# **R230 Focused-ultrasonicator**

## True Versatility On-bench or On-deck

Future-proof your lab with the Gold Standard in sample processing. The Covaris R230 is reconfigurable on-bench or on-deck, from mid to ultra-high throughput to meet all of your current and future needs.

Combined with the integration friendly, fully automatable AFA-TUBE (96 and 384-well plate formats available), streamline your library prep with workflow simplification and lower input volumes to yield maximum cost savings.

| Feature                                     | Benefit   |
|---|---|
| Powered by AFA-energetics™                  | Controlled, non-contact processing  |
| Direct on-deck integration                  | Compatible with most liquid handlers                                      |
| Standalone, on-bench sample processing      | Scalable and reconfigurable   |
| Controlled energy delivery                  | Maintains optimal sample integrity  |
| Automation compatible consumables with RFID | Sample tracking and reduced human error                                   |
| Automated water management                  | User-defined scheduling for system set-up maximizes laboratory efficiency |

### **Supported Applications:**

- DNA/RNA Shearing
- Mammalian Cell Lysis

- Compound Screening
- Bead Mixing/Pellet Resuspension
- Low Mass Sample Extraction:
   FFPE, Tissue, and Whole Blood







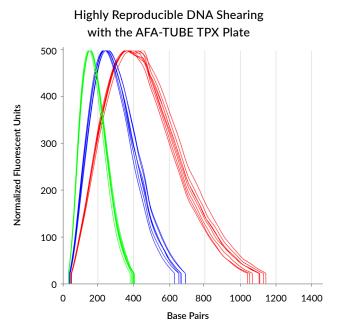


"Because of the Covaris advantages, the total application costs are lower and results superior to other methods."

Marchal, Claire, et al. "Genome-Wide Analysis of Replication Timing by Next Generation Sequencing with E/L Repli-Seq." Nature Protocols, vol. 13, no. 5, 2018, pp. 819–839., DOI: <a href="https://www.nature.com/articles/nprot.2017.148">https://www.nature.com/articles/nprot.2017.148</a>" 10.1038/nprot.2017.148

#### AFA-TUBE TPX 96 and 384-well Plates





**Figure 3.** Electropherograms showing narrow size distribution obtained from high quality gDNA on the R230 in a logarithmic scale for 96 samples imaged on the Fragment Analyzer (DNF-474). Green: 175 bp (130 sec of AFA in 20  $\mu$ L), blue 250 bp (90 sec of AFA in 50  $\mu$ L), and red 350 bp (50 sec of AFA in 50  $\mu$ L).

| Instrument Specifications       |  |
|---------------------------------|--|
| Part Number                     | 500620   |
| Treatment Power                 | 2.5 to 450 Watts peak incident power,<br>0.1 to 135 Watts average incident power   |
| Instrument Dimensions           | 36 cm (width), 29 cm (depth), and 15 cm (height)   |
| WCS 3.1 and EB 1.0 Dimensions   | 37 cm (width), 40 cm (depth), and 37 cm (height) • EB 1.0 adds 13 cm to the height   |
| Carboy(s) Dimensions            | 20 cm (width), 20 cm (depth), and 45 cm (height)   |
| Tubing Length                   | 3 meters   |
| Power Requirements              | 100 to 240 VAC 500VA, 50 to 60 Hz  |
| Operating Environment           | Ambient temperature: 19 to 25 °C (66 to 77 °F)<br>Relative humidity: 30 to 70%   |
| Operating Temperature           | 10 to 30 °C  |
| Regulatory Labeling             | CE, ETL Mark (for Product Safety), WEEE  |
| Operating System                | Includes: Notebook computer interface via Ethernet with Microsoft Windows and Covaris SonoLab™ 10 Operating, Software installed              |
| Chiller                         | WCS 3.1 included (The integrated water conditioning system includes a chiller, UV lamp, and particle filter)                                 |
| Sample Processing Capacity      | Sample Processing Capacity 8 tubes at a time simultaneous processing; 96 tube capacity scanning  |
| Sample Volumes                  | <ul> <li>AFA-processed volumes from 5 to 50 μL</li> <li>Max working volume up to 200 μL</li> </ul>   |
| Recommended Batch Size          | 24 to 384 samples  |
| Covaris-qualified Consumables   | <ul><li>96 AFA-TUBE TPX Plate (PN 520291)</li><li>384 AFA-TUBE 20 PP Plate (PN 520303)</li><li>384 AFA-TUBE 5 PP Plate (PN 520302)</li></ul> |
| Integration with Lab Automation | Yes: Sonolab 10 API  |

### **Ordering Information**

| Part # | Product Name                | Description  |
|--------|-----------------------------|--|
| 500620 | R230 Focused-ultrasonicator | <ul> <li>R230 Focused-ultrasonicator module</li> <li>SonoLab 10 Software</li> <li>WCS 3.1 module</li> <li>Electronics module (E.B. 1.0 (The electronics module is integrated to the WCS 3.1))</li> </ul> |