

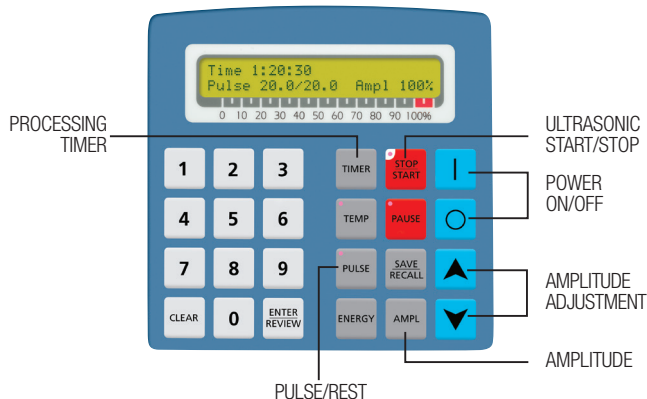
Q2000 Sonicator

The Q2000 offers the ability to process large volumes in individual batches or flow through applications. This model includes a high amplitude, 1.5" diameter, 10" long probe and booster. The Q2000 is powerful, durable and customizable.

The Q2000 Sonicator allows the user to program processing times and a full range of intensity settings. Processing time can be set from 1 second to 10 hours. A pulsing feature is also included. Pulsing can reduce the amount of heat generated by sonication when processing temperature sensitive samples. A temperature monitoring probe option is also available.



Stand sold separately.



FEATURES:

Programmable operation

Set time and amplitude for hands free operation

Pulse mode

Prevent heat buildup in temperature sensitive samples

Digital amplitude / intensity control

Output intensity can be set from 20-100%

Elapsed time indicator

Displays duration of sonication

Display of wattage and joules

Real-time energy monitoring

Temperature protection

Prevents overheating of samples

Processing Volume

1 – 20L*

PART NO. Q2000 INCLUDES:

- Generator
- Converter
- Booster
- Converter cable
- Power cable
- Wrench set
- 1.5" (38mm) diameter probe

TECHNICAL SPECIFICATIONS:

Power Rating:	2,000 watts
Frequency:	20kHz
Programmable Timer:	10 hours
Adjustable Pulse On/Off:	1 second to 1 minute
Dimensions (H x W x D):	7 x 15 x 18.25 in. (178 x 380 x 463 mm)
Voltage:	230V, 50/60 Hz

*Processing volume is application specific and will vary depending on many factors.

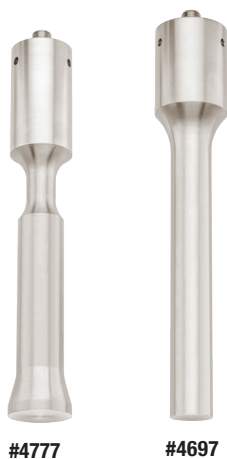
Batch Processing

The Q2000 can be used to process approximately 1-20L when used with 2 probe sizes. The 1.5" diameter probe is standard and is recommended for 5L or more. An optional 1" diameter probe is available for processing 1L or more.



Replacement Probes

Two probe options are available with the Q2000. The #4777 probe is included with the system.



Part #	Tip Diameter	Processing Volume	Amplitude
4777	1.5" (38mm)	5 - 20L	100µm
4697	1" (25mm)	1 - 10L	100µm

Note: Processing volumes are application specific. There are many variables (viscosity, concentration, etc.) that can affect the min/max processing volumes and processing times. Stirring may be beneficial to viscous samples. Contact us for assistance.

Optional Accessories



#4474



#461



#4060

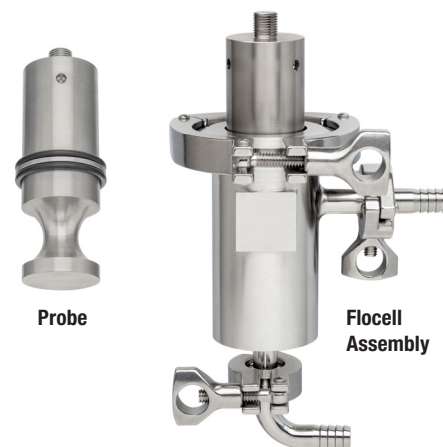
Part #	Description
4474	Sound Enclosure (H x W x D) 36 x 16 x 16 in. (914 x 406 x 406 mm)
461*	Support Stand and Converter Clamp
4060	Temperature Probe

**Stand and clamp can be used inside of enclosure.*

High Volume In-Line Processing

Flocells offer inline/continuous, large volume, sample processing. The sample may be processed in a single pass, recirculated through multiple times or have a multi-unit configuration for even faster processing. The type of configuration and actual flow rate are dependent on the individual application, sample type and desired end result.

The liquid sample is pumped into the Flocell through the inlet at the bottom of the unit. As the sample passes through the cavitation field, it is processed. The processed liquid exits the unit through an outlet port. The degree of processing can be controlled by adjusting the intensity of sonication as well as flow rate.



The unit is recommended for processing volumes of 5L or more. Routine applications include emulsification, cell lysis, homogenization, solubilizing, deagglomerating and dispersing.

The Flocell is compatible with the Q2000 system. The #4705 Flocell has 1/2" sanitary connections and includes the #4676 probe/horn. Sonication produces heat and this unit should be used with an external heat exchanger and chiller to maintain an acceptable sample temperature. Note that a pump, tank, chiller and other common accessories are not included.

Part #	Description
4705	Flocell <ul style="list-style-type: none"> Includes #4676 probe Material: 316L Stainless steel 1/2" Sanitary connections Hose barbs for 3/8" ID tubing Internal volume 110ml
4676	Flocell Probe 1.5" (38mm) diameter
4135	Stand for Flocell 11 x 10 x 16 in. (280 x 254 x 155mm)
4475	Sound Enclosure 14.5 x 17 x 32 in. (369 x 432 x 813mm)