



VWR PowerMax™  
Advanced Homogenizing Systems

Homogenizing  

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Solutions For  

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Any Laboratory



Power  
MAX™



## Specifications

	VWR PowerMax AHS 200	VWR PowerMax AHS 250	VWR PowerMax AHS 300	VWR PowerMax AHS 400
Speed Range (rpm)	5,000-35,000	10,000-30,000	0-28,000	0-23,000
Wattage	125	700	700	1800
Noise Level	72dB	72dB	68dB	68dB
Net. Weight	1.2lb (0.5kg)	3.2lb (1.4kg)	21lb (9.5kg)	32lb (14.5kg)
Programmable	NO	NO	Yes	Yes
Configuration	Handheld	Handheld	Bench top	Bench top
Sample Volume Range	0.03ml to 2L	0.03ml to 20L	0.03ml to 25L	0.03ml to 40L
Max Generator Diameter	up to 20mm	up to 30mm	up to 37mm	All

## VWR PowerMax™ Advanced Homogenizing Systems

**D**esigned to meet the changing needs of today's laboratory. VWR PowerMax combines power and durability, along with an extensive selection of generators and sealed chambers to deliver superior performance.

**Powerful Motor Units-** PowerMax motor units are built for durability and provide plenty of power to homogenize difficult samples quickly and effortlessly. PowerMax offers both hand-held and bench top units.

**Auto-Loc Generators-** Designed for quick and easy attachment of generators with only a quarter turn. Auto-Loc generators are constructed of 316 stainless steel, these generators can be sterilized by hot air, autoclaving, flaming or chemical processes. Auto-Loc generators feature a foam-reducing design which limits the amount of air introduced into the sample during homogenization. Generators are available in many sizes, from 5mm to 59mm in diameter. Auto-Loc generators are designed to process samples quickly and efficiently- most sample can be done only in 15-30 seconds.

**GenPack PCR Homogenizing Kits-** Ideal for repeat homogenizing without the risk of cross contamination. These 316 stainless steel, economy generator packs eliminate the need for cleaning between samples and feature hands-free ejection of generators. GenPack generators are 7mm in diameter and capable of homogenizing samples as small as 0.1ml and as large as 10ml. Genpack generators can be sterilized by autoclaving or chemical processes.

**Sealed Chamber Assemblies-** PowerMax sealed chamber assemblies are designed to protect the operator from hazardous aerosols that could be generated during processing. Sealed chambers also protect your sample from external contaminants. Built for safety, sealed chambers do not allow operation with the blade exposed.

**Programmable Homogenizers-** PowerMax Models AHS 300 and AHS 400 are fully programmable bench top homogenizers, featuring homogenizing software. Operators can control their process via computer while graphing and recording all data. Programs can be stored and recalled for future use.

# AHS 200

## VWR PowerMax™ Advanced Homogenizing System

- Compact, Light-Weight Design
- Super Quiet, 72dB
- Hand-held or Stand Mounted
- Features Auto-Loc Generator System
- Variable Speed from 5,000 - 35,000 rpm

The PowerMax AHS 200's compact design offers plenty of power to homogenize small samples quickly and efficiently with its 125 watt motor. Variable speed control and Auto-Loc generator system make the AHS 200 extremely versatile and convenient. Auto-Loc generators quickly attach and remove with only a quarter turn. Homogenize samples as small as .03ml or as large as 2L. The AHS 200 is recommended for Auto-Loc generators up to 20mm in diameter and sealed tube assemblies. The AHS 200 PCR homogenizing kits feature GenPack economy generators, ideal for repeat homogenizing without the risk of cross contamination.

PowerMax AHS 200 PCR Homogenizing Package- contains a 125 watt, variable speed motor unit, one GenPack 12 (twelve, 7mm diameter economy generators), GenPack Adapter, tool kit, and instruction manual.

### GenPack PCR Homogenizing Kit



PowerMax AHS 200 Standard Package- contains a 125 watt, variable speed motor unit, support stand assembly with easy-lift mechanism, three Auto-Loc generators (5 x 75mm, 7 x 95mm, and 10 x 105mm), tool kit, spare bearings and instruction manual.

