# **ORBITAL SHAKER**



# ORBITAL SHAKER

Allows for easy and accurate rack placement, data retrieval on power failure and slow start up function prevents liquid spillage. Applications like stability and dissolution studies, liquid extractions, protein precipitation studies, small peptide synthesis and dilutions makes it an ideal choice.

Used in Stability, Dissolution Studies, Liquid Extractions, Protein Precipitation, Small Peptide Synthesis, Dilutions. Also known as Laboratory Orbital Shaker.

### **SHA55** ORBITAL SHAKER

Compact space-saving design fits easily in incubator and refrigerator

Simultaneous display of speed, timer and operating mode

Brushless DC motor ensures maintenance-free, reliable and quiet operation

Electronic time switching clock controls time or continuous operation mode

RS232 interface enables data logging & computer control

Over speed detection and protection

Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers



#### **SPECIFICATIONS**

Model	SHA55-350S SHA55-350			
Speed Range	100-350 rpm (Linear) 100-800 (orbital)	100-350 rpm (Linear) 100-500 (orbital)		
Temperature	4-4	0°C		
Permissible Ambient Temperature	5-4	0°C		
Shaking Orbit	4 mm	10 mm		
Permissible Relative Humidity	80.0	00%		
Timing Range	1-119	9 min		
Motion	Orbital/Linear			
Motor rating Input [W]	28			
Motor rating output [W]	15			
Maximum Load Capacity	2.5 kg 7.5 kg			
Operation	Continuous/Timed			
Overall Dimension	340x300x100 mm 420x370x100 mm			
Display	LCD			
Weight	8.1 kg 13.5 kg			
Power	30 W			
Power Supply	100-240V, 50/60Hz			

Accessory Code	Name	Description	Unit	For Models
LS53894	Universal attachment with 3 bars			SHA55-350S
LS53906	Fixing clip attachment			SHA55-350S

LS53918	Lengthways roller attachment		SHA55-350S
LS53930	Dish Attachment with non-slip mat		SHA55-350S
LS53942	Universal attachment Bar, black		SHA55-350S
LS53954	Fixing clip for flask volume 25 ml		All
LS53966	Fixing clip for flask volume 50 ml		All
LS53978	Fixing clip for flask volume 100 ml		All
LS53990	Fixing clip for flask volume 200/250 ml		All
LS54002	Fixing clip for flask volume 500 ml		All
LS54014	Universal attachment with 4 bars		SHA55-350
LS54026	Fixing clip attachment		SHA55-350
LS54038	Lengthways roller attachment		SHA55-350
LS54050	Dish platform with non-slip mat and fixed string	8 pcs	SHA55-350







SHA55-350

### **SHA52** ORBITAL SHAKER

Microprocessor control with simultaneous display of time and speed
Compact space-saving design fits easily in incubator and refrigerator
Brushless DC motor ensures maintenance-free, reliable and quiet operation
Adjustable speed control provides gentle to vigorous agitation
Multi-functional shaking system
Audio alarm signals program completion
Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers



Model	SHA52-250	SHA52-300		
Speed Range	50-250 rpm	50-300 rpm		
Temperature	Ambien <sup>-</sup>	t +5-40°C		
Shaking Orbit	20 mm	10 mm		
Timing Range	1 min~99h59 min			
Motion	Or	Orbital		
Maximum Load Capacity	2.5 kg	3 kg		
Operation	Continuous/Timed			
Overall Dimension	280x270x110 mm			
Display	LED			

Weight	7.2 kg		
Power	50 W 51 W		
Power Supply	AC90~240V, 50/60Hz, 2A AC100~240V, 50/60Hz, 2A		

### **OPTIONAL ACCESSORIES**

Accessory Code	Name	Description
LS52480	Flat Platform	
LS52493	Platform100ml	
LS52506	Platform250ml	
LS52519	Universal Platform	
LS52532	Platform with springs	







SHA52-300

### SHA53-250 ORBITAL SHAKER

Microprocessor control with simultaneous display of time and speed Compact space-saving design fits easily in incubator and refrigerator Brushless DC motor ensures maintenance-free, reliable and quiet operation Adjustable speed control provides gentle to vigorous agitation Multi-functional shaking system

