

The new Q700 is the most technologically advanced sonicator available today. A state-of-the-art touch screen interface offers intuitive control and provides a user-friendly experience. The most important feature of a Sonicator is reproducibility. Improved internal circuitry guarantees more efficient operation, sample-to-sample consistency and most importantly, a reliable end result.

The Q700 is the only sonicator on the market that offers full amplitude control from 1-100%. This enables greater control of the probe's intensity, helping to pinpoint the optimum settings for efficient sample processing. We have increased maximum power output to 700 watts making the system more durable and capable of handling even larger samples if necessary. Our new display, design improvements and added accessories make this the most sophisticated and versatile Sonicator available today.



Stand sold separately.

FEATURES:

FULL AMPLITUDE CONTROL

Amplitude (intensity) is controlled from 1-100% giving a greater degree of resolution and the ability to pinpoint the amplitude needed to effectively process your sample.

PROGRAMMABILITY

Parameters including processing times, pulse on/off and amplitude can be saved to memory and run by the touch of a button.

PULSE MODE

Adjustable pulse On and Off times to reduce the heat gain in temperature sensitive samples.

TEMPERATURE MONITORING

An optional temperature probe is available for those customers who wish to monitor the temperature of their sample. If the temperature limit is reached, sonication shuts down to prevent overheating.

RoHS COMPLIANT

All Qsonica equipment is built lead free.

RUN MULTIPLE PROGRAMS IN SEQUENCE

Multiple programs can be run in sequence. For example, the unit can be programmed to sonicate at 50% amplitude for 5 minutes, shut off for 2 minutes and re-start at 25% amplitude for 10 minutes. Up to 5 programs can be run in succession.

TOTAL ENERGY OUTPUT DISPLAY

Energy delivered to the probe is displayed in both Watts and Joules.

AUTO TUNING

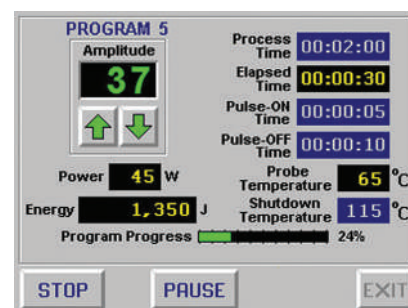
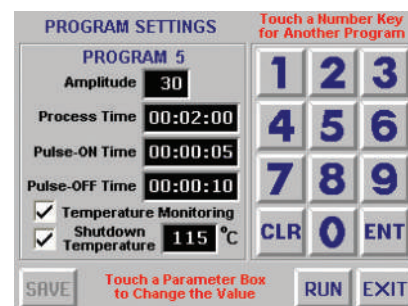
The Sonicator digitally tracks frequency changes in the converter / tip assembly caused by load and temperature changes and maintains electrical efficiency at all times. Manual tuning is unnecessary.

OVERLOAD PROTECTION

The unit is equipped with fault detection circuitry to shut down sonication in the event that a fault occurs.

TOUCH SCREEN CONTROL

A large, color LCD screen clearly displays all operating parameters and options. Intuitively and quickly access any of the sonicator's functions with a simple touch.



PART NO. Q700 INCLUDES:

- Generator
- Converter
- 1/2" diameter probe
- Power cable
- Converter cable
- Wrench set

TECHNICAL SPECIFICATIONS:

Power Rating:	700 watts
Frequency:	20 kHz
Programmability:	10 memories plus sequencing
Programmable Timer:	72 hours
Adjustable Pulse On/Off:	1 second to 24 hours
Dimensions:	8" W x 15.25" L x 8.5" H
Voltage:	110V, 50/60 Hz

Specify desired voltage for export.

Horns (also known as probes) are made from titanium and machined to specific sizes and shapes. When driven at their resonant frequency, they expand and contract longitudinally. This mechanical vibration is amplified and transmitted down the length of the probe. In liquid, the probe causes cavitation which constitutes the main mechanism for sample processing.

Choosing the appropriate horn is extremely important. The sample volume to be processed is directly related to the tip diameter. Smaller tip diameters (Microtip probes) deliver high intensity sonication, but the energy is focused within a small, concentrated area. Larger tip diameters can process larger volumes, but offer lower intensity. Probes are offered with replaceable, solid or sapphire tips.

