

ULTRASONIC PROCESSORS FOR SMALL AND MEDIUM VOLUME APPLICATIONS

500 and 750 Watt Ultrasonic Processor – 250 µ l to liters*



VC 505 – VC 750

□ Energy Monitor

Digitally displays the actual amount of energy in Joules (watts x seconds) that is being delivered to the probe.

□ Wattmeter

Digitally displays the actual amount of power in watts that is being delivered to the probe.

□ Automatic Tuning and Frequency Control

Eliminates the need for constant adjustment of the power supply

□ Microprocessor Based and Programmable

Digital accuracy and repeatability assures adherence to the most exacting protocol.

□ Automatic Amplitude Compensation

Ensures uniform probe amplitude regardless of the varying loading conditions encountered during the processing cycle.

□ Real Time Display

Provides a window on the process. No more assumptions. No more approximations. All parameters are continuously displayed on the screen, providing operating mode confirmation without process interruption.

□ Variable Power Output Control

Allows the ultrasonic vibrations at the probe tip to be set to any desired amplitude. Selected output level is clearly displayed on the screen.

□ Ten Hour Process Timer

Controls the processing time from 1 second to 10 hours.

□ Elapsed Time Indicator

Monitors both the elapsed time and the duration of processing.

□ Independent On/Off Pulser

Enables safe treatment of temperature-sensitive samples at high intensity, and provides mixing by repeatedly allowing the sample to settle back under the probe after each burst. Both on and off cycles are independently controllable from 1 second to 59 seconds.

□ User Friendly

Menu driven fill-in-the-blank prompts provide intuitive guidance through all functions.

□ Smallest Footprint In Its Class

Compact design eases emplacement and optimizes bench space. Only 7½" x 13½" (190 x 340 mm).

*On a flow-through basis

Specifications

POWER SUPPLY	Net power output: VC 505 - 500 Watts. VC 750 - 750 Watts. Frequency: 20 kHz Remote actuation compatible. Dimensions: (H x W x D) 9¼" x 7½" x 13½" (235 x 190 x 340 mm) Weight: 15 lbs. (6.8 kg).
SEALED CONVERTER	Model CV 33. Piezoelectric lead zirconate titanate crystals (PZT) Diameter: 2½" (63.5 mm) Length: 7¼" (183 mm) Weight: 2 lbs. (900 g) Cable length: 5' (1.5 m)
STANDARD PROBE	Tip diameter: ½" (13 mm) solid or with threaded end and replaceable tip. Please specify.* Processing capability: 10 ml to 250 ml.** Length: 5⅞" (136 mm) Weight: ¾ lb (340 g) Titanium alloy TI-6AL-4V
ELECTRICAL REQUIREMENTS	Unless otherwise requested, units are shipped wired for 117 volts, 50/60 Hz. For export, please specify desired voltage option.

Ordering Information

	Order No.
500 Watt ultrasonic processorVC 505
750 Watt ultrasonic processorVC 750

Shipped complete and ready for operation with a ½" (13 mm) probe with replaceable tip,* tool kit and instruction manual

*Do not use a probe with replaceable tip when processing samples containing organic solvents or low surface tension liquids. See caution below.

Use solid probe Order No. 630-0219 instead. Unless otherwise specified, the probe supplied will have a replaceable tip.

**For other volumes please refer to probe and microtip listings. A different probe can be substituted for the standard probe.

CAUTION: All probes, including those with replaceable tips, are tuned to resonate at 20 kHz. If the replaceable tip is removed or isolated from the rest of the probe, that element will no longer resonate at 20 kHz and the power supply will fail. Organic solvents (e.g. methylene chloride) and low surface tension liquids will penetrate the interface between the probe and the replaceable tip, thus carrying the particulates into the threaded section and isolating the tip from the probe. When processing samples containing organic solvents or low surface tension liquids, ALWAYS use a solid probe or as an alternate a full wave 10" (254 mm) probe or an extender. NEVER use a probe with a replaceable tip.