Transducers

ACUSON Redwood Ultrasound System

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Comprehensive suite of transducers

The ACUSON Redwood ultrasound system has a comprehensive suite of over 13 transducers supporting a diverse range of clinical applications



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Curved



5C1 Transducer

Form factor	Curved
Design	1D, Single Crystal
Gesture detection	No
Bandwidth	1.0-5.7 MHz
Axial & lateral resolution	0.67 and 1.2 mm
Field of view	72 deg
Physical footprint	63.3 x 18.2 mm
Total weight	743 g



9C3 Transducer

Form factor	Curved
Design	1D, Hanafy, Piezoceramic
Gesture detection	No
Bandwidth	2.2–9.2 MHz
Axial & lateral resolution	0.56 and 0.96 mm
Field of view	78.6 deg
Physical footprint	69.56 x 20.47 mm
Total weight	780.4 g

Linear



10L4 Transducer

Form factor	Linear
Design	Multi-D, Piezoceramic
Gesture detection	No
Bandwidth	2.9–9.9 MHz
Axial & lateral resolution	0.3 and 0.52 mm
Field of view	38.2 mm
Physical footprint	49.25 x 18.85 mm
Total weight	723.2 g



14L5 Transducer

Form factor	Linear
Design	Multi-D, Piezoceramic
Gesture detection	No
Bandwidth	4.8–13.6 MHz
Axial & lateral resolution	0.3 and 0.38 mm
Field of view	38.2 mm
Physical footprint	49.58 x 12.89 mm
Total weight	726.9 g



18L6 Transducer

Form factor	Linear
Design	1D, Hanafy, Piezoceramic
Gesture detection	No
Bandwidth	4.6–17.8 MHz
Axial & lateral resolution	0.3 and 0.43 mm
Field of view	57.5 mm
Physical footprint	69.22 x 16.48 mm
Total weight	761.8 g

Endocavity



9EC4 Transducer

Form factor	Curved
Design	1D, Piezoceramic
Gesture detection	No
Bandwidth	2.9–8.1 MHz
Axial & lateral resolution	0.46 and 0.8 mm
Field of view	176 deg
Physical footprint	17.0 x 22.0 mm
Total weight	700 g

Vector



4V1 Transducer

Form factor	Vector
Design	1D, Hanafy, Piezoceramic
Gesture detection	No
Bandwidth	1.4-5.1 MHz
Axial & lateral resolution	0.9 and 1.1 mm
Field of view	90 deg
Physical footprint	35.5 x 20.2 mm
Total weight	639 g



5V1 Transducer

Form factor	Sector / Vector
Design	1D, Single Crystal, Piezoceramic
Gesture detection	No
Bandwidth	1.1–4.9 MHz
Axial & lateral resolution	1.06 and 3.72 mm
Field of view	90 deg
Physical footprint	27.2 x 18.7 mm
Total weight	640 g



8V3 Transducer

Form factor	Sector/Vector
Design	1D, Hanafy, Piezoceramic
Gesture detection	No
Bandwidth	2.1-8.3 MHz
Axial & lateral resolution	0.59 and 0.79 mm
Field of view	90 deg
Physical footprint	26.9 x 16.6 mm
Total weight	644 g



10V4 Transducer

Form factor	Sector/Vector
Design	1D, Piezoceramic
Gesture detection	No
Bandwidth	3.4-10.4 MHz
Axial & lateral resolution	0.22 and 1.18 mm
Field of view	90 deg
Physical footprint	22.6 x 14.3 mm
Total weight	376 g

Pencil



CW2 Transducer

Form factor	Pencil
Design	N/A
Gesture detection	N/A
Bandwidth	N/A
Axial & lateral resolution	N/A
Field of view	N/A
Diameter	17 mm
Total weight	N/A



CW5 Transducer

Pencil
N/A
11 x 7 mm
N/A

Transesophageal echocardiography (TEE)



V5Ms Transducer

Form factor	Transesophageal echocardiography (TEE)
Design	1D, Piezoceramic
Gesture detection	No
Bandwidth	3.0-7.0 MHz
Axial & lateral resolution	0.22 and 1.18 mm
Field of view	90 deg
Physical footprint	14.8 x 11.6 mm
Total weight	1800 g

