0 MHz
843	Harmonic frequency	6.0, 6.5, 7.0, 9.0 MHz
844	PW Doppler frequency	3.6, 4.2, 5.0 MHz
845	Color Doppler frequency	4.3, 6.1, 7.3 MHz
846	External Inputs and outputs (not including on-board peripherals)	
847	HDMI	
848	Ethernet	
849	Multiple USB 3.0 ports	
850	Safety Conformance	

851	The LOGIQ Fortis is:	
852	Classified to UL 60601-1 by a Nationally Recognized Test Lab	
853	Certified to CAN/CSA-C22.2 No. 60601.1-M90 by an SCC accredited test lab	
854	CE Marked to EU Medical Device Regulation MDR 2017/745	
855	Compliant to Council Directive 2011/65/EU for RoHS	
856	Conforms to the following standards for safety (including national deviations)	<ul style="list-style-type: none"> • EMC Emissions group 1 class A device requirements as per sub clause 4.2 of CISPR 11 • IEC 60601-1 Medical electrical equipment – Part 1: General requirements for safety • IEC 60601-1-2 Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral standard: Electromagnetic disturbance – Requirements and tests • IEC 60601-1-6 Medical electrical equipment Part 1-6 general requirements for basic safety and essential performance – Collateral standard: usability • IEC 60601-2-37 Medical electrical equipment – Part 2-37: Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment • IEC 62366 Medical devices – Application of usability engineering to medical devices • IEC62366-1 Medical device software – Software life-cycle processes • ISO 10993-1 Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process

857	Supplement: cardiac measurements/calculations	
858	B-Mode measurements	
859	Aorta	<ul style="list-style-type: none"> • Aortic Root Diameter (Ao Root Diam) • Aortic Arch Diameter (Ao Arch Diam) • Ascending Aortic diameter (Ao Asc) • Descending Aortic Diameter (Ao Desc Diam) • Aorta Isthmus (Ao Isthmus) • Aorta (Ao st junct)
860	Aortic valve	<ul style="list-style-type: none"> • Aortic Valve Cusp Separation (AV Cusp) • Aortic Valve Area Planimetry (AVA Planimetry) • (Trans AVA)
861	Left atrium	<ul style="list-style-type: none"> • Left Atrium Diameter (LA Diam) • LA Length (LA Major) • LA Width (LA Minor) • Left Atrium Diameter to AoRoot Diameter Ratio (LA/Ao ratio) • Left Atrium Area (LAA(d), LAA(s)) • Left Atrium Volume, Single Plane, Method of Disk (LAEDV A2C, LAESV A2C) (LAEDV A4C, LAESV A4C), (LAEDV A-L, LAEDV Index A-L, LAESV A-L, LAESV Index A-L)
862	Left ventricle	<ul style="list-style-type: none"> • Left Ventricle Mass (LVPWd, LVPWs) • Left Ventricle Volume, Teichholz/Cubic (LVIDd, LVI Ds) • Left Ventricle Internal Diameter (LVIDd, LVI Ds) Left Ventricle Length (LVLd, LVLs) • Left Ventricle Outflow Tract Diameter (LVOT Diam) • Left Ventricle Posterior Wall Thickness (LVPWd, LVPWs) • Left Ventricle Length (LV Major) • Left Ventricle Width (LV Minor) • Left Ventricle Outflow Tract Area (LVOT) • Left Ventricle Area, Two Chamber/Four Chamber/Short Axis (LVA (d), LVA (s)) • Left Ventricle Endocardial Area, Width (LVA (d), LVA(s)) • Left Ventricle Epicardial Area, Length (LVAepi (d), LVAepi (s)) • Left Ventricle Mass Index (LVPWd, LVPWs) • Ejection Fraction, Teichholz/Cube (LVIDd, LVIDs)
863	Left ventricle continued	<ul style="list-style-type: none"> • Left Ventricle Posterior Wall Fractional Shortening (LVPWd, LVPWs) • Left Ventricle Stroke Index, Teichholz/Cube (LVIDd, LVIDs and Body Surface Area) • Left Ventricle Fractional Shortening (LVIDd, LVIDs) • Left Ventricle Stroke Volume, Teichholz/Cubic (LVIDd, LVIDs) • Left Ventricle Stroke Index, Single Plane, Two Chamber, Method of Disk (LVI Dd, LVIDs, LVSD, LVSS) • Left Ventricle Stroke Index, Single Plane, Four Chamber, Method of Disk (LVI Dd, LVIDs, LVSD, LVSS) • Left Ventricle Stroke Index, Bi-Plane, Bullet, Method of Disk (LVAd, LVAs) • Interventricular Septum (IVS) • Left Ventricle Internal Diameter (LVI D) • Left Ventricle Posterior Wall Thickness (LVPW)
