



Transducers

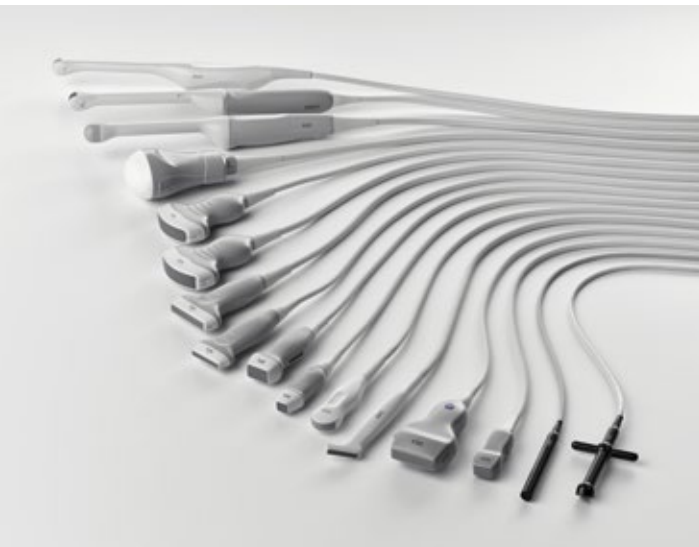
ACUSON Juniper ultrasound system

siemens-healthineers.com/ultrasound



ACUSON Juniper

Image every patient



Contents

Curved	3
Linear	6
Micro Convex	8
Phased Array	9
Vector	10
Pencil	11

Curved



5C1 transducer

Frequency Bandwidth	1.4–5.0 MHz
Number of Elements	128
Footprint	62.5 mm
Maximum Field of View	70°
Maximum Display Depth	300 mm
Biopsy Guide	Available
Exam Types	Abd, Renal, Bowel, FAST, Lung, OB, Early OB, OB (Adv), Fetal Echo, GYN, Venous, Arterial, Pelvis, Spine
Design Attributes	<ul style="list-style-type: none"> • Curved Vector Format • Hanafy lens transducer technology • User-selectable MultiHertz multiple frequency imaging



7C2 transducer

Frequency Bandwidth	2.2–7.0 MHz
Number of Elements	192
Footprint	61.8 mm
Maximum Field of View	70°
Maximum Display Depth	300 mm
Biopsy Guide	Available
Exam Types	Abd, Renal, Bowel, FAST, Lung, OB, Early OB, OB (Adv), Fetal Echo, GYN, Pelvis, Ped Abd, Spine
Design Attributes	<ul style="list-style-type: none"> • Curved Vector Format • Hanafy lens transducer technology • Ergonomically designed form factor • User-selectable MultiHertz imaging



9MC3 transducer

Frequency Bandwidth	3.0–9.0 MHz
Number of Elements	192
Footprint	31.7 mm
Maximum Field of View	220°
Maximum Display Depth	140 mm
Biopsy Guide	Available
Exam Types	Early OB, OB (Adv), GYN, Prostate, OB
Design Attributes	<ul style="list-style-type: none"> • Wide field of view curved array transducer • User-selectable MultiHertz imaging • Lightweight transducer with flexible cable • Curved Vector Format



10MC3 transducer

Frequency Bandwidth	3.0–10.0 MHz
Number of Elements	128
Footprint	32 mm
Maximum Field of View	150°
Maximum Display Depth	140 mm
Biopsy Guide	Available
Exam Types	Early OB, OB (Adv), GYN, Prostate, OB
Design Attributes	<ul style="list-style-type: none"> • Wide field of view curved array transducer • User-selectable MultiHertz imaging • Lightweight transducer with flexible cable • Curved Vector Format



9VE3 transducer

Frequency Bandwidth	3.0–9.0 MHz
Number of Elements	128
Footprint	25.5 mm
Maximum Field of View	145°
Maximum Display Depth	140 mm
Biopsy Guide	Not available
Exam Types	Early OB, OB (Adv), GYN, Pelvic floor, OB
Design Attributes	<ul style="list-style-type: none"> • Curved Vector Format • Wide bandwidth endovaginal volume transducer • User-selectable MultiHertz imaging • Lightweight transducer with flexible cable



