Ultrasonic Homogenizer VP-300N

Easy operation. High output is suitable for large volume samples. Used with the stand. Various options such as Cup horn makes it possible for Noncontact sonication.

Features

- •High output type using with stand. Standard throughput is 10mL to 250mL.
- Easy tuning completed in about 5 seconds
- Oscillation function and various operation modes according to the chip used

Applications

- Disruption and Solubilization of E. coli that protein expressed.
- •Random fragmentation of Genomic DNA. **Emulsification of samples.**
- •Non-contact sonication with Cup horn [option]

Oscillation and Operation mode

Optimal oscillation is done by setting the chip used on the screen. PWM operation mode that automatically adjusts the output according to the viscosity change of the sample. POW operation mode that performs stable oscillation when the sample viscosity and temp. SEN operation mode that controls the output so that the value of oscillation sensor inside constantly (Effective for Sonicating for a long time with optional continuous

Omin Man	4min	8min	16min

Disruption of E. coli 35ml (50ml Centrifuge tube and φ12mm standard horn used)

Optional Please be sure to read the next page for the combinations.

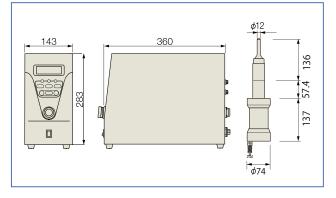
Product Name/Model	Remarks	
 	For10 - 250mL sample (*). This product includes VP-ET12	
φ20mm Standard horn VP-HN20	For 25-500mL sample(*). This product includes VP-ET20	
φ12mm Tip VP-ET12	For Replacement when consumed	
Ø20mm Tip VP-ET20	For Replacement when consumed	
φ12mm Extender VP-EX12	L 100mm version of VP-ET12	
φ20mm Extender VP-EX20	L 100mm version of VP-ET20	
∮ 3mm Tapered Micro Tip VP-MT03	For1 - 10mL, Tip diameter ϕ 3.5mm	
φ 5mm Tapered Micro Tip VP-MT05	For 2 - 10mL, Tip diameter ϕ 5mm	
φ 6mm Tapered Micro Tip VP-MT06	3-10mL, Tip diameter φ6.6mm	
Coupler VP-CP01	For connection with Stepped Micro Tip	
φ2mm Stepped Micro Tip VP-MS02	For 0.1 - 10mL, Tip diameter \$\phi2.2mm	
φ 3mm Stepped Micro Tip VP-MS03	For 0.25 - 10mL, Tip diameter φ3mm	
φ6mm Stepped Micro Tip VP-MS06	For 2-10mL, Tip diameter ϕ 6mm	
φ38mm Cup horn VP-CH38	Enables processing without contact	
φ51mm Cup horn VP-CH51	Enables processing without contact	
Continuous crashing cell (For $oldsymbol{\phi}$ 12mm VP-CC05	Enables Flow-through processing (Approx. 19 L/h)	
Continuous crashing cell (For $m{\phi}$ 20mm VP-CC06	Enables Flow-through processing (Approx. 19 L/h)	
Dedicated stand VP-ST30	Almost required in VP-300N	
Absorption silencer VP-SB01	No need to stand when use	
Foot switch VP-FS01	Foot switch	

(")In E. coli, considering the efficiency, the throughput ideally around the described median. When it reaches Max amount, processing takes time (approx 15 min with about 35ml for crushing of above 90% in ϕ 12 mm, approx 40 min with 250 ml).

Model	VP-300N	
High frequency output	Maxmum 300W	
Transducer normal output	50 to 200W (*)	
Oscillation frequency range	19 to 21Hz	
Turning	Automatically	
Operation mode	PWM operation: Automatic output adjustment according to viscosity change of sample POW operation: Stable oscillation when change in viscosity or temp are small SEN operation: Controls the output so the value of oscillation sensor inside constantly	
Other functions	Timer operation (1sec to 120min) Programmed interval operation (ON: 3 to 60sec, OFF: 1 to 60sec)	
Display	Real time output value %, Output value setting %, Oscillation frequency, The tip used, Operation mode	
Configuration	Main unit, Converter, φ12mm Standard horn (Pre-installed Tip)	
Oscillation switch	Equipped in Main unit (Optional foot switch can be used)	
Dimensions / Weight	143(W) x 360(D) x 283(H)mm, Approx. 6.7kg	
Standard accessories	Standard forn (ф12mm: VP-HN12), Tip (ф12mm: VP-ET12)	
Power supply	AC100V/5A	

VP-300N with Optional stand

Dimensions



We contribute to the development of research and industry [2019-2020 General Catalog] 7/19/19/19

Protuberances not included in Dimensions.
 Vessels of photo not included.

^(*) The upper limit varies depending on the horn and the tip used.