864	Mitral valve	<ul style="list-style-type: none"> • Mitral Valve Annulus Diameter (MV Ann Diam) • E-Point-to-Septum Separation (EPSS) • Mitral Valve Area Planimetry (MVA Planimetry)
865	Pulmonic valve	<ul style="list-style-type: none"> • Pulmonic Valve Area (PV Planimetry) • Pulmonic Valve Annulus Diameter (PV Annulus Diam) • Pulmonic Diameter (Pulmonic Diam)
866	Right atrium	<ul style="list-style-type: none"> • Right Atrium Diameter, Length (RAD Ma) • Right Atrium Diameter, Width (RAD Mi) • Right Atrium Area (RAA) • Right Atrium Volume, Single Plane, Method of Disk (RAAd) • Right Atrium Volume, Systolic, Single Plane, Method of Disk (RAAs)

867	Right ventricle	<ul style="list-style-type: none"> • Right Ventricle Outflow Tract Area (RVOT Planimetry) • Left Pulmonary Artery Area (LPA Area) • Right Pulmonary Artery Area (RPA Area) • Right Ventricle Internal Diameter (RVIDd, RVIDs) • Right Ventricle Diameter, Length (RVD Ma) • Right Ventricle Diameter, Width (RVD Mi) • Right Ventricle Wall Thickness (RVAWd, RVAWs) • Right Ventricle Outflow Tract Diameter (RVOT Diam) • Left Pulmonary Artery (LPA) • Main Pulmonary Artery (MPA) • Right Pulmonary Artery (RPA)
868	System inferior vena cava	<ul style="list-style-type: none"> • Systemic Vein Diameter (Systemic Diam) • Patent Ductus Arteriosis Diameter (PDA Diam) • Pericard Effusion (PEs) • Patent Foramen Ovale Diameter (PFO Diam) • Ventricular Septal Defect Diameter (VSD Diam) • Interventricular Septum (IVS) Fractional Shortening (IVSd, IVSs)
869	Tricuspid valve	<ul style="list-style-type: none"> • Tricuspid Valve Area (TV Panimetry) • Tricuspid Valve Annulus Diameter (TV Annulus Diam)
870	M-Mode measurements	
871	Aorta	<ul style="list-style-type: none"> • Aortic Root Diameter (Ao Root Diam) • Aortic Valve • Aortic Valve Diameter (AV Diam) • Aortic Valve Cusp separation (AV Cusp) • Aortic Valve Ejection Time (LVET)
872	Left atrium	<ul style="list-style-type: none"> • Left Atrium Diameter to AoRoot Diameter Ratio (LA/Ao Ratio) • Left Atrium Diameter (LA Diam)
873	Left ventricle	<ul style="list-style-type: none"> • Left Ventricle Volume, Teichholz/Cubic (LVIDd, LVI Ds) • Left Ventricle Internal Diameter (LVIDd, LVI Ds) • Left Ventricle Posterior Wall Thickness (LVPWd, LVPWs) • Left Ventricle Ejection Time (LVET) • Left Ventricle Pre-Ejection Period (LVPEP) • Interventricular Septum (IVS) • Left Ventricle Internal Diameter (LVI D) • Left Ventricle Posterior Wall Thickness (LVPW)
874	Mitral valve	<ul style="list-style-type: none"> • E-Point-to-Septum Separation (EPSS) • Mitral Valve Leaflet Separation (D-E Excursion) • Mitral Valve Anterior Leaflet Excursion (D-E Excursion) • Mitral valve D-E Slope (D-E Slope) • Mitral Valve E-F Slope (E-F Slope) • Mitral Annular Plane Systolic Excursion (MAPSE)
875	Pulmonic valve	<ul style="list-style-type: none"> • QRS Complex to End of Envelope (Q-PV close)
876	Right ventricle	<ul style="list-style-type: none"> • Right Ventricle Internal Diameter (RVIDd, RVIDs) • Right Ventricle Wall Thickness (RVAWd, RVAWs) • Right Ventricle Outflow Tract Diameter (RVOT Diam) • Right Ventricle Ejection Time (RVET) • Right Ventricle Pre-Ejection Period (RVPEP)
877	System	<ul style="list-style-type: none"> • Pericard Effusion (PE (d))
