

ULTRASONIC HOMOGENIZERS



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An Ultrasonic Homogenizer is a multifunctional instrument that uses ultrasonic waves to produce a cavitation effect in liquid and disrupt cells or tissues. It consists of an ultrasonic generator and an ultrasonic transducer. The generator produces sound waves which are transmitted to a probe placed in a liquid sample vibrated at high frequency that creates high pressure waves resulting in the formation of microscopic bubbles. These bubbles expand and collapse called cavitation which generates intense heat & pressure and breaks down the particles. The homogenized sample can then be used for various applications, such as protein extraction, DNA fragmentation, or cell lysis.

LTHMG10 ULTRASONIC HOMOGENIZER

7 inch large screen LCD touch screen display. Microcomputer control, which can store 20 sets of work data. Ultrasonic time, ultrasonic power can be set.

Automatic detection of ultrasonic power to prevent the change of ultrasonic power as the

temperature of the sample is changed.

Integrated temperature control to prevent sample overheating. Automatic frequency tracking, automatic fault alarm.

Single ultrasound time: 0.1-99.9S

Single interval time: 0.1-99.9S

Total working time: 1S-99H59M59S(touch type to 99hours)

Mode of work: clearance or continuity

frequency: 19.5-20.5KHz

Can select computer online function



SPECIFICATIONS

| Model | LTHMG10-1 | LTHMG10-2 | LTHMG10-3 | LTHMG10-4 |
|----------------------------|-------------|---------------|-----------------|--------------------|
| Ultrasonic Frequency | 20-25 (KHZ) | | | |
| Optional probe | 2,3,6 Φ mm | 2,3,6, 8 Φ mm | 2,3,6,8,10 Φ mm | 2,3,6,8,10,12 Φ mm |
| Crusher Capacity | 0.1-150 ml | 0.1-250 ml | 0.1-400 ml | 0.1-500 ml |
| Sample temperature monitor | Yes | | | |
| Maximum Power | 0-150 W | 0-250 W | 0-500 W | 0-650 W |

| Model | LTHMG10-5 | LTHMG10-6 | LTHMG10-7 | LTHMG10-8 |
|----------------------------|--------------------|---------------------|----------------------|-------------------------|
| Ultrasonic Frequency | 20-25 (KHZ) | | 19.5-20.5 (KHZ) | |
| Optional probe | 2,3,6,8,10,12 Φ mm | 2,3,6,10,12,15 Φ mm | 3,6,10,15,20,22 Φ mm | 10, 15, 20, 22, 25 Φ mm |
| Crusher Capacity | 0.1-600 ml | 0.1-700 ml | 5-1000 ml | 20-1200 ml |
| Sample temperature monitor | Yes | | | |
| Maximum Power | 0-900 W | 0-950 W | 0-1200 W | 0-1500 W |

| Model | LTHMG10-9 | LTHMG10-10 | LTHMG10-11 |
|----------------------------|---------------------|------------|------------|
| Ultrasonic Frequency | 19.5-20.5 (KHZ) | | |
| Optional probe | 15, 20, 22, 25 Φ mm | | |
| Crusher Capacity | 50-1500 ml | 50-1800 ml | 50-2000 ml |
| Sample temperature monitor | Yes | | |

| | | | |
|---------------|----------|----------|----------|
| Maximum Power | 0-1800 W | 0-2000 W | 0~2200 W |
|---------------|----------|----------|----------|



LTHMG10-1



LTHMG10-2



LTHMG10-3



LTHMG10-4



LTHMG10-5



LTHMG10-6



LTHMG10-7



LTHMG10-8



LTHMG10-9



LTHMG10-10



LTHMG10-11

LTHMG12 CUP TYPE ULTRASONIC PROCESSOR

No aerosol generation- enhanced biological safety, used for aseptic operation; (such as: mycobacterium, hepatitis B virus, hepatitis A virus, influenza (including H1N1), SARS virus)

The risk of sample cross-contamination is eliminated; chromosomes can be broken and cells can be broken through centrifuge tubes

Eliminates the cumbersomeness of traditional hand-held probes and fixed probes, with a sound-absorbing compression device

Can effectively prevent the generation of sample foam

Chinese LCD display, the power can be fine-tuned, and the input mode can be fine-tuned by 5W each time

Periodic pulses are used to break cells, the start and end times of pulses are adjustable, and the adjustable time is accurate to 0.1 second

Can handle a variety of samples, a wide range of sample processing

Standard disposable containers (PCR tubes Eppendorf, 0.4~6ml Corning/Falcon tubes) can be used

Can be used to deal with micro samples; minimum to 5uL

It can process 4 samples at one time, and the corresponding model needs to be selected

The automatic continuous rotating centrifuge tube makes the ultrasonic energy distribution more uniform, the data is specific and repeatable

With a cooling water circulation tank interface, a low-temperature cooling liquid circulation machine can be selected to avoid excessive temperature during the crushing process and affect the infectivity of viruses.



SPECIFICATIONS

| Model | LTHMG12-1 | LTHMG12-2 |
|----------------------------------|--|-----------|
| Ultrasonic power | 1200 W | 2200 W |
| Crushing capacity | (0.1-1.5ml)x4 ml | |
| Temperature control range | -5-50 degrees (requires optional low temperature constant temperature) | |
| duty cycle | 1-99.9% | |
| Display mode | widescreen LCD display | |
| Single ultrasound time | 0.1-9.9 S | |
| Single gap time | 0.1-9.9 S | |
| Total working time | 1-999 M | |
| Alarm functions include | temperature, time, overload, no-load | |
| Random horn | Φ20 or 25 (optional) | |
| Optional centrifuge tube fixture | 0.2ml x8 holes or 5ml x3 holes | |
| Working frequency | 19.5-20.5 KHz | |
| Power Supply | 220/110V 50Hz/60Hz | |





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