LABSONIC® M
The ultrasonic homogenizer for every application

Benefits

- universal ultrasonic homogenizer
- selectable amplitude and active cycle
- self-optimization of energy output

Ultrasonic homogenizers are widely used for disruption of bacteria, yeast and cultured animal cells. The LABSONIC® M homogenizer is a compact, handheld laboratory instrument that combines all functions in one unit and thus helps saving bench space.

Sonication amplitude can be set between 20 and 100% of the maximum output of 100 W, active time interval between 0,2 and 1,0 sec. This helps to prevent sample denaturation by heating or foaming.

Service life of the titanium sonotrodes is increased by automatic length determination and frequency adjustment. Maximum sample volume is 750 ml in batch mode or up to several liters[2] using a flow cell.

Technical specifications

Dimensions	W × H × D = 130 × 180 × 50 mm
Weight	0.75 kg
Line voltage	230 V|50 Hz or 115 V|60 Hz
Output	100 W (90 W in aqueous media)
Output settings	20% to 100%, continuous
Duty cycle (pulsed operation)	10% to 100%, continuous
Timer	Optional, by external timer
Working frequency	30 kHz according to US Standard
Accuracy	±1 kHz
Max. energy density	125 to 600 W/cm² depending on sonotrode
Max. amplitude	125 to 220 µm depending on to sonotrode
Operational stability	Permanent operation, also in air
Fuses	T2A primary (internal)
Protection class|protection	I, grounded device|IP 40
Interference	According to EN 55011|EN 50082-2
PC-connection	Optional, socket integrated
Ambient temperature	+5°C to +40°C
Humidity	Avoid extreme humidity

Ordering information

BBI-8535027
LABSONIC® M
230 V|50 Hz

BBI-8535035
LABSONIC® M
115 V|60 Hz,

All units are delivered without probes and further accessories.

Accessories

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Reference	Description	For sample volume (ml)
	Probes made of Titanium, normal length	
BBI-853 5612	Probe ∅ 0.5 mm, approx. 80 mm long	0.01–0.5
BBI-853 5620	Probe ∅ 1 mm, approx. 80 mm long	0.1–5
BBI-853 5639	Probe ∅ 2 mm, approx. 80 mm long	2–50
BBI-853 5647	Probe ∅ 3 mm, approx. 80 mm long	5–200
BBI-853 5655	Probe ∅ 7 mm, approx. 80 mm long	20–500
BBI-853 5671	Probe ∅ 10 mm, approx. 80 mm long	30–750
	Probes made of Titanium, double length	
BBI-853 5680	Probe ∅ 3 mm, approx. 160 mm long	5–200
BBI-853 5698	Probe ∅ 7 mm, approx. 160 mm long	20–500
BBI-853 5710	Probe ∅ 10 mm, approx. 160 mm long	30–750

02|

Reference	Description
	Accessories for sonication in a flow cell
BBI-853 5663	Probe ∅ 7 mm, for flow cell 853 5728, approx. 80 mm long
BBI-853 5701	Probe ∅ 7 mm, long form, for flow cell 853 5736, approx. 160 mm long
BBI-853 5728	Flow cell incl. cooling connection, stainless steel 1.4301, autoclavable, incl. quick-fit connector. For operation a probe 853 5663 is required!
BBI-853 5736	Flow cell incl. cooling connection, glass, autoclavable, for sonicating liquids in a closed system. The norm adapter 853 5744 is needed.
BBI-853 5744	Norm adapter for glass flow cell 853 5736

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Timer, for connection to LABSONIC® M

	Further accessories
BBI-853 5280	Clamp STH-16 (included with LABSONIC® M)
BBI-853 5272	Stand ST-16, ∅ 16 mm, plate stainless steel 1.4301, rod made of aluminium
BBI-853 5779	Timer, for connection to LABSONIC® M
BBI-853 5787	PC-control, incl. recording of input power, slot-in board for PC, connecting cable and software for Windows 95/98
BBI-853 5795	PC-control, incl. recording of input power and temperature, slot-in board for PC, connecting cable and software for Windows 95/98
BBI-853 5817	Sound dampening chamber SB2 for LABSONIC® M