Table 1: Selectable frequencies¹

Transducer	2D	THI	Color Doppler	PW Doppler	CW Doppler	Contrast
5C1	• Low • Mid • High	• HPen • HLow • HMid • HHigh	• Low • Mid • High • Res	LowMidHighRes	_	• Low • Mid
9C3	• Pen • Low • Mid • High	HPen HLow HMid HHigh	• Pen • Mid • Res	• Low • Mid	-	• Low • Mid • High
10L4	• Low • Mid • High	• HLow • HMid • HHigh	PenMidHighRes	• Low • Mid	-	• Low • Mid
	on MSK exam only: • Low • Mid • High • Res	• HLow • HMid • HHigh	PenLowMidHigh	• Low • Mid	-	-
	on the other exams: • Low • Mid • High					
18L6	on MSK exam only: • Low • Mid • High • Res	• HLow • HMid • HHigh	• Pen • Mid • Res	• Low • Mid • High	_	-
	on the other exams: • Low • Mid • High					
9EC4	• Low • Mid • High	• HLow • HMid • HHigh	• Low • Mid • High	• Low • Mid • High	-	• Low • Mid • High

¹ System specific

Transducer	2D	THI	Color Doppler	PW Doppler	CW Doppler	Contrast
4V1	• Low • Mid • High	HPenHLowHMidHHigh	• Pen • Mid • Res	• Low • Mid • High	_	• Low • Mid
5V1	• Pen • Low	on Cardiac exam only: • HLow • HMid • HHigh on the other	• Low • Mid • High	PenLowMidHighRes	Cardiac exam only: • Mid on	PenLowMidHighRes
	exams: • HPen • HLow • HMid • HHigh					
8V3	• Low • Mid • High • Res	• HLow • HMid • HHigh	on Cardiac exam only: • Low • Mid on the other exams: • Pen • Low • Mid	on Cardiac exam only: • Low • Mid on the other exams: • Low • Mid • High	on Cardiac exam only: • Low • Mid	-
10V4	• Low • Mid • High • Res	• HLow • HMid • HHigh	High Low Mid High	• Low • Mid • High	on Cardiac exam only: • Low • Mid	-
CW2		_	_	_	• Mid	
CW5	_	_	_	_	• Mid	_
V5Ms	PenLowMidHigh	• HLow • HMid	• Low • Mid	• Low • Mid	• Low • Mid	-

¹ System specific

Transducer	Cable length
5C1	2.1 m
9C3	2.1 m
10L4	2.1 m
14L5	2.1 m
18L6	2.1 m
9EC4	2.2 m
4V1	1.9 m
5V1	2.1 m
8V3	2.2 m
10V4	2.2 m
V5Ms	1.9 m

Table 3: Connector type

Transducer	Connector type			
5C1	Compact Pinless Connector			
9C3	Compact Pinless Connector			
10L4	Compact Pinless Connector			
14L5	Compact Pinless Connector			
18L6	Compact Pinless Connector			
9EC4	Compact Pinless Connector			
4V1	Compact Pinless Connector			
5V1	Compact Pinless Connector			
8V3	Compact Pinless Connector			
10V4	Compact Pinless Connector			
CW2	Hirose			
CW5	Hirose			
V5Ms	Micro Pinless Connector			

Table 2: Cable length Table 4: Needle guide

Transducer	Product description	Guidance angle selection – depth	
5C1	Verza™ needle guidance system	1 – 2.2 cm 2 – 3.8 cm 3 – 6.1 cm 4 – 9.9 cm 5 – 15.0 cm	
9C3	Ultra-Pro II™ needle guide	A – 5 cm B – 10 cm	
10L4	Verza needle guidance system	1 – 2.2 cm 2 – 3.6 cm 3 – 5.6 cm 4 – 8.6 cm 5 – 13 cm	
14L5	Verza needle guidance system	1 – 1.8 cm 2 – 3.0 cm 3 – 4.3 cm 4 – 6.4 cm 5 – 8.9 cm	
18L6	Ultra-Pro II needle guide	A – 2.1 cm B – 5.4 cm	
9EC4	Disposable Endocavity Guide Kit – 24 pack	1° Needle Path angle	
9EC4	Reusable Endocavity Guide	1° Needle Path angle	
4V1	Ultra-Pro II needle guide	A – 5 cm B – 10 cm	

Table 5: Advanced applications

Transducer	Strain Elastography	Point Shear Wave Elastography	2D Shear Wave Elastography	Contrast Imaging	Fusion Imaging
5C1	N/A	Yes	N/A	Yes	N/A
9C3	N/A	N/A	N/A	Yes	N/A
10L4	Yes	Yes	Yes	Yes	N/A
14L5	Yes	N/A	N/A	N/A	N/A
18L6	Yes	N/A	N/A	N/A	N/A
9EC4	Yes	N/A	N/A	Yes	N/A
4V1	N/A	Yes	N/A	Yes	N/A
5V1	N/A	N/A	N/A	Yes	N/A
8V3	N/A	N/A	N/A	N/A	N/A
10V4	N/A	N/A	N/A	N/A	N/A
CW2	N/A	N/A	N/A	N/A	N/A
CW5	N/A	N/A	N/A	N/A	N/A
V5Ms	N/A	N/A	N/A	N/A	N/A

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