8VC3 transducer

Frequency Bandwidth	2.7–8.0 MHz
Number of Elements	128
Footprint	48.9 mm
Maximum Field of View	69°
Maximum Display Depth	300 mm
Biopsy Guide	Not available
Exam Types	Abd, OB, Early OB, OB (ADV), GYN, Pelvic floor, Fetal Echo
Design Attributes	<ul style="list-style-type: none"> • Curved Vector Format • Wide bandwidth curved array transducer • User-selectable MultiHertz imaging • Ergonomically designed form factor • Lightweight transducer with flexible cable

Linear



12L3 transducer

Frequency Bandwidth	2.9–11.5 MHz
2D Steering Angle	max ± 15°
Color Doppler Steering Angle	max ± 15°
PW Doppler Steering Angle	max ± 15°
Number of Elements	192
Footprint	51.3 mm
Maximum Field of View	133 mm
Maximum Display Depth	160 mm
Biopsy Guide	Available
Exam Types	Bowel, FAST, Lung, OB, Breast, Testis, Penile, Thyroid, Ped Hip, Carotid, Venous, Arterial, Spine, MSK, Digital, Nerve
Design Attributes	<ul style="list-style-type: none"> • Wide bandwidth long linear transducer • Virtual format imaging • Hanafy lens transducer technology



11L4 transducer

Frequency Bandwidth	3.6–13.0 MHz
Number of Elements	128
Footprint	38.4 mm
Maximum Field of View	120 mm
Maximum Display Depth	160 mm
Biopsy Guide	Available
Exam Types	Bowel, FAST, Lung, OB, Breast, Testis, Penile, Thyroid, Ped Hip, Carotid, Venous, Arterial, Spine, MSK, Digital, Nerve
Design Attributes	<ul style="list-style-type: none"> • Wide bandwidth linear transducer • Virtual format imaging • User-selectable MultiHertz imaging • Ergonomically designed form factor • 2D beam steering • Lightweight transducer with flexible cable



16L4 transducer

Frequency Bandwidth	4.3–15.4 MHz
Number of Elements	192
Footprint	34.6 mm
Maximum Field of View	65 mm
Maximum Display Depth	60 mm
Biopsy Guide	Available
Exam Types	Bowel, FAST, Lung, Breast, Testis, Penile, Thyroid, Ped Hip, Carotid, MSK, Digital, Nerve
Design Attributes	<ul style="list-style-type: none"> • Wide bandwidth linear transducer • Virtual format imaging • Hanafy lens transducer technology



18H5 transducer

Frequency Bandwidth	4.5–18.0 MHz
Number of Elements	192
Footprint	26.9 mm
Maximum Field of View	68 mm
Maximum Display Depth	80 mm
Biopsy Guide	Not available
Exam Types	Testis, Penile, MSK, Digital, Nerve, IO Abd, Carotid, Thyroid
Design Attributes	<ul style="list-style-type: none"> • Wide bandwidth linear transducer • Virtual format imaging • User-selectable MultiHertz imaging • Ergonomically designed form factor • Lightweight transducer with flexible cable

Micro Convex



11M3 transducer

Frequency Bandwidth	3.5–11.0 MHz
Number of Elements	128
Footprint	28.1 mm
Maximum Field of View	110°
Maximum Display Depth	140 mm
Biopsy Guide	Not available
Exam Types	Ped Abd, Ped Echo, Neo Echo, Neo Head, Carotid
Design Attributes	<ul style="list-style-type: none"> • Micro convex Vector Format • Wide bandwidth curved array transducer • User-selectable MultiHertz imaging • Ergonomically designed form factor • Lightweight transducer with flexible cable