Audio alarm signals program completion

Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers



Model	SHA53-250	
Speed Range	50-250 rpm	
Temperature	Ambient +5-40°C	
Shaking Orbit	10, 15, 20 mm available (15mm by default)	
Timing Range	1 min~99h59 min	
Motion	Orbital	
Maximum Load Capacity	8 kg	
Operation	Continuous/Timed	
Platform Dimension	270x240 mm	
Overall Dimension	320x350x145 mm	

Display	LED	
Weight	17.5 kg	
Power Supply	AC90~240V, 50/60Hz, 2A	

### **OPTIONAL ACCESSORIES**

Accessory Code	Name	Description
LS52545	Flask Clamp	
LS52558	Flask Clamp	
LS52571	Flask Clamp	
LS52584	Flask Clamp	

Accessory Code	Name	Description
LS52597	Platform	
LS52610	Platform	
LS52623	Platform	
LS52636	Platform	

# **SHA58** ORBITAL SHAKER

Compact space-saving design fits easily in small spaces

Brushless DC motor ensures maintenance-free, reliable and quiet operation

Electronic time switching clock controls time or continuous operation mode

Simultaneous display of speed, timer and operating mode

RS232 interface enables data logging & computer control

Over speed detection and protection

Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers



Model	SHA58-800 SHA58-500			
Speed Range	100-800 rpm (orbital) 100-350 rpm (Linear)	100-500 rpm (orbital) 100-350 rpm (Linear)		
Permissible Ambient Temperature	5-4	0°C		
Shaking Orbit	4 mm	10 mm		
Permissible Relative Humidity	80.0	00%		
Timing Range	1-119	99 min		
Motion	Orbital	/Linear		
Motor rating Input [W]	28			
Motor rating output [W]	15			
Maximum Load Capacity	2.5 kg	7.5 kg		
Operation	Continuo	ous/Timed		
Overall Dimension	340x300x100 mm	420x370x100 mm		
Display	LCD			
Weight	8.1 kg 13.5 kg			
Power	30 W			
Power Supply	110V-240V, 50/60Hz			

### **OPTIONAL ACCESSORIES**

Accessory Code	Name	Description	Unit	For Models
LS53894	Universal attachment with 3 bars			SHA58-800
LS53906	Fixing clip attachment			SHA58-800
LS53918	Lengthways roller attachment			SHA58-800
LS53930	Dish Attachment with non-slip mat			SHA58-800
LS53942	Universal attachment Bar, black			SHA58-800
LS53954	Fixing clip for flask volume 25 ml			All
LS53966	Fixing clip for flask volume 50 ml			All
LS53978	Fixing clip for flask volume 100 ml			All
LS53990	Fixing clip for flask volume 200/250 ml			All
LS54002	Fixing clip for flask volume 500 ml			All
LS54014	Universal attachment with 4 bars			SHA58-500
LS54026	Fixing clip attachment			SHA58-500
LS54038	Lengthways roller attachment			SHA58-500
LS54050	Dish platform with non-slip mat and fixed string		8 pcs	SHA58-500



SHA58-800



SHA58-500

# **SHA54-300** ORBITAL SHAKER

Easy to operate with one touch knob DC brushless motor for gentle and powerful motion



Model	SHA54-300	
Speed Range	50-300 rpm	
Speed Increment	1 rpm	
Timing Range	1 min ~ 99 h59 min	
Maximum Load Capacity	3 kg	

Overall Dimension	280×270×110 mm
Weight	6.5 kg
Power	45 W
Power Supply	220 V/120 V

### SHA56-200 ORBITAL SHAKER

Max. load capacity is 3kg with platform

Double LEDs for independent display of time and speed

Various platform accessories are available

Brushless DC motor ensures maintenance-free, reliable and quiet operation



#### **SPECIFICATIONS**

Model	SHA56-200	
Speed Range	40-200 rpm	
Permissible Ambient Temperature	5-40°C, 80%RH	
Shaking Orbit	20 mm	
Timing Range	1 min ~ 99 h59 min	
Motor rating Input [W]	16	
Motor rating output [W]	10	
Maximum Load Capacity	3 kg	
Overall Dimension	270×330×110mm	
Display	LED	
Weight	3.1 kg	
Power	30 W	
Power Supply	100-240 V, 50/60 Hz	