PowerMax AHS 200 Motor Only- contains 125 watt, variable speed motor unit and instruction manual.

Support Stand Assembly Only- contains base platform with no-skid rubber top, 24" vertical support rod, and easy-lift mechanism.

All Auto-Loc generators and GenPack economy generators are constructed of 316 stainless steel for maximum chemical resistance and durability. The Auto-Loc system makes attaching generators simple, easy, and safe. GenPack economy generators eliminate the need for cleaning between samples and feature hands-free generator ejection.



Convenient  
Hand-held  
Design



## Specifications

Dimensions:	2.15"W x 8"H x 1.75"D (5.4 x 20.3 x 4.4cm)
Weight:	1.2lb (0.5kg)
Speed Range:	5,000 to 35,000 rpm
Wattage:	125
Sample Volume Range:	0.03ml to 2L
Noise Rating:	72dB
Speed Control:	Analog, variable speed

## Recommended Usage and Helpful Tips

The PowerMax AHS 200 is ideal for processing small tissue samples, PCR, DNA or RNA blot analysis.

Choose a generator diameter twice as large as the largest solid in your sample.

5mm or 7mm generators are ideal for 1.5ml micro-tubes.

Placing Generator 1/3 of the sample height off the bottom of the tube or container will help maximize homogenization.

### PowerMax AHS 200

Description	Cat. No.	Price
PowerMax AHS 200 PCR Homogenizing Package, 120V	14230-000	\$1769.00
PowerMax AHS 200 PCR Homogenizing Package, 230V	14230-002	\$1769.00
PowerMax AHS 200 Standard Package, 120V	14227-318	\$4600.00
PowerMax AHS 200 Standard Package, 230V	14227-320	\$4600.00
PowerMax AHS 200 Motor Only, 120V	14227-314	\$900.00
PowerMax AHS 200 Motor Only, 230V	14227-316	\$900.00
Support Stand Assembly only- AHS 200	14227-262	\$269.23

# AHS 250

VWR PowerMax™

## Advanced Homogenizing System

- Our Most Powerful Hand-Held Unit
- Homogenize Tough Plant and Animal Tissue
- Large Samples up to 20L
- Features Auto-Loc Generator System

The PowerMax AHS 250 is designed for heavy laboratory use. This unit can process high viscosity samples, thoroughly homogenize tough cellular tissue, or large volumes up to 20L. Powerful 700w motor has variable speed control from 10,000 to 30,000 rpm. Optional external speed control is ideal for use in fume hoods and delivers a broader speed range of 0 to 30,000 rpm. The PowerMax AHS 250 is recommended for use with Auto-Loc generators up to 30mm in diameter and all sealed chamber assemblies which contain aerosols, prevent contamination, and provide added safety when working with hazardous materials. The Auto-Loc system makes changing the generator simple, easy, and safe. The AHS 250 can also use the GenPack economy generators when fitted with the GenPack adapter. All Auto-Loc generators and GenPack economy generators are constructed of 316 stainless steel for maximum chemical resistance and durability.

**PowerMax AHS 250 Package-** contains a 700 watt, variable speed motor unit, stainless steel support stand with 24" (61cm) vertical rod, heavy duty clamp, three Auto-Loc generators (10 x 105mm, 20 x 200mm saw tooth, and 30 x 200mm flat bottom), tool kit, spare bearings and instruction manual are also included.