Phased Array



5P1 transducer

Frequency Bandwidth	1.1–4.8 MHz
Number of Elements	96
Footprint	22.1 mm
Maximum Field of View	90°
Maximum Display Depth	300 mm
Biopsy Guide	Not available
Exam Types	Abd, FAST, LUNG, Renal, Adult Echo, Ped Echo, TCD
Design Attributes	<ul style="list-style-type: none"> • Wide bandwidth phased array Single Crystal Piezoelectric transducer • User-selectable MultiHertz imaging • Ergonomically designed form factor • Lightweight transducer with flexible cable

Vector



8V4 transducer

Frequency Bandwidth	2.7–8.0 MHz
Number of Elements	64
Footprint	9.6 mm
Maximum Field of View	90°
Maximum Display Depth	140 mm
Biopsy Guide	Not available
Exam Types	Ped Abd, Ped Echo, Neo Head, Neo Echo
Design Attributes	<ul style="list-style-type: none"> • Wide bandwidth phased array transducer • User-selectable MultiHertz imaging • Ergonomically designed form factor • Lightweight transducer with flexible cable



10V4 transducer

Frequency Bandwidth	4.1–9.9 MHz
Number of Elements	128
Footprint	14 mm
Maximum Field of View	90°
Maximum Display Depth	140 mm
Biopsy Guide	Not available
Exam Types	Ped Abd, Ped Echo, Neo Head, Neo Echo
Design Attributes	<ul style="list-style-type: none"> • Vector imaging format • User-selectable MultiHertz Imaging

Pencil



CW2 transducer

Selectable CW Doppler Frequencies	2.0 MHz
Number of Elements	2
Footprint	17 mm
Diameter	17 mm
Biopsy Guide	Not available
Exam Types	Adult Echo, Ped Echo



CW5 transducer

Selectable CW Doppler Frequencies	5.0 MHz
Number of Elements	2
Footprint	17 mm
Diameter	17 mm
Biopsy Guide	Not available
Exam Types	Carotid, TCD, Ped Echo

Table 1: Selectable frequencies

Transducer	Fundamental	Harmonic	Color Doppler	PW Doppler	CW	DTI
10MC3	• 5.0 • 6.2 • 7.3	• 6.6 • 7.2 • 9.4	• 4.0 • 5.3 • 6.2	• 4.0 • 5.3/6.2	–	–
10V4	• 4.0 • 5.3 • 7.2 • 8.9	• 6.6 • 7.2 • 8.0 • 8.8	• 4.0 • 5.0 • 6.2	• 4.0 • 5.0 • 6.2	• 4.0 • 4.4	• 4.0 • 5.3
11L4	• 6.2 • 8.0 • 10.0	• 7.3 • 8.0 • 9.4	• 4.0 • 5.3 • 6.2	• 4.0 • 5.3 • 6.2	–	–
11M3	• 4.0 • 4.3 • 5.7 • 8.0	• 6.2 • 7.3 • 8.0	• 3.6 • 4.4	• 3.6 • 4.4	–	• 3.6 • 4.4
12L3	• 6.2 • 8.0 • 13.3	• 6.7 • 8.4 • 10.0	• 4.0 • 6.7	• 4.0 • 6.7	–	–
16L4	• 8.0 • 10.0 • 13.3	• 9.4 • 10.7 • 12.3	• 5.3 • 6.2	• 5.3 • 6.2	–	–
18H5	• 8.0 • 11.4 • 13.3	• 10.6 • 12.3 • 14.5	• 6.2 • 7.3	• 6.2 • 7.3	–	–
5C1	• 2.5 • 3.1 • 4.0	• 3.1 • 3.4 • 3.6 • 4.4 • 5.0	• 2.0 • 2.7	• 2.0 • 2.7	–	–
5P1	• 1.6(TCD) • 2(TCD) • 2.5 • 3.1 • 3.6	• 2.7 • 3.0 • 3.7 • 4.0	• 1.8 • 2.2 • 2.5	• 1.8 • 2.2 • 2.5	1.8	• 1.8 • 2.2 • 2.5
7C2	• 3.6 • 4.4 • 5.0 • 5.7	• 4.4 • 5.0 • 5.7	• 2.7 • 3.3	• 2.7 • 3.3	–	–
8V4	• 4.2, 5.7, 6.7	• 5.4, 6.2, • 7.2	• 3.6 • 4.4	• 3.6 • 4.4	• 3.6	• 4.2 • 5.7 • 6.7
8VC3	• 3.3 • 4.2 • 5.0	• 4.4 • 5.0 • 5.7 • 6.2(PVF)	• 2.7 • 3.3	• 2.7 • 3.3	–	–

