

Benchmark 

# **PULSE 650**

Ultrasonic Homogenizer



- ✚ **650W of power for cell disruption, homogenization, emulsification and more**
- ✚ **Large touch screen with total control over operating parameters**
- ✚ **Supplied complete with controller, 6mm horn, motorized stand and soundproof enclosure**
- ✚ **Stackable, space-saving design**
- ✚ **Lighted chamber for easy sample visualization**
- ✚ **UV-C chamber sterilization function**



Like the smaller Pulse 150™, the Pulse 650™ utilizes ultrasonic waves and cavitation to disrupt cells, shear DNA and create emulsions. With up to 650 watts of power, samples from 0.1ml to 500ml can be processed. Pulsed operation, power ratios and other operating parameters are easily set using the large touch screen. Alarms alert the user to over temperature, over/no load and expiration of time.

The Pulse 650 is complete with everything needed for operation, including a soundproof enclosure for reducing noise levels. The low profile controller and soundproof enclosure are stackable to save valuable bench space. The enclosure features interior lights and a large front panel for viewing samples. A remote controlled, motorized lift provides easy probe placement. Between uses, the chamber can be decontaminated with the UV-C lights to help prevent cross contamination.

Six horns, from 2mm to 12mm, are available to meet sample volume requirements. The Pulse 650 is supplied with the 6mm horn as standard, for processing samples from 10-100ml. The table below shows the horn requirement for additional volumes.

Horn size	2mm	3mm	6mm*	8mm	10mm	12mm
Process capacity	0.1 - 5ml	3-10ml	10-100ml	20-200ml	30-300ml	50-500ml
Power ratio	1 - 40%	1 - 50%	1 - 70%	1 - 80%	1-90%	20-95%

\*Supplied with Pulse 650



Soundproof enclosure with lights, motorized lift and remote control

## Technical Data

Power	6.5 - 650 W, continuously adjustable
Frequency	20 - 25 KHz
Cycle time (pulse on/off)	0.1 - 99.9 sec
Timer	1 sec - 99 hours, 59 min, 59 sec
Duty cycle	0.1 - 99.9%
Volume*	0.1 - 500ml
Program memory	20 programs
Password protection	Yes
Display/control	7" full color touch screen
Horn	6mm titanium (others available, 2mm, 3mm, 8mm, 10mm, 12mm)
Alarms	No load, over load, end of run, over temperature
Controller	
Dimensions (W x D x H)	13.4 x 16.5 x 6.6 in. 34 x 42.7 x 16.8 cm
Weight	24.2 lbs/11 kg
Soundproof enclosure	
Dimensions (W x D x H)	13 x 13 x 20.5 in. 32 x 32 x 52 cm
Weight	28.6 lb/13 kg
Electrical	115 or 230V, 50/60Hz
Warranty	2 years

\*Volume dependent upon the installed horn. Supplied with 6mm horn for volumes 10 - 100 ml.

## Ordering Information

DP0650*	Pulse 650 Ultrasonic Homogenizer, complete with controller, transducer, 6mm horn and soundproof enclosure
DP0150-2	Horn, 2 mm diameter, for 0.1 - 5ml
DP0150-3	Horn, 3 mm diameter, for 3 - 10ml
DP0150-6	Horn, 6 mm diameter, for 10 - 100ml
DP0150-8	Horn, 8 mm diameter, for 20-200ml
DP0150-10	Horn, 10 mm diameter, for 30 - 300ml
DP0150-12	Horn, 12 mm diameter, for 50 - 500ml

115V with US plug. For 230V, EU plug, please add -E to cat no.

Also available:



Pulse 150 Ultrasonic Homogenizer  
150W for volumes to 150ml