Digital

ULTRASONIC PROCESSORS





SONIC Series, Ultrasonic Cell Diruptures Cell Dirupture Homogenizer:

Ultrasonic cell disruptures are multi-function and multipurpose instruments that utilize strong supersound produce empty effect of taking among liquid, the instruments of multi-function, multiuse of dealing with the supersound to the material, can be used in the brokenness of many kinds of animal and plant cells, virus cell, at the same time, can use emulsification, separates, melts, draws, subdues steeping, washes and accelerates the chemical reaction etc. evenly. Widely used in such fields as biochemistry, microbiology, medicine chemistry, surface chemistry, physics, zoology, etc. The three types of machines are with temperature control functions.

Standard Delivery:

Power supply, Ultrasonic transducer, Ultrasonic probe, Sound abating enclosion.

Main Functions:

- Digital display.
- Automatic tracking frequency.
- Adjustable power.
- Internal timer.
- Duty cycle setup.
- Overload alarm.

Optional Probes:



| Model | Ultrasonic frequency | Maximum power | Duty ratio (%) | Optional Probes diameter | Standard probe size included with machine | Capacity (ml) | Temp. control |
|--------------|-------------------------|------------------|-------------------|--------------------------------|---|------------------|------------------|
| SONIC-150W | 20-25 Khz | 150W | 1-99% | 3mm | 6mm | 10-100ml | No |
| SONIC-250W | 20-25 Khz | 250W | 1-99% | 3mm | 6mm | 10-200ml | No |
| SONIC-650W | 20-25 Khz | 650W | 1-99% | 2,3,8,10,12, 15mm | 6mm | 0.5-500ml | No |
| SONIC-650WT | 20-25 Khz | 650W | 1-99% | 2,3,8,10,12, 15mm | 6mm | 0.5-600ml | Yes |
| SONIC-950WT | 20-25 Khz | 950W | 0.1-99.9% | 2,3,8,10,12, 15, 18mm | 6mm | 0.5-600ml | Yes |
| SONIC-1200W | 19.5-20.5Khz | 1200W | 1-99% | 15,25ml | 20mm | 50-1000ml | No |
| SONIC-1200WT | 19.5-20.5Khz | 1200W | 0.1-99.9% | 15,25ml | 20mm | 50-1000ml | Yes |
| SONIC-1800W | 19.5-20.5Khz | 1800W | 0.1-99.9% | 25,28ml | 25mm | 50-1200ml | Yes |

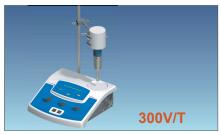
ULTRASONIC PROCESSORS

Analog



Features:

Power Output 0-150WATTS Output Frequency 20k Hz **Automatic Tuning** Yes Microprocessor Control N/A Duty Cycle (Pulsing) 10 - 90% Timer 1-15 minutes Display LED N/A Temperature Controller Sound Abating Chamber Optional



Features:

Power Output 0-300WATTS **Output Frequency** 20k Hz **Automatic Tuning** Yes Microprocessor Control N/A **Duty Cycle (Pulsing)** 10 - 90% 1-15 minutes Timer Display **LED** N/A Temperature Controller Sound Abating Chamber Optional



Features:

Power Output 0-300WATTS Output Frequency 20k Hz Automatic Tuning Yes Microprocessor Control N/A Duty Cycle (Pulsing) 10 - 90% Timer 1-15 minutes Display **LED** N/A Temperature Controller Sound Abating Chamber Integrated



| Catalog No. | Tip diameter | Prosessing vol. | Indensity | Type |
|-------------|---------------|-----------------|-----------|---------|
| 0-120-0005 | 5/32" (3.8mm) | 300µl-15ml | Very high | Stteped |
| 0-120-0007* | 1/18" (3.2mm) | 500µl-10ml | Very high | Tapered |
| 0-120-0008* | 3/16" (4.8mm) | 750µl-25ml | High | Tapered |

^{*} Tapered micro tips are a 2 piece design & must be used in conjuction with the 1/2" dia. tapped tip. cat no. 0-120-0010.

Titanium Standard Tips (Horns):

Sold Tips -are machined from a single piece of Titanium & are preferred when processing liquids with high surface tension. In addition, Solid Tips are generally less likely to cause sample cross contaminations.

Tapped Tips -All include 1 Titanium Replacement, Flat Tip. Flat Tips should be replaced when they show signs of excessive "pitting" and intensity/performance is greatly Catalog No. | Tip diameter | Prosessing vol. | Indensity | Type

decreased.



| Catalog No. | Tip diameter | Prosessing vol. | indensity | туре |
|-------------|---------------|-----------------|-------------|---------|
| 0-120-0009 | 3/8" (9.2 mm) | 5ml-200ml | High | Solid |
| 0-120-0010 | 1/2" (12.7mm) | 10ml-300ml | Medium-high | Tapered |
| 0-120-0011 | 1/2" (12.7mm) | 10ml-300ml | Medium-high | Solid |
| 0-120-0012 | 3/4" (19.1mm) | 25ml-600ml | Medium | Tapped |
| 0-120-0013 | 3/4" (19.1mm) | 25ml-600ml | Medium | Solid |
| 0-120-0014 | 1" (25.4mm) | 50ml-1000ml | Low | Tapped |
| 0-120-0015 | 1" (25.4mm) | 50ml-1000ml | Low | Solid |

Titanium Replacement Flat Tips:







| Catalog No. 0-120-0016 | | 0-120-0017 | 0-120-0018 | |
|------------------------|---------------|---------------|-------------|--|
| Tip diameter | 1/2" (12.7mm) | 3/4" (19.1mm) | 1" (12.7mm) | |

Titanium Cup Tips:

It provide an easy way to process samples without direct exposure to the homogenizer tip, avoiding cross contamination. Titanium Cup Tips can simultaneously process sealed vial, test tubes or micro tubes with identical parameters.

No. of tubes





| Catalog No. | Tip Diameter | Tip Diameter Resrvoir Vol. | | Indensity | |
|-------------|-----------------|----------------------------|---|------------|--|
| 0-120-0019 | 1 1/2" (38.1mm) | 250ml | | Medium | |
| 0-120-0020 | 2" (50.8mm) | 2000ml | | Low | |
| Catalog No. | 0-120-002 | 1 | (| 0-120-0022 | |



This chamber permits continuous processing of liquids, and is designed for emulsifying and homogenizing applications.

The continuous flow chamber may be sealed in a closed system when mounted, so that infectious materials can be used.

It is equipped with a water flow-through cooling jacket to enable the temperature of the processed solution to be maintained at a desired level.