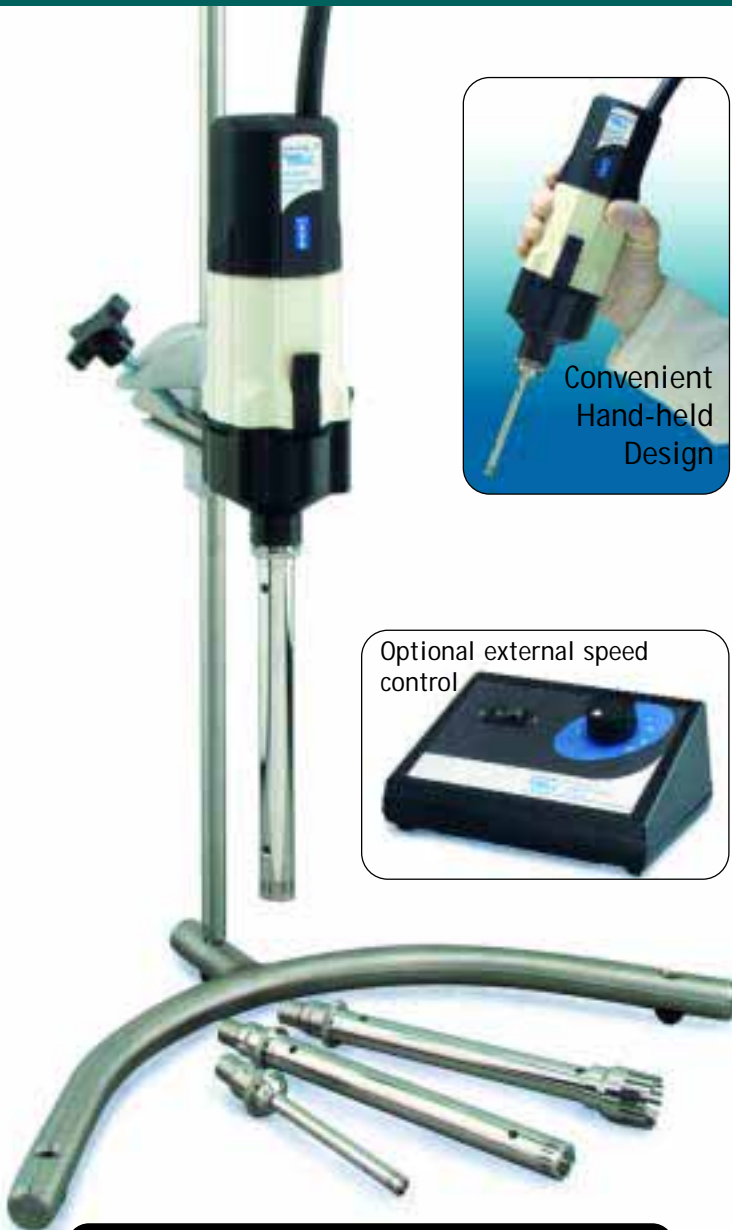
**PowerMax AHS 200 Motor Only-** contains 700 watt, variable speed motor unit and instruction manual.

**Stainless Steel Support Stand and Clamp-** This ultra stable support stand features all stainless steel construction which provides strength and durability. Support stand includes Vertical support rod 24" (61cm) and U-shaped base. Cast aluminum, heavy-duty clamp secures motor unit to stand. (Stand and clamp are sold separately)

**External Speed Control-** Optional external speed control offers a broader speed range (0 to 30,000 rpm) and can be remotely located outside fume hoods for easy, safe speed adjustments.

### Specifications

Dimensions:	2.75"W x 9"H x 2.75"D (6.9 x 22.8 x 6.9cm)
Weight:	3.2lb (1.4kg)
Speed Range:	10,000 to 30,000rpm
Wattage:	700
Sample Volume Range:	0.03ml to 20L
Noise Rating:	72dB
Speed Control:	Analog, variable speed



### Recommended Usage and Helpful Tips

The PowerMax AHS 250 is capable of batch homogenizing high viscosity materials or cell tissues. Ideal for high-speed dispersion, waste water and soil analysis.

Always begin homogenizing at a low rpm, then gradually increase speed.

Generators 120mm in length or longer should be immersed at least half way into your sample material.

The Auto-Loc generator system can reduce particles to 0.01 microns.

