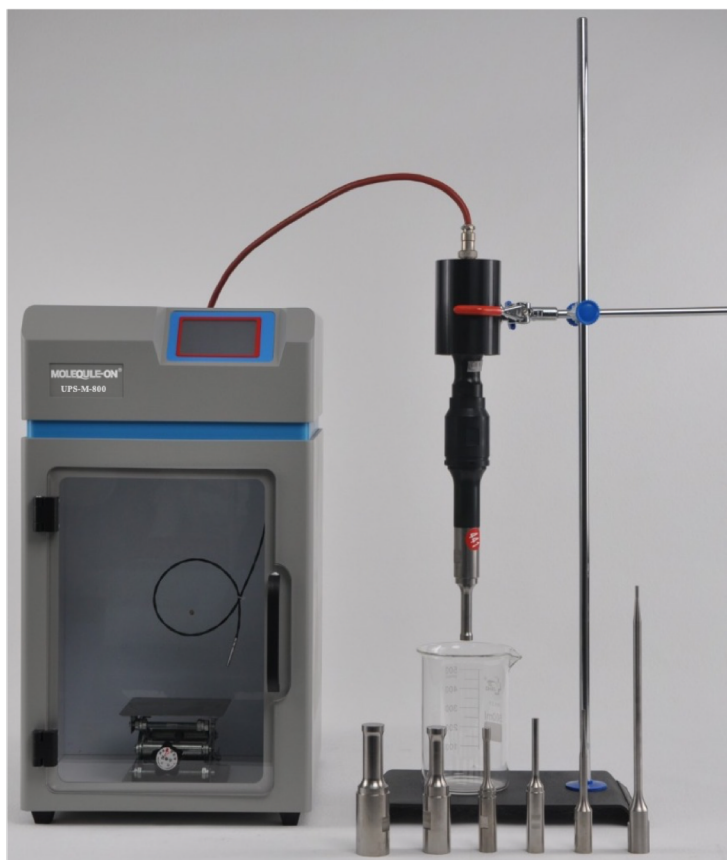


# MQ Ultra Probe Sonicator (Homogenizer)

Cat No: UPS-M-800

**MOLEQULE-ON<sup>®</sup>**



## Description

MQ Ultra probe sonicator (Homogenizer) with a frequency 24KHz (19-26 KHz) has automatic frequency scanning and checking. The model UPS-M-800 has machine and sound proof box together. Compact shell design occupies minimal bench space with a size of 6.8 kg and a dimensions 47x32x52 cm. Complete the whole experiment with much less noise.

The unique design of titanium alloy probe allows the ultrasonic waves emits from the sides and increases the contact area with the sample, so the sample is processing more thoroughly. The probe is resistant to acid and wear having a lifespan 6 times longer than ordinary probes. Probe options include (mm)  $\Phi 3$ ,  $\Phi 6$ ,  $\Phi 8$ ,  $\Phi 10$ ,  $\Phi 13$ ,  $\Phi 16$ ,  $\Phi 18$ ,  $\Phi 20$ ,  $\Phi 25$ ,  $\Phi 30$  (probe is sold separately according to customer's need).

The outer box has 3.2" color LCD touch screen, data storage function which store about 10 set of data individually. Additional features include automatic resonance point, power control and 99h time control which can be paused at any time. Temperature sensor can detect sample temperature in real time 0-300°C (Overheat Protection). Each parameter has an independent setting interface. It displays the frequency and power setting with 1% increment.

Small bulb inside the box allows to observe the status of the sample during processing.

## Application

- Extraction of cell contents, bacteria and viral tissue.
- Dispersion and homogenization of the material particles. For example, nanomaterial dispersion (silicon dioxide, carbon nanotubes, graphene, etc.).
- Accelerate the dissolution and accelerate the chemical reaction. For example for chemical synthesis.

## Working Application

High shear forces created by ultrasonic vibration have the ability to break up lump formation and result in smaller and more uniform particle sizes. The stable and homogenous suspensions produced by ultrasonic are widely used in many industries. Probe sonication is acquiring more and more noticeable position in industry. It is highly effective for processing nanomaterials (carbon nanotubes, graphene, inks, metal oxides, etc.).

Sonicators have become the industry standard for:

- Nanoparticle Dispersion; Composite material preparation
- DNA and Chromatin Shearing;
- Cell lysis, tissue disruption; Cell Lysis-breaking extraction and smashing
- Cannabis extracts (CBD, THC); Herbal Medicine and phytoextraction
- Protein Purification
- Homogenizing /Extraction of Soil Organic Matter
- Sonication is effective for many other applications including:
- Degassing / Liposomes / Crystallization / Emulsification / Extraction

## Technical Parameter

<b>Model</b>	<b>UPS-M-800</b>
<b>Power in</b>	AC 100 ~ 240V, 50 ~ 60 Hz Auto Adapt
<b>Power Output</b>	800 Watt (Step Control 0-100%)
<b>Frequency Range</b>	24KHz (19 ~ 26Khz auto tacking frequency)
<b>3 Working Mode</b>	Continuous Pulse Loop (1 sec ~ 99 min) Timer (1 sec ~ 99 hours)
<b>Sample Processing Volume</b>	0.3 ~ 2000 ml
<b>Ultrasonic Probe</b>	Titanium alloy, long life design.
<b>Sonicator Dimensions</b>	270x300x450mm (LxWxH)
<b>Open Door Dimensions</b>	260x190mm
<b>Packing Size</b>	45cm x 40cm x50cm
<b>Gross Weight</b>	8.0 kg

## Probe Options

<b>Ø3mm Probe</b>	0.3ml~100ml
<b>Ø6mm Probe</b>	0.3ml~200ml
<b>Ø10mm Probe</b>	10ml~500ml
<b>Ø13mm Probe</b>	10ml~1 Liter
<b>Ø20mm Probe</b>	50ml~2 Liter)