Accessory Code	Name	Description
LS52865	Universal attachment, black	
LS52891	Fixing clip for flask volume 25 ml	
LS52904	Fixing clip for flask volume 50 ml	
LS52917	Fixing clip for flask volume 100 ml	
LS52942	Fixing clip for flask volume 200 / 250 ml	

Accessory Code	Name	Description
LS52954	Fixing clip for flask volume 500 ml	
LS52978	Fixing clip attachment	
LS53002	Dish Attachment with non-slip mat	
LS53014	Universal attachment with 3 bars	
LS53026	Lengthways roller attachment	

# SHA59-200 ORBITAL SHAKER

Double LEDs for independent display of time and speed Various platform accessories are available Brushless DC motor ensures maintenance-free, reliable and quiet operation



### **SPECIFICATIONS**

Model	SHA59-200	
Speed Range	40-200 rpm	
Permissible Ambient Temperature	5-40°C, 80%RH	
Timing Range	1 min-19 h59 min	
Amplitude	20 mm	
Motor rating Input [W]	16	
Motor rating output [W]	10	
Maximum Load Capacity	3 kg	
Overall Dimension	270×330×110 mm	
Display	LED	
Weight	3.1 kg	
Power	30 W	
Power Supply	100-240 V,50/60 Hz	

Accessory Code	Name	Description
LS52865	Universal attachment, black	
LS52891	Fixing clip for flask volume 25 ml	
LS52904	Fixing clip for flask volume 50 ml	
LS52917	Fixing clip for flask volume 100 ml	
LS52942	Fixing clip for flask volume 200 / 250 ml	

Accessory Code	Name	Description
LS52954	Fixing clip for flask volume 500 ml	
LS52978	Fixing clip attachment	
LS53002	Dish Attachment with non-slip mat	
LS53014	Universal attachment with 3 bars	
LS53026	Lengthways roller attachment	

# SHA5B-070 ORBITAL SHAKER

Max. load capacity is 10kg with platform

Double LCDs for independent display of time and speed

Various platform accessories are available

DC Motor



### **SPECIFICATIONS**

Model	SHA5B-070
Speed Range	10-70 rpm
Permissible Ambient Temperature	5-40°C, 80%RH
Timing Range	1 min-19 h59 min
Angle Range	9°
Motor rating Input [W]	40
Motor rating output [W]	24
Maximum Load Capacity	10 kg
Overall Dimension	360×410×200 mm
Display	LCD
Weight	9 kg
Power	50 W
Power Supply	100-240 V, 50/60 Hz

Accessory Code	Name	Description
LS52878	Universal attachment, black	
LS52891	Fixing clip for flask volume 25 ml	
LS52904	Fixing clip for flask volume 50 ml	
LS52917	Fixing clip for flask volume 100 ml	
LS52942	Fixing clip for flask volume 200 / 250 ml	

Accessory Code	Name	Description
LS52954	Fixing clip for flask volume 500 ml	
LS52990	Fixing clip attachment	
LS53038	Dish platform with non-slip mat and fixed string(8 pcs)	
LS53050	Universal attachment with 4 bars	
LS53062	Lengthways roller attachment	

# SHA5C-080 ORBITAL SHAKER

Max. load capacity is 3kg with platform

Double LEDs for independent display of time and speed

Various platform accessories are available

DC Motor



### **SPECIFICATIONS**

Model	SHA5C-080
Speed Range	10-80 rpm
Permissible Ambient Temperature	5-40°C, 80%RH
Timing Range	1 min-19 h59 min
Angle Range	7°
Motor rating Input [W]	16
Motor rating output [W]	10
Maximum Load Capacity	3 kg
Overall Dimension	270×330×130 mm
Display	LED
Weight	3.2 kg
Power	20 W
Power Supply	100-240 V, 50/60 Hz