### PowerMax AHS 250

Description	Cat. No.	Price
PowerMax AHS 250 Standard Package, 120V	14227-322	\$5300.00
PowerMax AHS 250 Standard Package, 230V	14227-324	\$5300.00
PowerMax AHS 250 Motor Only, 120V	14227-276	\$1220.34
PowerMax AHS 250 Motor Only, 230V	14227-278	\$1220.34
External Speed Control	14227-264	\$637.70
Stainless Steel Support Stand 24"H	14227-328	\$200.00
Heavy-Duty clamp	14216-208	\$59.00

# AHS 300 & 400

VWR PowerMax™

## Advanced Homogenizing System

- High-Torque Bench Top Homogenizers
- Manual and Programmable Operation
- Includes Accu-Lift Support Stand
- Maintains Constant Speed



Graph and record your process with homogenizer software

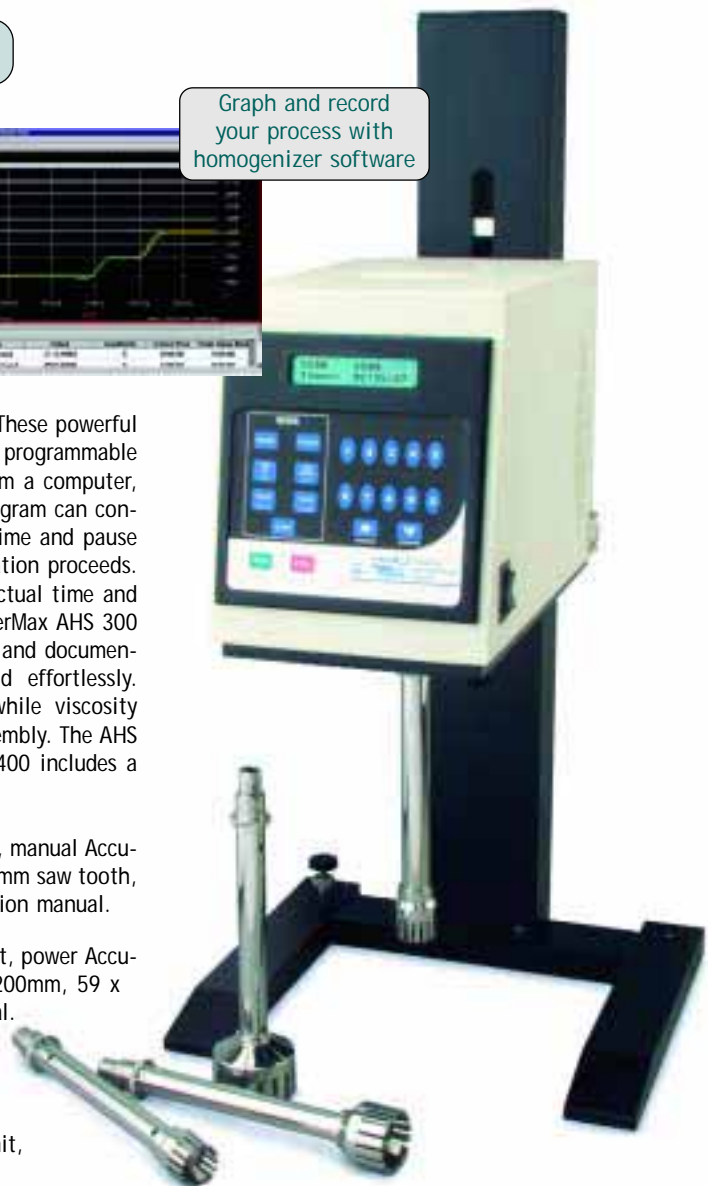
Ideal for scale-up work, pilot studies, and large batch processing up to 40L. These powerful bench top homogenizers are computer controlled and capable of manual or programmable operation. Programming can be done from the touch pad on the unit or from a computer, via an RS-232 port. An infinite number of programs can be created; each program can consist of up to 23 different cycles, with each cycle defining the speed, run time and pause between cycles. Data can be graphed on the computer screen as homogenization proceeds. Both the programs and the data collected (set time and set speed versus actual time and actual speed) can be stored and recalled for screen display or printout. PowerMax AHS 300 and AHS 400 units meet industry requirements for verification of processing and documentation maintenance. Powerful motors process tough samples quickly and effortlessly. Microprocessor speed control maintains constant speed (+/- 1%) even while viscosity changes. Both Packages and motor only kits include an Accu-Lift support assembly. The AHS 300 includes a Accu-lift stand that requires manual adjustments. The AHS 400 includes a motorized stand for easy, accurate vertical movement of the motor unit.

