



FOTROS

Technical and Engineering Company

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Ultrasonic Homogenizer





The laboratory ultrasonic homogenizer (sonicator) is a powerful and versatile tool for a wide range of sample preparation and processing procedures in the laboratory. This device transfers mechanical energy to liquids using high-intensity ultrasonic waves, resulting in phenomena such as cavitation, intense mixing, and particle breakdown.

Explanations	Frequency (K Hz)	Power (Watt)	Processing Volume	Model
Power adjustment, temperature sensor for solution, sound-insulated chamber, connection to software and graph output, temporal programming (continuous and discrete), motion mechanism for solution container, body color: white	25	Variable power up to 400	20 -500 millimeter	UH01A
Power adjustment, sound-insulated housing, manual jack for container solution, time programming (continuous and discrete), body color: black	25	Variable power up to 400	20 -500 millimeter	UH01B
Power adjustment, temperature sensor for solution, sound-insulated chamber, connection to software and graph output, temporal programming (continuous and discrete), motion mechanism for solution container, body color: white	20	Variable power up to 800	100 -1000 millimeter	UH02A
Power adjustment, sound-insulated housing, manual jack for container solution, time programming (continuous and discrete), body color: black	20	Variable power up to 800	100 -1000 millimeter	UH02B

 Models have the capability for high-level power customization.

Key Applications:

Cell Disruption:

Extracting proteins, DNA, RNA, and other cellular components from micro-organisms and tissues.

Dispersion:

Dispersing nanoparticles, pigments, and other materials in liquids.

Emulsification:

Producing stable oil-in-water or water-in-oil emulsions.

Accelerating Chemical Reactions:

Increasing the speed and yield of certain chemical reactions.

Extraction:

Extracting active compounds from plant sources and other materials.

Particle Size Reduction:

Grinding solid particles in liquids.

Notable Features:

- Automatic frequency tuning
- Titanium horn
- Noise-canceling chamber
- Fast and efficient processing
- Precise process control
- Adjustable power
- Solvent temperature control
- Variety in sample volume
- User friendly HMI
- Computer software connectivity



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