Probe tips will pit or erode over time and require replacement. Replaceable tip probes are used with aqueous samples only. In addition to aqueous samples, Solid probes can be used with organic solvents, alcohols and low surface tension liquids. Contact Qsonica with questions regarding proper tip selection.



Standard Probes



Replaceable

Solid

Part #	Type of Tip	Processing Volume	Tip Diameter	Amplitude (microns)
4220	Replaceable Tip	20-250 ml	1/2" (13 mm)	120 µm
4219	Solid Tip	20-250 ml	1/2" (13 mm)	120 µm
4207	Replaceable Tip	50-500 ml	3/4" (19 mm)	60 µm
4208	Solid Tip	50-500 ml	3/4" (19 mm)	60 µm
4210	Replaceable Tip	100-1,000 ml	1" (25 mm)	30 µm
4209	Solid Tip	100-1,000 ml	1" (25 mm)	30 µm

Replacement Tips for Standard Probes

Standard 1/2", 3/4" and 1" horns have replaceable tips. During normal use, tips erode and become less effective over time. These worn tips can be easily removed and replaced.



Part #	Tip Diameter	For Use With
4406	1/2" (13 mm)	#4220
4407	3/4" (19 mm)	#4207
4408	1" (25 mm)	#4210



New Tip



Worn Tip

Microtip Probes

Microtips are thin, high intensity probes which are designed for processing small sample volumes. Microtips screw into the threaded end of the standard 1/2" probe (#4220).



Part #	Processing Volume*	Tip Diameter	Amplitude (microns)
4417	0.2-5 ml	1/16" (2 mm)	320 µm
4418	1-15 ml	1/8" (3 mm)	380 µm
4420	5-50 ml	1/4" (6 mm)	200 µm

* The recommended processing volume range is application specific. For example, samples containing surfactants foam easily and may require larger volumes for effective sonication. Contact Qsonica for application assistance.



Coupler with Stepped Microtip

The stepped microtip and coupler assembly is a low intensity option which can be used to process small volumes that do not require high power. The probe tip remains 1/8" in diameter for 48mm. This 2-piece assembly attaches directly to the converter.



Part #	Processing Volume	Tip Diameter	Amplitude (microns)
4422*	0.5-15 ml	1/8" (3 mm)	200 µm
4421	Coupler - *required for use of a Stepped Microtip		

Extenders

Standard probes may not be long enough to fit down into certain long necked vessels. Extender probes attach to standard horns of the same tip diameter and extend the length of the horn assembly. Extenders are available in 5" and 10" lengths with either solid, or replaceable tips.



Part #	Type of Tip	Length	Tip Diameter
406HW	Solid Tip	5"	1/2" (13 mm)
406HWT	Replaceable Tip	5"	1/2" (13 mm)
407HW	Solid Tip	5"	3/4" (19 mm)
407HWT	Replaceable Tip	5"	3/4" (19 mm)
408HW	Solid Tip	5"	1" (25 mm)
408HWT	Replaceable Tip	5"	1" (25 mm)
407FW	Solid Tip	10"	3/4" (19 mm)
407FWT	Replaceable Tip	10"	3/4" (19 mm)
408FW	Solid Tip	10"	1" (25 mm)
408FWT	Replaceable Tip	10"	1" (25 mm)

Extenders offer the same processing volume and amplitude of their corresponding standard horn.

Boosters



Booster horns increase the intensity of standard 3/4" and 1" horns. Boosters attach between the converter and horn to increase amplitude by the gain ratio indicated below.

Part #	For Use With	Gain Ratio
4121	3/4" (19 mm) and 1" (25 mm) Probes	2 to 1

High Gain Horns

High gain horns (also known as high intensity horns) offer double the amplitude of standard 3/4" and 1" horns. High gain horns attach directly to the converter.



