Probe Sonicator with Soundproof Box, 20 kHz Ultrasonic Cell Disruptor 80-1800 W, 0.5-3000 mL

Model
MSUSCG-150NSWISS,MSUSCG-250NSWISS,MSUSCG-300NSWISS,MSUSCG-450NSWISS,MSUSCG-600NSWISS,MSUSCG-900NSWISS,MSUSCG-1200NSWISS,MSUSCG-1800NSWISS | Brand **Master Science**





The Master Science Probe Sonicator with Soundproof Box is a 20 kHz ultrasonic processor supplied with a soundproof enclosure and a stainless steel lifting table. It is used for cell, bacterial and viral tissue disruption, for dispersing, homogenising and emulsifying particles such as silica, carbon nanotubes and graphene, and for accelerating dissolution and chemical reactions.

KEY HIGHLIGHTS

- Quieter operation
- Protects sensitive samples
- Consistent output
- Safe running

Request a Quotation
Contact us for pricing, configuration options and delivery details.

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Overview

Eight models from 80 W to 1800 W handle volumes from 0.5 mL to 3000 mL with the matching horn. Automatic frequency tracking, resonance and power control, amplitude compensation and overtemperature protection support reliable, repeatable processing.

> For a touch-screen model, see our Touch Screen Ultrasonic Cell Disruptor, an alternative to the Probe Sonicator with Soundproof Box.

Key Benefits

Quieter operation
A soundproof box encloses the probe and sample.

Protects sensitive samples
Pulse on/off cycles from 1 s to 99 min for temperature-sensitive material.

Consistent output
Automatic amplitude compensation as the load changes.

Safe running
Overload and overtemperature protection with fault alarm.

Technical Specifications

GENERAL	
Brand	Master Science
Model Number	MSUSCG-150NSWISS,MSUSCG-250NSWISS,MSUSCG-300NSWISS,MSUSCG-450NSWISS,MSUSCG-600NSWISS,MSUSCG-900NSWISS,MSUSCG-1200NSWISS,MSUSCG-1800NSWISS
SKU	MSUSCG-150NSWISS,MSUSCG-250NSWISS,MSUSCG-300NSWISS,MSUSCG-450NSWISS,MSUSCG-600NSWISS,MSUSCG-900NSWISS,MSUSCG-1200NSWISS,MSUSCG-1800NSWISS
Ultrasonic Modes	Pulse and continuous
Timer	LCD, 1 s to 99 h
Processing Capacity	0.5-50 mL; 2-100 mL; 5-200 mL; 10-300 mL; 20-1500 mL; 20-1000 mL; 50-2000 mL; 100-3000 mL (by model, with matching horn)
Standard Probe	3, 6, 8, 13, 16, 13, 20, 25 mm (by model)
Horn Material	Titanium alloy Ti-6Al-4V
Transducer	PZT piezoelectric ceramic, 44-73 mm diameter
Lifting Table	Stainless steel, 100 x 100 mm

POWER	
Models and Power	150N: 80 W; 250N: 150 W; 300N: 300 W; 450N: 450 W; 600N: 600 W; 900N: 900 W; 1200N: 1200 W; 1800N: 1800 W (220 V, 50 Hz)
Frequency	20 kHz
Power Regulation	0-100% in 5% steps

DIMENSIONS & WEIGHT	
Host Size	245 x 365 x 245 mm
Soundproof Box Size	240 x 250 x 390 mm
Host Weight	8.5 / 10.5 / 13.5 kg (by model)
Soundproof Box Weight	4.5 kg

SAMPLE PREPARATION PROBLEMS IT ADDRESSES	
Loud ultrasonic noise in the lab	Soundproof box around the probe.
Heat-sensitive samples	Pulse mode with adjustable on/off cycles.
Power drifts as the sample changes	Amplitude compensation and frequency tracking.
Probe overheating or overload	Built-in overload and overtemperature protection.

Applications

The Probe Sonicator with Soundproof Box is used for

Disruption of cells, bacteria and viral tissue Extraction of cell contents Dispersion of nanomaterials such as silica, carbon nanotubes and graphene Homogenising and emulsifying products Accelerating dissolution and chemical synthesis

Ultrasonic System

- 20 kHz piezoelectric transducer
- Titanium alloy horns
- Automatic resonance and power control
- Automatic frequency tracking with fault alarm
- Automatic amplitude compensation

Control

- Direct keypad entry
- Process timer 1 s to 99 h with real-time pause
- Pulse on/off from 1 s to 99 min
- Power 0-100% in 5% steps
- Cumulative working time display

Protection and Setup

- Sample overload protection
- Overtemperature protection
- Soundproof box
- Stainless steel lifting table

Standard Accessories Included

- Generator
- Transducer with standard horn
- Soundproof box
- Stainless steel lifting table

Optional Accessories

- Temperature sensor
- Wrench
- Iron support stand
- Additional horns from 2 mm to 30 mm (by model)