Accessory Code	Name	Description
LS52865	Universal attachment, black	
LS52891	Fixing clip for flask volume 25 ml	
LS52904	Fixing clip for flask volume 50 ml	
LS52917	Fixing clip for flask volume 100 ml	
LS52942	Fixing clip for flask volume 200 / 250 ml	

Accessory Code	Name	Description
LS52954	Fixing clip for flask volume 500 ml	
LS52978	Fixing clip attachment	
LS53002	Dish Attachment with non-slip mat	
LS53014	Universal attachment with 3 bars	
LS53026	Lengthways roller attachment	

# SHA5E-070 ORBITAL SHAKER

Three-dimensional rocking motion

Max. load capacity is 5kg with platform

Double LCDs for independent display of time and speed

Various platform accessories are available

DC Motor



### **SPECIFICATIONS**

Model	SHA5E-070	
Speed Range	10-70 rpm	
Timing Range	1 min-19 h59 min	
Motion	Reciprocal	
Angle Range	9°	
Motor rating Input [W]	40	
Motor rating output [W]	24	
Maximum Load Capacity	5 kg	
Overall Dimension	360×430×106 mm	
Display	LCD	
Weight	9 kg	
Fuse	250 V,1 A, Φ5x20	
Power	50 W	
Power Supply	100-240 V, 50/60 Hz	

Accessory Code	Name	Description
LS52878	Universal attachment, black	
LS52891	Fixing clip for flask volume 25 ml	
LS52904	Fixing clip for flask volume 50 ml	
LS52917	Fixing clip for flask volume 100 ml	
LS52942	Fixing clip for flask volume 200 / 250 ml	

Accessory Code	Name	Description
LS52954	Fixing clip for flask volume 500 ml	
LS52990	Fixing clip attachment	
LS53038	Dish platform with non-slip mat and fixed string(8 pcs)	
LS53050	Universal attachment with 4 bars	
LS53062	Lengthways roller attachment	

# SHA5F-080 ORBITAL SHAKER

Three-dimensional rocking motion

Max. load capacity is 3kg with platform

Double LEDs for independent display of time and speed

Various platform accessories are available

DC Motor



### **SPECIFICATIONS**

Model	SHA5F-080
Speed Range	10-80 rpm
Permissible Ambient Temperature	5-40°C, 80%RH
Timing Range	1 min-19 h59 min
Angle Range	7°
Motor rating Input [W]	16
Motor rating output [W]	10
Maximum Load Capacity	3 kg
Overall Dimension	270×330×130 mm
Display	LED
Weight	2.7 kg
Power	20 W
Power Supply	100-240 V, 50/60 Hz

Accessory Code	Name	Description
LS52865	Universal attachment, black	
LS52891	Fixing clip for flask volume 25 ml	
LS52904	Fixing clip for flask volume 50 ml	
LS52917	Fixing clip for flask volume 100 ml	
LS52942	Fixing clip for flask volume 200 / 250 ml	

Accessory Code	Name	Description
LS52954	Fixing clip for flask volume 500 ml	
LS52978	Fixing clip attachment	
LS53002	Dish Attachment with non-slip mat	
LS53014	Universal attachment with 3 bars	
LS53026	Lengthways roller attachment	

# SHA5G-080 ORBITAL SHAKER

Three-dimensional rocking motion
Max. load capacity is 3kg with platform
Various platform accessories are available
DC Motor



### **SPECIFICATIONS**

Model SHA5G-080	
Speed Range	0-80 rpm
Permissible Ambient Temperature	5-40°C, 80%RH
Angle Range	7°
Motor rating Input [W]	16
Motor rating output [W]	10
Maximum Load Capacity	3 kg
Overall Dimension	270×330×130 mm
Weight	2.7 kg
Power	20 W
Power Supply	100-240 V,50/60 Hz

Accessory Code	Name	Description
LS52865	Universal attachment, black	
LS52891	Fixing clip for flask volume 25 ml	
LS52904	Fixing clip for flask volume 50 ml	
LS52917	Fixing clip for flask volume 100 ml	
LS52942	Fixing clip for flask volume 200 / 250 ml	

