

FUS Elite 3000

A Turnkey Ultrasound-Guided Solution to Advance Biomedical Research in Focused Ultrasound



What does FUS Elite 3000 offer?

- 1 Three standard ultrasound system and transducer configurations to meet a range of customer requirements, including variable depths and frequencies, for research and development
- **2** An applicator arm and integrated cart for easy manual positioning of the transducers for therapy planning and delivery
- **3** A graphical user interface (GUI) to control the rotation of the imaging array and major parameters of FUS imaging
- 4 An easy upgrade pathway from any Vantage System configuration and from certain HIFUPlex[™] solutions from Sonic Concepts

FUS Elite 3000 SOLUTION



Water Conditioning Unit & In-Line Chiller Degassed Water with Automatic Closed Loop **Temperature Control**

FUS Elite 3000 TRANSDUCER SPECIFICATIONS

	FUS-01	FUS-02	FUS-03
Fc (MHz)	0.5	1.1	2.0
# of Rings	3	4	8
Radius (mm)	64.0	64.0	64.0
I.D. (mm)	31.7	31.7	31.7
O.D. (mm)	64.0	64.0	64.0
Geometric Focal Distance* (mm)	52.0	52.0	52.0
Lateral Width (mm)	3.1	1.5	0.8
Axial Length (mm)	21.9	11.5	5.9
Pressure Focal Gain	13.8	27.6	55.1
TAP, Avg. (Watts)**	400	500	500
TAP, Peak (Watts)**	2000	2000	2000
Focal Pressure, Peak (MPa)+	6.0	15.0	28.0

* From the exit plane of the transducer

** TAP = Total Acoustic Power + Linear calculation at maximum peak power

	FUS-04	FUS-05	FUS-06
Fc (MHz)	0.5	1.1	2.0
# of Elements	64	128	128
Radius (mm)	150	150	150
I.D. (mm)	44	44	44
O.D. (mm)	150	150	150
Geometric Focal Distance* (mm)	128	128	128
Lateral Width** (mm)	3.0	1.4	0.8
Axial Length** (mm)	30.0	10.7	7.3
Axial Steering (mm)	115	57	40
Lateral Steering (mm)	44	21	16
Pressure Focal Gain	21.0	50.2	92.0
TAP, Avg. (Watts)+	500	1250	1250
TAP, Peak (Watts)+	2500	5000	5000
Focal Pressure, Peak (MPa)++	67	343	627
rom the exit plane of the transducer using **D	own -3 dB from acoustic maximum	+TAP = Total Acoustic Pow	er

*From the exit plane of the transducer using **Down -3 dB from acoustic maximum the provided bladder coupling system

++Assumes a linear free field environment



Verasonics designs, manufactures, and markets Vantage™ Research Ultrasound Systems for academic and commercial investigators. These real-time, software-based, programmable ultrasound systems accelerate research by providing unmatched speed and control to simplify the data collection and analysis process. Individuals across the globe rely on the flexibility of the Vantage platform for ultrasound-driven research and development in biomedical, materials science, earth sciences, and the physics of acoustics.



Sonic Concepts[™] is a global leader in designing and delivering innovative therapeutic and focused ultrasound solutions, including the HIFUPlex[™] and NeuroFUS[®] systems. Every day, researchers and organizations around the world use their bestin-class customizable products and turnkey ultrasonic therapy and imaging solutions to make medical breakthroughs and solve complex problems.