Part #	Type of Tip	Processing Volume	Tip Diameter	Amplitude (microns)
4305	Replaceable Tip	50-500 ml	3/4" (19 mm)	120 µm
4306	Solid Tip	50-500 ml	3/4" (19 mm)	120 µm
4310	Solid Tip	100-1,000 ml	1" (25 mm)	60 µm
4311	Replaceable Tip	100-1,000 ml	1" (25 mm)	60 µm



#432B2
(Probe sold separately.)

Part #	Description
432B2	Sound Enclosure with Converter Holder, Exterior Dimensions (W x H x D) 13.5 x 30.5 x 13 in. (343 x 775 x 330 mm)

Sound Enclosure

Sonicators are extremely loud devices and will cause discomfort to the user and anyone nearby. The Sound Enclosure reduces noise by approximately 20 dBa and is made to work with all accessories (excluding the Microplate Horn which has its own dedicated enclosure).

In addition to reducing noise, the Sound Enclosure has an internal support rod and converter mounting system. Any Qsonica probe or horn will be held safely and securely inside the unit.

Two ports are located on either side of the enclosure for coolant tubing or a temperature monitoring probe. The interior walls are lined with acoustical foam and the door has a window so experiments can be visually monitored.



#432B2
(Cup horn sold separately.)

Replacement Converter



Part #	Description
CL334	Replacement Converter

Replacement Wrenches



Part #	Description
4015	Heavy Duty Pin Spanner

Part #	Description
404	Wrench Set

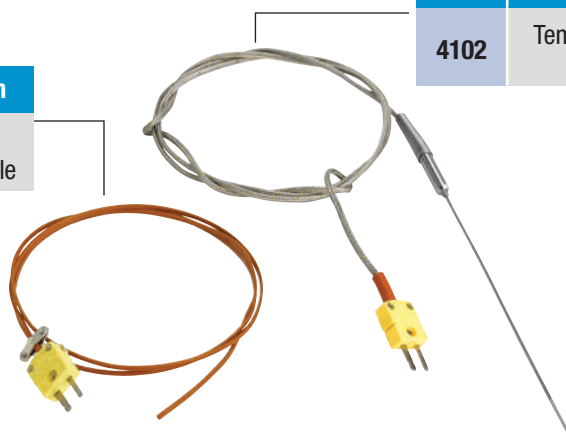


Temperature Monitoring Options

(Q700 only)

Part #	Description
4103	Flexible Thermocouple

2 types of temperature probes are available for use with the Q700 Sonicator



Part #	Description
4102	Temperature Probe

Replacement Converter Cable



Part #	Description
K4	6 ft. Long
K4-10	10 ft. Long

Footswitch



Enables hands free operation

Part #	Description
FS-3	For Use with Q700
4004	For Use with Q500

Heavy Duty Stand

Part #	Description
4130	Heavy Duty Stand

The stand securely holds horns in place and ensures all tips are level. An adjustable jack stand to raise and lower samples is included



Large Clamp Stand

Part #	Description
459	Stand with 1/2" Diameter Support Rod and Converter Clamp



Jack Stand



Raises and lowers sample vessels to a stationary probe as needed.

Part #	Description
357	Jack Stand

4 Tip Horns

The 4 Tip Horn enables 4 samples to be processed simultaneously. This horn is effective for cell disruption, mixing, homogenization and many other applications. This horn is available with either 1/8" or 1/4" tip diameters.

#4659 is a 4 Tip Horn with 1/8" tips. It is recommended for 1-15ml volumes and fits into both 1.5ml and 15ml tubes. The space between each tip is 1.05". The #504 and #510 Coolracks are compatible with #4659.

#4674 is a 4 Tip Horn with 1/4" tips. It is recommended for 10-50ml volumes and is used with 15 and 50ml tubes. The space between each tip is 1.6". The #511 Coolrack is compatible with the #4674.



#4659

#4674



The #4130 Stand with Lab Jack is recommended for use with all high throughput horns. This stand holds the horn stable and level to ensure consistent results.



24 Tip Horn

The 24 Tip Horn processes each well of a 24 well plate at the same time. This horn is effective for cell disruption, mixing, dissolution and many other applications. The distance between each tip is .708".



