

# UIS Technology

Ultrasonic Homogenizer Processor



## Ultrasonic Homogenizer

UHP-200

**UHP-200**

200 watt and 20 kHz with  
40 db Soundproof Enclosure



Property	UP200
Input Voltage (V)	220
Input Current (A)	1.1
Input Frequency (Hz)	50~60
Output power (W)	0~200
Output Frequency (KHz)	20±1
Power Adjustable	Yes
Frequency Adjustable	No
Interface	TFT LCD (touch)
Working Mode	Pulse
Pulse ON (s)	1~20
Pulse OFF (s)	1~10
Total duration for a cycle (min)	30
Sound enclosure box	40 db
Thermometer	Yes (PT-100)
Temperature range (°C)	0-100
Horn Material	Ti-6Al-4V
Horn final diameter (mm)	3 or 5
Working volume (CC)	2~50

Ultrasonic homogenizers are used for purposes such as mixing, dispersing and emulsifying, the goals are to reduce small particles, droplets in a liquid, to improve uniformity and stability of the mixture. By decreasing the mean particle diameter, the number of individual particles is increased. Therefore, the average particle distance decreases and the particle surface area increases as well. Ultrasonic homogenizers work great compared to conventional homogenization methods with the following properties:

- Ultrasonic homogenizers produce small particles / droplets and a narrow distribution curve.
- Ultrasonic homogenizers can handle high solids concentrations.
- Ultrasonic homogenizers prepare stable suspensions, dispersions and emulsions.
- Ultrasonic homogenizers are precisely controllable that is important process parameters (e.g., amplitude, power, time, temperature, and pressure) can be influenced and adjusted.
- Ultrasonic homogenizers are energy efficient, user friendly and safe to use.

This Ultrasonic Homogenizer Processor has the nominal working power of 200 watts with 5-mm horn tip, which make it suitable for biologic and microbiological usage. This Ultrasonic Homogenizer is appropriate for cell lysis, tissue homogenization, making emulsions, dispersing and synthesizing of nano particles, etc. in small volumes (5-50 cc).

