

UIS Technology

Ultrasonic Homogenizer Processor



Ultrasonic Homogenizer

UHP-1200

UHP-1200

1200 watt and 20 kHz with
40 db Soundproof Enclosure



Property	UP1200
Input Voltage (V)	220
Input Current (A)	6
Input Frequency (Hz)	50~60
Output power (W)	100~1200
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)	30
Working volume (CC)	2000~5000

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 general product has been found many applications in several fields such as Nano-Technology, Materials Engineering, Chemistry, Chemical Engineering, Oil and Gas Industry, Biology, etc. The main applications of the Ultrasonic Homogenizer Processor UHP-1200 are synthesizing and processing of nano-materials. Beside these, it is suitable to accelerate chemical reactions without addition of chemical agents or increasing temperature and/or pressure.