Transducer	Fundamental	Harmonic	Color Doppler	PW Doppler	CW	DTI
9MC3	• 4.2 • 5.7 • 7.3	• 5.0 • 5.7 • 7.3	• 4.0 • 5.3	• 4.0 • 5.3	–	–
9VE3	• 4.7 • 5.7 • 7.3	• 5.7 • 6.6 • 7.3	• 4.0 • 5.3	• 4.0 • 5.3	–	–
CW2	–	–	–	–	• 2	–
CW5	–	–	–	–	• 5	–

Table 2: Cable length

Transducer	Cable length
10MC3	2.13 m
10V4	2.2 m
11L4	2.23 m
11M3	2.1 m
12L3	2.1 m
16L4	2.1 m
18H5	2.2 m
5C1	1.95 m
5P1	2.1 m
7C2	1.95 m
8V4	2.2 m
8VC3	2.1 m
9MC3	2.2 m
9VE3	2.1 m
CW2	1.9 m
CW5	2.2 m

Table 3: Connector type

Transducer	Connector type
5C1	TC-ZIF
7C2	TC-ZIF
9MC3	TC-ZIF
10MC3	TC-ZIF
9VE3	TC-ZIF
8VC3	TC-ZIF
11L4	TC-ZIF
12L3	TC-ZIF
16L4	TC-ZIF
18H5	TC-ZIF
11M3	TC-ZIF
5P1	TC-ZIF
8V4	TC-ZIF
10V4	TC-ZIF
CW2	Hirose
CW5	Hirose

Table 4: Biopsy guides

Transducer	Product description	Guidance angle selection – depth
5C1	Ultra-Pro II	4, 8 cm
7C2	Ultra-Pro II	10 cm
9MC3	Endocavity NG	15.7 cm (Disposable), 16 cm (Reusable)
10MC3	Endocavity NG	0 angle
9VE3	N/A	–
8VC3	N/A	–
11L4	Ultra-Pro II	2.4, 4 cm
12L3	Ultra-Pro II	3 cm
16L4	Infinih	Free angle
18H5	N/A	–
11M3	N/A	–
5P1	N/A	–
8V4	N/A	–
10V4	N/A	–
CW2	N/A	–
CW5	N/A	–

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	N/A	N/A
7C2	N/A	N/A	N/A	N/A	N/A
9MC3	N/A	N/A	N/A	N/A	N/A
10MC3	N/A	N/A	N/A	N/A	N/A
9VE3	N/A	N/A	N/A	N/A	N/A
8VC3	N/A	N/A	N/A	N/A	N/A
11L4	Yes	N/A	N/A	N/A	N/A
12L3	Yes	N/A	N/A	N/A	N/A
16L4	Yes	N/A	N/A	N/A	N/A
18H5	Yes	N/A	N/A	N/A	N/A
11M3	N/A	N/A	N/A	N/A	N/A
5P1	N/A	N/A	N/A	N/A	N/A
8V4	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

The products/features mentioned in this document may not be commercially available in all countries. Due to regulatory reasons, their future availability cannot be guaranteed.

Please contact your local Siemens Healthineers organization for further details.

ACUSON Juniper is a trademark of Siemens Medical Solutions USA, Inc.

MultiHertz is a trademark of Siemens Medical Solutions USA, Inc.

Siemens Healthineers Headquarters

Siemens Healthcare GmbH
Henkestr. 127
91052 Erlangen, Germany
Phone: +49 9131 84-0
siemens-healthineers.com

Legal Manufacturer

Siemens Medical Solutions USA, Inc.
Ultrasound
22010 S.E. 51st Street
Issaquah, WA 98029, USA
Phone: 1-888-826-9702
siemens-healthineers.com/ultrasound