Accessory Code	Name	Description
LS52954	Fixing clip for flask volume 500 ml	
LS52978	Fixing clip attachment	
LS53002	Dish Attachment with non-slip mat	
LS53014	Universal attachment with 3 bars	
LS53026	Lengthways roller attachment	

### **SHA51-350** ORBITAL SHAKER

Microprocessor control with simultaneous display of time and speed Brushless DC motor ensures maintenance-free, reliable and quiet operation Adjustable speed control provides gentle to vigorous agitation

Audio alarm signals program completion

Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers



#### **SPECIFICATIONS**

Model	SHA51-350
Speed Range	50-350 rpm
Temperature	4-45°C
Shaking Orbit	10 mm
Timing Range	1 min~99h59 min
Motion	Orbital
Maximum Load Capacity	2 kg
Operation	Continuous/Timed
Overall Dimension	280x260x90 mm
Display	LED
Weight	7.5 kg
Power	50 W
Power Supply	AC100-230V, 60Hz

Accessory Code	Name	Description
LS54209	Platform	Flat platform with non-slip rubber mat
LS54221	Platform	Double deck flat platform with non-slip rubber mat
LS54233	Platform	Platform with clamps for flasks 100-150ml
LS54245	Platform	Platform with clamps for flasks 250-300ml

Accessory Code	Name	Description
LS54257	Platform	Universal platform with adjustable bars
LS54269	Platform	Universal platform with springs
LS54281	Platform	Sticky pad (not platform, can be put in the platform BX-103551 or BX-103552)

### **SHA51-300** ORBITAL SHAKER

Microprocessor control with simultaneous display of time and speed Brushless DC motor ensures maintenance-free, reliable and quiet operation Adjustable speed control provides gentle to vigorous agitation

Audio alarm signals program completion

Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers



### **SPECIFICATIONS**

Model	SHA51-300
Speed Range	50-300 rpm
Temperature	4-45°C
Shaking Orbit	20 mm
Timing Range	1 min~99h59 min
Motion	Orbital
Maximum Load Capacity	2 kg
Operation	Continuous/Timed
Overall Dimension	280x260x90 mm
Display	LED
Weight	7.5 kg
Power	50 W
Power Supply	AC100-230V, 60Hz

Accessory Code	Name	Description
LS54209	Platform	Flat platform with non-slip rubber mat
LS54221	Platform	Double deck flat platform with non-slip rubber mat
LS54233	Piationii	100-150mi
LS54245	Platform	Platform with clamps for flasks 250-300ml

Accessory Code		Description
LS54257	Platform	Universal platform with adjustable bars
LS54269	Platform	Universal platform with springs
LS54281	Platform	Sticky pad (not platform, can be put in the platform BX-103551 or BX-103552)

# SHA51-250 ORBITAL SHAKER

Microprocessor control with simultaneous display of time and speed Brushless DC motor ensures maintenance-free, reliable and quiet operation Adjustable speed control provides gentle to vigorous agitation

Audio alarm signals program completion

Accommodate a variety of platforms, non-slip rubber mat, conical flasks and other sample containers



#### **SPECIFICATIONS**

Model	SHA51-250
Speed Range	50-250 rpm
Temperature	4-45°C
Shaking Orbit	30 mm
Timing Range	1 min~99h59 min
Motion	Orbital
Maximum Load Capacity	2 kg
Operation	Continuous/Timed
Overall Dimension	280x260x90 mm
Display	LED
Weight	7.5 kg
Power	50 W
Power Supply	AC100-230V, 60Hz

#### **OPTIONAL ACCESSORIES**

Accessory Code	Name	Description
LS54209	Platform	Flat platform with non-slip rubber mat
LS54221	Platform	Double deck flat platform with non-slip rubber mat
LS54233	Platform	Platform with clamps for flasks 100-150ml
LS54245	Platform	Platform with clamps for flasks 250-300ml

Accessory Code		Description
LS54257	Platform	Universal platform with adjustable bars
LS54269	Platform	Universal platform with springs
LS54281	Platform	Sticky pad (not platform, can be put in the platform BX-103551 or BX-103552)



### **Biozef**