PowerMax AHS 300 Package- contains a 700 watt, programmable motor unit, manual Accu-Lift support stand assembly, three Auto-Loc generators (10 x 105mm, 20 x 200mm saw tooth, and 30 x 200mm flat bottom), software, tool kit, spare bearings and instruction manual.

PowerMax AHS 400 Package- contains a 1800 watt, programmable motor unit, power Accu-Lift support stand assembly, three Auto-Loc generators (30 x 200mm, 43 x 200mm, 59 x 200mm flat bottom), software, tool kit, spare bearings and instruction manual.

PowerMax AHS 300 Motor Kit- contains 700 watt, programmable motor unit, manual Accu-Lift support stand, software, and instruction manual.

PowerMax AHS 400 Motor Kit- contains 1800 watt, programmable motor unit, motorized Accu-Lift support stand, software, and instruction manual.



### Recommended Usage and Helpful Tips

PowerMax AHS 300 and 400 are designed for large volume production, pilot studies, high viscosity samples, and tough cellular tissue homogenizing.

For large solid mass or dry homogenizing, use a seal chamber assembly with blade.

Best to position the generator off center in a tube or round container to maximize homogenization.

All Auto-Loc generators can be autoclaved as an assembly or disassembled components.

### Specifications

	AHS 300	AHS 400
Dimensions:	7.25"W x 10.5"H x 10.5"D (18.4 x 26.6 x 26.6cm)	7.25"W x 10.5"H x 12.5"D (18.4 x 26.6 x 31.7cm)
Weight:	21lb (9.5kg)	32lb (14.5kg)
Speed Range:	0 to 28,000 rpm	0 to 23,000 rpm
Wattage:	700	1800
Sample Volume Range:	0.03ml to 25L	0.03ml to 40L
Noise Rating	68dB	68dB
Speed Control:	Digital/Programmable	Digital/Programmable
Stand Type:	Manual Accu-Lift	Motorized Accu-Lift

### PowerMax AHS 300

Description	Cat. No.	Price
PowerMax AHS 300 Package, 120V	14227-302	\$9864.40
PowerMax AHS 300 Package, 230V	14227-304	\$9864.40
PowerMax AHS 300 Motor Kit, 120V	14227-294	\$4677.97
PowerMax AHS 300 Motor Kit, 230V	14227-296	\$4677.97

### PowerMax AHS 400

Description	Cat. No.	Price
PowerMax AHS 400 Package, 120V	14227-306	\$11,796.61
PowerMax AHS 400 Package, 230V	14227-308	\$11,796.61
PowerMax AHS 400 Motor Kit, 120V	14227-298	\$6305.08
PowerMax AHS 400 Motor Kit, 230V	14227-300	\$6305.08



## VWR PowerMax™ Auto-Loc Generators

- 316 Stainless Steel Construction
- Foam-Reducing Design
- Universal Fit - Generators Work With All Models

PowerMax Auto-Loc generators are designed for quick and easy changing of generators with only a quarter turn. Built for durability, Auto-Loc generators are constructed of 316 stainless steel and can be completely sterilized by hot air, autoclaving, flaming or chemical processes. All generators feature a foam-reducing design which limits the amount of air introduced into the sample during homogenization. All generators disassemble quickly and easily for cleaning.

