

500 Watt Ultrasonic Processor – 250 microliters to 1 liter*

Real time display . . .



VC 505

- **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 guarantees adherence to the most exacting protocol.
- **Automatic Amplitude Compensation**
Ensures uniform probe amplitude regardless of the varying loading conditions encountered during the processing cycle.
- **On Demand Real Time Display**
Provides a window on the process. No more assumptions. No more approximations. Pressing a button enables all set and run parameters to be continuously displayed on the screen, providing instant 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**
Ultra-compact design eases emplacement and optimizes bench space. Only 7½" x 13½" (190 x 340 mm).

* For larger volumes use medium volume continuous flow cell Part No. 630-0651 or VCX 1500. Laboratory stand and converter clamp are not included.

SPECIFICATIONS

POWER SUPPLY	Net power output: VC 505 - 500 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*	Part No. CV 334. Piezoelectric lead zirconate titanate crystals (PZT) Diameter: 2½" (63.5 mm) Length: 7¼" (183 mm) Weight: 2 lbs. (900 g)
CONVERTER CABLE	Cable length: 6' (1.8 m). Part No. 201-0300
STANDARD PROBE	Tip diameter: ½" (13 mm) with threaded end and replaceable tip Part No. 630-0220 or solid probe with non-replaceable tip Part No. 630-0219. Please specify** Processing capability: 50 ml to 250 ml.*** Length: 5⅜" (136 mm) Weight: ¾ lb (340 g) Titanium alloy Ti-6Al-4V
TOOL KIT	Supplied with one open end wrench Part No. 888-00026, and one blue spanner wrench Part No. 888-00041 for the converter and one red spanner wrench Part No. 888-00042 for the probe.
ELECTRICAL REQUIREMENTS	Unless otherwise requested, units are shipped wired for 117 volts, 50/60 Hz. For export, please specify desired voltage option.

ORDERING INFORMATION

Model No.

500 Watt ultrasonic processor VC 505

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

OPTIONAL ACCESSORIES

For optional accessories, please refer to pages 11 through 17.

- * The converter incorporates two plugs which can be removed and replaced with barb fittings, to enable air cooling when the converter is operated at high amplitude for prolonged durations.
- ** 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 Part No. 630-0219 instead. Unless otherwise requested, the probe supplied will have a replaceable tip.
- *** For other volumes please refer to probe and microtip listings on pages 11 through 13. A different probe can be substituted for the ½" (13 mm) 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 go into an overload condition and shut down or 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.