878	Tricuspid valve	<ul style="list-style-type: none"> • QRS Complex to End of Envelope (Q-TV close) • Tricuspid Annular Plane Systolic Excursion (TAPSE)

879	Doppler Mode measurements	
880	Aortic valve	<ul style="list-style-type: none"> • Aortic Insufficiency Mean Pressure Gradient (AR Trace) • Aortic Insufficiency Peak Pressure Gradient (AR Vmax) • Aortic Insufficiency End Diastole Pressure Gradient (AR Trace) • Aortic Insufficiency Mean Velocity (AR Trace) • Aortic Insufficiency Velocity Time Integral (AR Trace) • Aortic Valve Mean Velocity (AV Trace) • Aortic Valve Velocity Time Integral (AV Trace) • Aortic Valve Mean Pressure Gradient (AV Trace) • Aortic Valve Peak Pressure Gradient (AR Vmax) • Aortic Insufficiency Peak Velocity (AR Vmax) • Aortic Insufficiency End-Diastolic Velocity (AR Trace) • Aortic Valve Peak Velocity (AV Vmax) • Aortic Valve Peak Velocity at Point E (AV Vmax)
881	Aortic valve continued	<ul style="list-style-type: none"> • Aorta Proximal Coarctation (Coarc Pre-Duct) • Aorta Distal Coarctation (Coarc Post-Duct) • Aortic Valve Insufficiency Pressure Half Time (AR PHT) • Aortic Valve Flow Acceleration (AV Trace) • Aortic Valve Pressure Half Time (AV Trace) • Aortic Valve Acceleration Time (AV Acc Time) • Aortic Valve Deceleration Time (AV Dec Time) • Aortic Valve Ejection Time (AVET) • Aortic Valve Acceleration to Ejection Time Ratio (AV Acc Time, AVET) • Aortic Valve Area(VTI): AVA (Vmax)
882	Left ventricle	<ul style="list-style-type: none"> • Left Ventricle Outflow Tract Peak Pressure Gradient (LVOT Vmax) • Left Ventricle Outflow Tract Peak Velocity (LVOT Vmax) • Left Ventricle Outflow Tract Mean Pressure Gradient (LVOT Trace) • Left Ventricle Outflow Tract Mean Velocity (LVOT Trace) • Left Ventricle Outflow Tract Velocity Time Integral (LVOT Trace) • Left Ventricle Ejection Time (LVET)
883	Mitral valve	<ul style="list-style-type: none"> • E' Early diastolic mitral valve annular velocity (E') • E' Avg Averaged early diastolic mitral valve annular velocity (E' Avg) • E' Lat Early diastolic mitral valve lateral annular velocity (E' Lat) • E' Medial Early diastolic mitral valve medial annular velocity (E' Medial) • E' Sept Early diastolic mitral • Mitral inflow E velocity to E' ratio (E/E') • Mitral inflow E velocity to E' Avg ratio (E/E' Avg) • Mitral inflow E velocity to E' Lat ratio (E/E' Lat) • Medial Mitral inflow E velocity to E' Medial ratio (E/E') • Mitral inflow E velocity to E' Sept ratio (E/E' Sept) • Mitral Valve Regurgitant Flow Acceleration (MR Trace) • Mitral Valve Regurgitant Mean Velocity (MR Trace)
884	Mitral valve continued	<ul style="list-style-type: none"> • Mitral Regurgitant Mean Pressure Gradient (MR Trace) • Mitral Regurgitant Velocity Time Integral (MR Trace) • Mitral Valve Mean Velocity (MV Trace) • Mitral Valve Velocity Time Integral (MV Trace) • Mitral Valve Mean Pressure Gradient (MV Trace) • Mitral Regurgitant Peak Pressure Gradient (MR Vmax) • Mitral Valve Peak Pressure Gradient (MV Vmax) • Mitral Regurgitant Peak Velocity (MR Vmax) • Mitral Valve Peak Velocity (MV Vmax) • Mitral Valve Velocity Peak A (MV A Velocity) • Mitral Valve Velocity Peak E (MV E Velocity)

885	Mitral valve continued	<ul style="list-style-type: none"> • Mitral Valve Area According to PHT (MV PHT) • Mitral Valve Flow Deceleration (MV DecT) • Mitral Valve Pressure Half Time (MV PHT) • Mitral Valve Flow Acceleration (MV AccT) • Mitral Valve E-Peak to A-Peak Ratio (A-C and D-E) (MV E/ARatio) • Mitral Valve Acceleration Time (MV Acc Time) • Mitral Valve Deceleration Time (MV Dec Time) • Mitral Valve Ejection Time ((MVET) • Mitral Valve A-Wave Duration (MV A Dur) • Mitral Valve Time to Peak (MV TTP) • Mitral Valve Acceleration Time/Deceleration Time Ratio (MVAcc/Dec Time) • Stroke Volume Index by Mitral Flow (MVA Planimetry, MVTrace)