#4597

Dual Horn

The Dual Horn allows a single Sonicator unit to process two samples simultaneously. Two standard probes are attached to a rectangular shaped horn. The distance from center to center of each probe is 4.5". 3/4" solid tip probes are included with the Dual Horn but 1/2" or 1" probes can also be substituted.



#4525

Microplate Horn

(Only for use with Q700)

Similar to a Cup Horn, but larger, the Microplate Horn is an indirect sonication device capable of processing an entire 96 well microtiter plate or many microtubes at one time.

Simply place your samples within the water-filled reservoir and the sonic energy is transferred into each individual well or tube.

The Horn is equipped with a clear acrylic collar to contain the liquid media within the reservoir. This allows the user to process deep well microplates or other tall vessels. Standard microtiter plates or PCR tubes require a smaller volume of liquid for sonication. For these applications, the clear acrylic collar may be removed and the lower, gray collar will allow for easier access to the samples.



#Q700MPX
(with Chiller and tubing set)



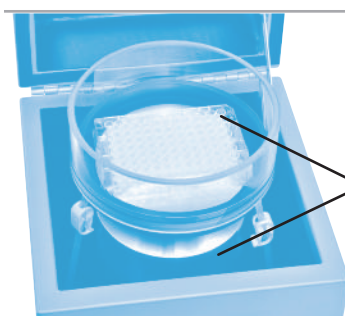
#431MPX



#431MPXH

Part #	Description
Q700MPX	Q700 (Without Standard Probe), and the 431MPX
431MPX	Microplate Horn, Pinch Clamps, Tubing and Sound Enclosure
431MPXH	Microplate Horn Only
432MP	Sound Enclosure for Microplate Horn
444	300µl Microcentrifuge Tube Holder/Cover

Exterior dimensions of the Sound Enclosure are (W x D x H):
10 x 10 x 17 in. (254 x 245 x 432 mm).



#444

The Microplate Horn is commonly used in PMCA research. A microcentrifuge tube holder and cover (#444) are available and often used for this application.



Sonicadores

Reactores

Análisis Térmico

Quimisorción

TPD/TPR/TPO

Porosidad

Espectrometría
de Masas

Propiedades
de Barrera

SIMS

Área Superficial
BET

En Anyover Instrumentación Científica distribuimos instrumentos científicos de alta tecnología para el campo de caracterización de materiales haciendo énfasis en la atención al cliente en temas de instalación, capacitación y soporte técnico. Nuestros representantes te apoyaran en la adquisición y mantenimiento de instrumentos de nuestras marcas.



ThermoFisher
SCIENTIFIC

Caracterización completa de materiales: Area Superficial BET, Porosidad, Quimisorción, Picnometría de Helio, TPD/TPR/TPO.



HIDEN
ANALYTICAL

Espectrometros de masas para análisis de gases, sistemas de vacío, plasmas y ciencias de superficies.



QSONICA
SONICATORS

Diseña, desarrolla y fabrica los sonicadores más avanzados del mundo.



Instrumentos para medir la permeabilidad al oxígeno (O2TR), al vapor de agua (WVTR) y al dióxido de carbono (CO2TR) y el innovador "data logger Wireless".



 **POROMETER**

Fabricante belga alemán de equipos para caracterización de membranas y filtros.



amtech
high throughput technology

Reactores para caracterización de catalizadores y otras aplicaciones a nivel laboratorio, para uso industrial y de investigación.



Instrumentos para Análisis Térmico (TGA, DSC, DTA, STA)

Sigue equipando tus investigaciones con nosotros.

Te ayudamos a:

1



Buscar

2



Seleccionar

3



Comprar

4



Dar
mantenimiento

¿Cómo es estar con nosotros?



Tengo el gusto de conocer al fundador de **ANYOVER** como un proveedor de confianza desde hace 10 años.

Mis más recientes adquisiciones: el Micro Reactor CATLAB y el Espectrómetro de Masas QGA, han sido de gran ayuda para nuestro grupo de investigación.

Nos permiten flexibilidad en el diseño de nuestros experimentos así como confiabilidad en los resultados obtenidos y un incremento en el número de pruebas realizadas.

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