

### Cole-Parmer® 500- and 750-Watt Ultrasonic Processors

#### Don't worry about over heating

- Prevent over heating with independent on/off pulser
- Easy-to-use menu for intuitive guidance
- Process samples from 250 µL to 19 L/hr with continuous flow cell
- Reproducible results with energy monitor

#### Ultrasonic Processors

- Deliver 500 or 750 watts at 20 kHz
- Use 500-watt model for small samples, 750-watt model for larger volumes
- Autotuning
- Monitor elapsed time, duration of processing, and power
- Adjustable energy intensity with variable amplitude control and monitor digitally and graphically

#### Ultrasonic Processors with Temperature Controller and Energy Controller

- Same features as above plus integral temperature controller, energy controller, and memory

**What's included:** converter, tool kit, foot switch connection, ½" (13-mm dia) probe 04710-31 with replaceable tip, and a 6-ft (1.8-m) cord with plug.



750-watt ultrasonic processor 04711-60



Order stand 04712-92 and clamp 04714-91 below.



Description	Sample volume	Frequency	Power		500-watt ultrasonic processors		750-watt ultrasonic processors	
			VAC	Hz	Catalog number	Price	Catalog number	Price
Ultrasonic processor	250 µL to 19 L/hr†	20 kHz	115	50/60	<a href="#">GH-04711-70</a>		<a href="#">GH-04711-60</a>	
			230	50/60	<a href="#">GH-04711-75</a>		<a href="#">GH-04711-65</a>	
Ultrasonic processor with temperature controller and energy controller		20 kHz	115	50/60	<a href="#">GH-04711-30</a>		<a href="#">GH-04711-40</a>	
			230	50/60	<a href="#">GH-04711-35</a>		<a href="#">GH-04711-45</a>	

†Maximum volume using continuous flow cell 04710-91 (order separately below)

#### Accessories

**GH-04710-48 Sound-abating enclosure.** Measures 14"W x 30"H x 14"D (35.6 x 76.2 x 35.6 cm). Support rod and converter clamp included

**GH-04712-05 Foot switch** for hands-free operation; 6-ft (1.8-m) cable included. CE-marked

**GH-04712-92 Stand.** 24"H x ½"-dia (61.0 x 1.3 cm) stainless steel rod and 9"L x 5½"W (22.9 x 14.0 cm) cast-iron base

**GH-04714-91 Converter clamp** secures converter onto ½"-dia rod; made of chemical-resistant reinforced plastic

**GH-04711-50 Stainless steel temperature probe** for models 04711-30, -35, -40, and -45. CSA-approved

#### Microtips

Process small samples at a very high intensity. Screw in the ½" (13 mm) threaded end probe in place of the replaceable tip.



Tip dia	Sample volume	Catalog number	Price
<b>Tapered microtips</b>			
½"	1 to 10 mL	<a href="#">GH-04710-42</a>	
¾"	3 to 15 mL	<a href="#">GH-04710-44</a>	
1"	5 to 25 mL	<a href="#">GH-04710-46</a>	
<b>Stepped tip</b> —must use with coupler below			
½"	0.25 to 10 mL	<a href="#">GH-04712-12</a>	

#### Replacement Tips

Tip dia	Catalog number	Price
½"	<a href="#">GH-04710-40†</a>	
¾"	<a href="#">GH-04710-41†</a>	
1"	<a href="#">GH-04710-47†</a>	

†Use with threaded probes only.

#### Replacement Probes

Tip dia	Sample volume	Catalog number	Price
<b>Solid probes</b>			
½"	10 to 250 mL	<a href="#">GH-04710-51</a>	
1"	50 to 1000 mL	<a href="#">GH-04710-55</a>	
<b>Solid high-gain probes</b>			
1"	50 to 1000 mL	<a href="#">GH-04710-59</a>	
<b>Threaded probes with replaceable tip</b>			
½"	10 to 250 mL	<a href="#">GH-04710-31</a>	
¾"	25 to 500 mL	<a href="#">GH-04710-33</a>	
1"	50 to 1000 mL	<a href="#">GH-04710-35</a>	

#### Continuous Flow Cell

- Get homogenization at flows up to 5 GPH (19 L/hr)
- Use with low viscosity samples for quick insonation
- Fits on ½" dia probe
- Autoclavable stainless steel



Description	Catalog number	Price
Continuous flow cell	<a href="#">GH-04710-91</a>	