886	Pulmonic Valve	<ul style="list-style-type: none"> • Pulmonic Insufficiency Peak Pressure Gradient (PR Vmax) • Pulmonic Insufficiency End-Diastolic Pressure Gradient (PRTrace) • Pulmonic Valve Peak Pressure Gradient (PV Vmax) • Pulmonic Insufficiency Peak Velocity (PR Vmax) • Pulmonic Insufficiency End-Diastolic Velocity (Prend Vmax) • Pulmonic Valve Peak Velocity (PV Vmax) • Pulmonary Artery Diastolic Pressure (PV Trace) • Pulmonic Insufficiency Mean Pressure Gradient (PR Trace)
887	Pulmonic valve continued	<ul style="list-style-type: none"> • Pulmonic Valve Mean Pressure Gradient (PV Trace) • Pulmonic Insufficiency Mean Square Root Velocity (PR Trace) • Pulmonic Insufficiency Velocity Time Integral (PR Trace) • Pulmonic Valve Mean Velocity (PV Trace) • Pulmonic Valve Velocity Time Integral (PV Trace) • Pulmonic Insufficiency Pressure Half Time (PR PHT) • Pulmonic Valve Flow Acceleration (PV Acc Time) • Pulmonic Valve Acceleration Time (PV Acc Time) • Pulmonic Valve Ejection Time (PVET) • QRS Complex to End of Envelope (Q-to-PV Close) • Pulmonic Valve Acceleration to Ejection Time Ratio (PV Acc Time, PVET)
888	Right ventricle	<ul style="list-style-type: none"> • Right Ventricle Outflow Tract Peak Pressure Gradient (RVOT Vmax) • Right Ventricle Outflow Tract Peak Velocity (RVOT Vmax) • Right Ventricle Outflow Tract Velocity Time Integral (RVOTTrace) • Right Ventricle Ejection Time (RV Trace) • Stroke Volume by Pulmonic Flow (RVOT Planimetry, RVOTTrace) • Right Ventricle Stroke Volume Index by Pulmonic Flow (RVOT Planimetry, RVOT Trace)
889	System	<ul style="list-style-type: none"> • Pulmonary Artery Peak Velocity (PV Vmax) • Pulmonary Vein Velocity Peak A (Reverse) (P Vein A) • Pulmonary Vein Peak Velocity (P Vein D, P Vein S) • Systemic Vein Peak Velocity (PDA Diastolic, PDA Systolic) • Ventricular Septal Defect Peak Velocity (VSD Vmax) • Atrial Septal Defect (ASD Diastolic, ASD Systolic) • Pulmonary Vein A-Wave Duration (P Vein A Dur) • IsoVolumetric Relaxation Time (IVRT) • IsoVolumetric Contraction Time (IVCT) • Pulmonary Vein S/D Ratio (P Vein D, P Vein S) • Ventricular Septal Defect Peak Pressure Gradient (VSD Vmax) • Pulmonic-to-Systemic Flow Ratio (Qp/Qs)
890	Tricuspid valve	<ul style="list-style-type: none"> • Tricuspid Regurgitant Peak Pressure Gradient (TR Vmax) • Tricuspid Valve Peak Pressure Gradient (TV Vmax) • Tricuspid Regurgitant Peak Velocity (TR Vmax) • Tricuspid Valve Peak Velocity (TV Vmax) • Tricuspid Valve Velocity Peak A (TV A Velocity) • Tricuspid Valve Velocity Peak E (TV E Velocity) • Tricuspid Regurgitant Mean Pressure Gradient (TR Trace) • Tricuspid Valve Mean Pressure Gradient (TV Trace)

891	Tricuspid valve continued	<ul style="list-style-type: none">• Tricuspid Regurgitant Mean Velocity (TR Trace)• Tricuspid Regurgitant Velocity Time Integral (TR Trace)• Tricuspid Valve Mean Velocity (TV Trace)• Tricuspid Valve Velocity Time Integral (TV Trace)• Tricuspid Valve Time to Peak (TV TTP)• Tricuspid Valve Ejection Time (TV Acc/Dec Time)• Tricuspid Valve A-Wave Duration (TV A Dur)• QRS Complex to End of Envelope (Q-TV Close)• Tricuspid Valve Pressure Half Time (TV PHT)• Stroke Volume by Tricuspid Flow (TV Planimetry, TV Trace)• Tricuspid Valve E-Peak to A-Peak Ratio (TV E/A Velocity)