LABSONIC® P
The high-performance ultrasonic homogenizer

Benefits

- sonication of larger samples
- selectable amplitude and active cycle
- self-optimization of energy output

The LABSONIC® P homogenizer is designed for higher output up to 400 W and correspondingly for treatment of larger samples. Several liters[2] can be sonicated in batch mode, whereas 10 to 50 L/h can be processed in continuous mode using a flow cell.

Sonication amplitude can be set between 20 and 100% of the maximum output of 400 W, active time interval between 0.2 and 1.0 sec. This helps to prevent sample denaturation by heating or foaming. Service life of the titanium sonotrodes is increased by automatic length determination and frequency adjustment.

The LABSONIC® P is preferably used together with a sound dampening box to protect the user from excess noise.

Technical specifications

Dimensions	W × H × D= 135 × 280 × 95 mm
Weight	8.8 kg
Line voltage	230 V|50 Hz or 115 V|60 Hz
Output	400 W (300 W in aqueous media)
Output settings	20% to 100%, continuous
Duty cycle (pulsed operation)	10% to 100%, continuous
Timer	Optional, by external timer
Working frequency	24 kHz according to US Standard
Accuracy	±1 kHz
Max. energy density	12 to 600 W/cm² depending on sonotrode
Max. amplitude	12 to 260 µm depending on sonotrode
Operational stability	Permanent operation, also in air
Fuses	T2A primary (internal)
Protection class|protection	I, grounded device|IP 40
Interference	According to EN 55011|EN 50082-2
PC-connection	Optional, socket integrated
Ambient temperature	+5°C to +40°C
Humidity	Avoid extreme humidity

Ordering information

BBI-8535108
LABSONIC® P
230 V|50 Hz

BBI-8535116
LABSONIC® P
115 V|60 Hz

All units are delivered without probes and further accessories.

Accessories

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Reference	Description	For sample volume (ml)
	Probes made of Titanium, normal length	
BBI-853 5124	Probe ∅ 3 mm, approx. 100 mm long	5–200
BBI-853 5132	Probe ∅ 7 mm, approx. 100 mm long	20–500
BBI-853 5140	Probe ∅ 14 mm, approx. 100 mm long	100–2000
BBI-853 5159	Probe ∅ 22 mm, approx. 100 mm long	100–2000
BBI-853 5167	Probe ∅ 40 mm, approx. 100 mm long	200–4000

02|

	Accessories for sonication in a flow cell	
BBI-853 5175	Probe ∅ 22 mm, for flow cells 853 5213, approx. 100 mm long	10–50 l/h
BBI-853 5183	Probe ∅ 22 mm, long form, for flow cells 853 5221, approx. 200 mm long!	10–50 l/h
BBI-853 5213	Flow cell including cooling connection, stainless steel 1.4301, autoclavable, with quick connector For operation a probe 853 5175 is required!	
BBI-853 5221	Flow cell including cooling connection, glass, autoclavable, for sonicating liquids in a closed system Norm adapter 853 5230 is required	
BBI-853 5230	Norm adapter for glass flow cell 853 5221	

03|

Reference	Description
	Further accessories
BBI-853 5272	Stand ST-16, ∅ 16 mm, rod made of aluminium, plate stainless steel 1.4301
BBI-853 5779	Timer, for connection to LABSONIC® P
BBI-853 5248	PC-control for LABSONIC® P, including recording of input power, slot-in card for PC, connecting cable and software for Windows 95/98
BBI-853 5256	PC-control for LABSONIC® P, including recording of input power and temperature, slot-in card for PC, connecting cable and software for Windows 95/98
BBI-853 5809	Sound dampening chamber SB1 for LABSONIC® P