Size (mm) Dia x Length	Recommended for models	Cat. No.	Price
5 x 75	All	14227-330	\$1122.45
7 x 95	All	14227-350	\$1203.13
7 x 150	All	14227-332	\$1306.12
10 x 105	All	14227-352	\$1203.13
10 x 150	All	14227-334	\$1306.12
20 x 115	All	14227-336	\$1663.27
20 x 200	All	14227-338	\$1775.51
30 x 115	250, 300, 400	14227-342	\$1969.39
30 x 200	250, 300, 400	14227-344	\$2000.00
37 x 200	300, 400	14227-346	\$2700.00
43 x 200	400	14227-348	\$3000.00
59 x 200	400	14227-326	\$3545.28

## VWR PowerMax™ GenPack PCR Homogenizing Kits

- Economy Generators for Repeat Homogenizing
- Eliminate Cross-Contamination
- 316 stainless Steel and Teflon Construction

Designed for molecular applications, PCR, and micro tube assays GenPack PCR homogenizing kits feature economy generators ideal for applications where cross contamination is a concern. GenPack economy generators eliminate the need for cleaning between samples and feature hands-free ejection of generator. GenPacks require the GenPack adapter. GenPack 12 PCR Kit contains twelve 7mm economy generators and the GenPack 20 includes twenty 7mm economy generators. GenPack PCR homogenizing kits work with all PowerMax motor units.

### PowerMax GenPack PCR Homogenizing Kits

Description	Cat. No.	Price
GenPack 12 PCR Kit*	14230-688	\$999.00
GenPack 20 PCR Kit*	14227-340	\$1800.00
GenPack Adapter	14230-004	\$299.00

\* requires the GenPack Adapter



VWR PowerMax™

## Sealed Chamber Assemblies

- Industry's safest solution to containing hazardous samples
- Includes Auto-Loc Generator or Blade System
- Universal fit - Chambers Work With All Models
- Sealed Tubes, Stainless and Glass Chambers

VWR PowerMax sealed chamber assemblies are designed to protect the operator from hazardous aerosols that could be generated during processing. Sealed chambers also protect your sample from external contaminants. All sealed chambers are built for safety, and do not allow operation with the blade or generator exposed. PowerMax offers a wide range of sealed chambers to accommodate various sample sizes and types. Sealed chambers with blades are ideal for larger solids or dry homogenizing. Generator systems are ideal for small particle reduction.



**Sealed Tubes-** Ideal for smaller samples ranging from 0.2 to 40ml. Slotted sides allow for easy viewing of sample. Includes tube enclosure, Auto-Loc generator with seal, and extra tubes.

**Sealed Chambers, Stainless steel-** Feature all stainless steel and Teflon construction. Designed for samples ranging from 10ml to 500ml and available with Auto-Loc generator or blade system.

**Sealed Chambers, Glass-** View your homogenization process with these glass enclosures. Process samples as small as 50ml or as large as 800ml. Available as a generator or blade system. All wetted components are constructed of glass, stainless steel, or Teflon.

### Sealed Tubes

Treatable Vol.: 0.2 to 40ml  
Includes Generator

Recommended for models:  
All



### Sealed Chambers- Stainless Steel

Treatable Vol.: 10ml to 500ml  
Includes Generator or Blade

Recommended for models:  
250, 300, and 400



### Sealed Chambers- Glass

Treatable Vol.: 50ml to 800ml  
Includes Generator or Blade

Recommended for models:  
250, 300, and 400



	Chamber size (ml)	Treatable Volume (ml)	Blade (B)/ Generator (G)	Cat. No.	Price
TUBES	5	0.2 to 3	G	14227-268	\$1100.00
	16	0.5 to 11	G	14227-270	\$1100.00
	19	0.5 to 13	G	14227-280	\$1200.00
	50	5 to 40	G	14227-282	\$1200.00
STAINLESS	70	10 to 65	B	14227-266	\$966.10
	70	10 to 65	G	14227-310	\$1157.90
	600	40 to 500	B	14227-272	\$1194.92
	600	40 to 500	G	14227-284	\$1372.88
GLASS	473	50 to 450	B	14227-290	\$1750.00
	473	50 to 450	G	14227-312	\$1575.00
	946	100 to 800	B	14227-292	\$2000.00
	946	50 to 800	G	14227-286	\$1630.00



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