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892	Color Flow Mode measurements	
893	Aortic valve	<ul style="list-style-type: none"> • Proximal Isovelocity Surface Area: Regurgitant Orifice Area (AR Radius) • Proximal Isovelocity Surface Area: Radius of Aliased Point (AR Radius) • Proximal Isovelocity Surface Area: Regurgitant Flow (AR Trace) • Proximal Isovelocity Surface Area: Regurgitant Volume Flow (AR Trace) • Proximal Isovelocity Surface Area: Aliased Velocity (AR Vmax)
894	Mitral valve	<ul style="list-style-type: none"> • Proximal Isovelocity Surface Area: Regurgitant Orifice Area (MR Radius) • Proximal Isovelocity Surface Area: Radius of Aliased Point (MR Radius) • Proximal Isovelocity Surface Area: Regurgitant Flow (MR Trace) • Proximal Isovelocity Surface Area: Regurgitant Volume Flow (MR Trace) • Proximal Isovelocity Surface Area: Aliased Velocity (MR Vmax)
895	Combination Mode measurements	
896	Aortic valve	<ul style="list-style-type: none"> • Aortic Valve Area (Ao Root Diam, LVOT Vmax, AV Vmax) • Aortic Valve Area by Continuity Equation by Peak Velocity (Ao Root Diam, LVOT Vmax, AV Vmax) • Stroke Volume by Aortic Flow (AVA Planimetry, AV Trace) • Cardiac Output by Aortic Flow (AVA Planimetry, AV Trace, HR) • Aortic Valve Area by Continuity Equation VTI (Ao Root Diam, LVOT Vmax, AV Trace)
897	Left ventricle	<ul style="list-style-type: none"> • Cardiac Output, Teichholz/Cubic (LVIDd, LVI Ds, HR) • Cardiac Output Two Chamber, Single Plane, Area-Length/Method of Disk (Simpson) (LVAd, LVAs, HR) • Cardiac Output Four Chamber, Single Plane, Area-Length/Method of Disk (Simpson) (LVAd, LVAs, HR) • Ejection Fraction Two Chamber, Single Plane, Area-Length/Method of Disk (Simpson) (LVAd, LVAs) • Ejection Fraction Four Chamber, Single Plane, Area-Length/Method of Disk (Simpson) (LVAd, LVAs) • Left Ventricle Stroke Volume, Single Plane, Two Chamber/Four Chamber, Area-Length (LVAd, LVAs)
898	Left ventricle continued	<ul style="list-style-type: none"> • Left Ventricle Stroke Volume, Single Plane, Two Chamber/Four Chamber, Method of Disk (Simpson) (LVIDd, LVIDs, LVAd, LVAs) • Left Ventricle Volume, Two Chamber/Four Chamber, Area-Length (LVAd, LVAs) • Ejection Fraction, Bi-Plane, Method of Disk (LVAd, LVAs, 2CH, 4CH) • Left Ventricle Stroke Volume, Bi-Plane, Method of Disk (LVAd, LVAs, 2CH, 4CH) • Left Ventricle Volume, Bi-Plane, Method of Disk (LVAd, LVAs, 2CH, 4CH) • Left Ventricle Stroke Index, Single Plane, Two Chamber/Four Chamber, Area-Length (LVSD, LVSS and BSA) • Left Ventricle Volume, Single Plane, Two Chamber/Four Chamber, Method of Disk (LVAd, LVAs) • Left Ventricle Volume, Apical View, Long Axis, Method of Disk (LVAd, LVAs)
899	Mitral valve	<ul style="list-style-type: none"> • Stroke Volume by Mitral Flow (MVA Planimetry, MV Trace) • Cardiac Output by Mitral Flow (MVA Planimetry, MV Trace, HR)
900	Pulmonic valve	<ul style="list-style-type: none"> • Stroke Volume by Pulmonic Flow (PV Planimetry, PV Trace) • Cardiac Output by Pulmonic Flow (PV Planimetry, PV Trace, HR)
901	Tricuspid valve	<ul style="list-style-type: none"> • Cardiac Output by Tricuspid Flow (TV Planimetry, TV Trace, HR)
902	Combination Mode measurements	
903	Parameter: lists the mode, the measurement folder and the specific measurement	

904	Measured Value: Up to six measurement values for each item. Average, maximum, minimum or last
905	Generic study in cardiology
906	Stroke Volume (SV)
907	Cardiac Output (CO)



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DOC2671561