

E220evolution Focused-ultrasonicator

High-performance Sample Preparation that Grows with your Needs

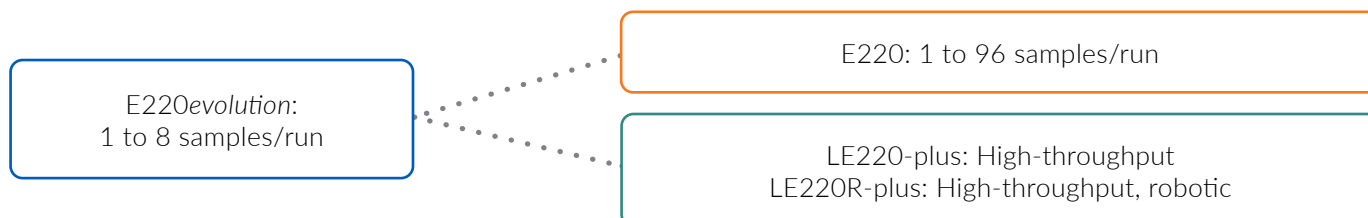
The versatility of the E220evolution Focused-ultrasonicator makes it possible to bring the advantages of Adaptive Focused Acoustics® (AFA®) to numerous biological and chemical applications. The E220evolution enables multi-sample, batch preparation, capable of processing a wide range of sample types and volumes. Process 1 to 8 samples in a batch, and upgrade to 96 samples when needed.



Features	Benefits
Isothermal processing	No heat damage, higher recovery
Non-contact, closed vessel	No cross contamination, no aerosols, no clean up
Precisely controlled and adjustable energy delivery	Standardized processes, highly reproducible
Automation ready	Integrates into customers' sample processing work flow
Multi-sample capability	Higher productivity, less operator intervention
Broad sample volume range	One instrument for multiple applications

Upgrade your Throughput

When workload requirements increase, upgrade your throughput without purchasing a new instrument.

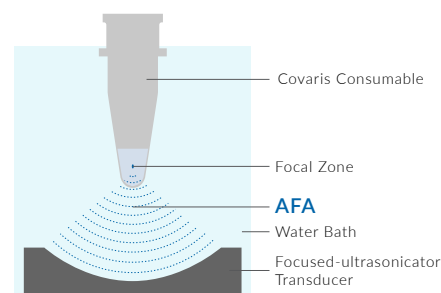


Supported High-throughput Applications

- DNA and RNA Extraction from FFPE Samples
- DNA and RNA Shearing for Next-Generation Sequencing
- Chromatin Shearing for ChIP Samples

Patented Covaris AFA Attributes

- Medical grade high frequency (MHz) ultrasonic transducer
- Geometrically focused convergent acoustic energy
- Non-contact delivery of controlled focused acoustic energy
- Sample vessel engineered for AFA
- Consistent sample processing temperature



System Specifications

Models	E-Series (E220 and E220x)
Treatment System	Bench-top: high intensity acoustic transducer, sample positioning system, temperature monitoring device, circulation pump, and water bath with safety enclosure
Treatment Power	100 Watts Average Power
Dimensions	24" W x 30" D x 19" H (61 cm x 76 cm x 48 cm)
Weight	Approximately 110 lbs (50 Kg)
Safety	Meets Low Voltage Directive 2006/95/EC. Tested to EN/UL/CSA 61010-1:2004 "Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use, Part 1: General Requirements"
Water Conditioning System (WCS)	Accessory to the E220evolution system water bath, automatically circulates water through a 0.5 micron particulate filter and ultraviolet (UV) lamp system. The unit helps to keep the water clean for up to one month before the water must be changed. The filter must be replaced once a year which helps keep the system free of algae growth for up to one year. Uses 100 to 240 VAC. Includes hose connections to E-series water bath.
Computer	Notebook (Computer may be supplied by Covaris or by the user)
Operating System	Microsoft Windows 10
Application Software	Covaris SonoLab
Data Input	Keyboard, mouse
Chiller	Chiller/heater re-circulating system - not included (may be supplied by Covaris or the user). Connect with the 3/8 inch I.D. hoses and quick connect fittings supplied
EMC	Meets EMC Directive 2004/108/EC. Tested to EMI emissions requirements for Industrial Scientific or Medical (ISM) equipment EN55011:1998 + A2:2002 Class A Group1 and EMC requirements - Electrical Equipment for Measurement, Control, and Laboratory Use EN 61326-1:2005 Table 2, EN 61000-3-2:2004 and EN 61000-3-3:1995 +A1:2001.
Water Bath	Distilled or deionized water only
Water Temp. Alarm Limit	Can be set at +5.0C to +40.0C
Power Requirements	100 to 120, 200 to 240 V ~ 50 to 60 Hz, 500 VAC
Operating Environment	Ambient temperature: 19C to 25C (66F to 77F) Relative humidity: 30% to 70%