

# ONiLAB



ONiLAB LLC

**ONiLAB**

The logo for ONiLAB is displayed in a bold, sans-serif font. The letters 'O', 'N', and 'i' are blue, while 'L', 'A', and 'B' are grey. The 'i' has a grey dot. Below the text is a reflection of the logo, rendered in a lighter, semi-transparent blue and grey. The entire logo is centered horizontally on a white background.

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ONiLAB products are manufactured in accordance with ISO9001 and ISO13485. All products comply with EU and North America standards, ROHS, CE, cTÜVus, FCC marked and subjected to the strict QC control.

ONiLAB instruments are tested and conform to the following safety and EMC standards:

EN 61010-1 UL 3101-1 CAN/CSA C22.2(1010-1)

EN 61010-2-10 EN 61326-1 EMC-guidelines: 89/336/EWG Instrument guidelines: 73/023/EWG

# ONiLAB

MIXING  
DISTILLING



7" inch hotplate magnetic stirrers are suitable for various heating and mixing applications with excellent chemical resistance, compact shape and efficient heat transfer. They are widely used in many scientific disciplines such as biology, chemistry, physics and medicine, etc.

## MS7-H550-Pro LCD Hotplate Magnetic Stirrer

### Features

- Microprocessor PID controls.
- LCD display with speed and temperature control knobs.
- Ceramic workplate with a high power of 1050W reaches a maximum temperature of 550°C.
- Max. heating temperature of 550°C.
- Ceramic workplate of 184x184mm.
- Speed is adjustable from 100 to 1500rpm.
- "Hot" safety indication on LCD when the plate temperature is above 50°C.
- PT1000 external temperature sensor for precise temperature control.
- RS232 interface enables data preservation and control by a PC.



## MS7-H550-S LED Hotplate Magnetic Stirrer

### Features

- LED display with speed and temperature control knobs.
- Adjustable speed range: 0-1500rpm.
- Ceramic workplate with a maximum temperature of 550°C.
- PT1000 external temperature sensor for precise temperature control at  $\pm 0.2^{\circ}\text{C}$ .
- "Hot" Safety indication on LED when the plate temperature is above 50°C.



Specifications	MS7-H550-Pro	MS7-H550-S
Workplate Dimension [W x D]	184x184mm (7 inch)	184x184mm (7 inch)
Workplate material	Glass ceramic	Glass ceramic
Motor type	Brushless DC motor	Shaded pole motor
Motor rating input	18W	15W
Motor rating output	10W	1.5W
Power	1050W	1030W
Heating output	1000W	1000W
Voltage	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz
Stirring positions	1	1
Max. stirring volume, [H <sub>2</sub> O]	20L	10L
Max. magnetic bar[length]	80mm	80mm
Speed range	100-1500rpm resolution ±1rpm	0-1500rpm
Speed display	LCD	Scale
Temperature display	LCD	LED
Heating temperature range	Room Temp.-550°C, increment 1°C	Room temp.-550°C, increment 5°C
Temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±10°C
Overheating protection	580°C	580°C
Temperature display resolution	±0.1°C	±1°C
External temperature sensor	PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)
"Hot" safety indication	50°C	50°C
Data interface	RS232	-
Protection class	IP21	IP21
Dimension [WxDxH]	215x360x112mm	215x360x112mm
Weight	5.3kg	4.5kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH

These magnetic stirrers deliver powerful, smooth mixing and safe heating. They are useful in biological, physical, chemical, pharmaceutical laboratories, etc.

## MS-H-Pro<sup>+</sup> LCD Digital Hotplate Magnetic Stirrer

### Features

- LCD digital control of speed and temperature.
- Maintenance free brushless DC motor.
- RS232 interface enables data preservation, transmission and control by a PC.
- Speed setting range from 0-1500rpm.
- RS232 interface provides PC control and data transmission.
- Ceramic workplate with max. temperature of 340°C.
- Various optional accessories make it suitable for many applications.
- "Hot" safety indication on LED when the plate temperature is above 50°C.
- PT1000 external temperature sensor for precise temperature control at of  $\pm 0.2^{\circ}\text{C}$ .



## MS-H-Pro<sup>T</sup> LCD Digital Hotplate Magnetic Stirrer with Timer

### Features

- LCD digital control of speed, temperature and time.
- Brushless DC motor with 550W power.
- Speed setting range up to 1500rpm.
- RS232 interface provides PC control and data transmission.
- Ceramic workplate with max. temperature of 340°C.
- Various optional accessories make it suitable for many applications.
- "Hot" safety indication on LED when the plate temperature is above 50°C.
- PT1000 external temperature sensor for precise temperature control at  $\pm 0.2^{\circ}\text{C}$ .
- Timer setting ranges from 1min to 99h59min.





## MS-H-S

### Magnetic Hotplate Stirrer

#### Features

- Maximum heating temperature 340°C.
- Maximum speed setting range up to 1500rpm.
- 530W high power brushless DC motor.
- Ceramic workplate provides good resistance and efficient heat transfer.
- Overheating protection with “hot” safety indication if temperature is above 50°C.
- Various optional accessories makes it suitable for many applications.

Specifications	MS-H-PRO <sup>+</sup>	MS-H-PRO <sup>†</sup>	MS-H-S
Workplate dimension	φ135mm(5 inch)	φ135mm(5 inch)	φ135mm(5 inch)
Workplate material	stainless steel cover with ceramic	stainless steel cover with ceramic	stainless steel cover with ceramic
Motor type	Brushless DC motor	Brushless DC motor	Brushless DC motor
Motor rating input	18W	18W	18W
Motor rating output	10W	10W	10W
Power	550W	550W	530W
Heating output	500W	500W	500W
Voltage	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz	100-120/200-240V 50/60Hz
Stirring positions	1	1	1
Max. stirring volume[H <sub>2</sub> O]	20L	20L	20L
Max. magnetic bar[length]	80mm	80mm	80mm
Speed range	100-1500rpm resolution±1rpm	100-1500rpm resolution±1rpm	0-1500rpm resolution±1rpm
Speed display	LCD	LCD	Dial
Temperature display	LCD	LCD	Dial
Heating temperature range	Room temp.-340°C, increment 1°C	Room temp.-340°C, increment 1°C	Room temp.-340°C
Temperature control accuracy	±1°C(<100°C) ±1%(>100°C)	±1°C(<100°C) ±1%(>100°C)	-
Overheating protection	360°C	360°C	350°C
Temperature display resolution	±0.1°C	±0.1°C	±0.5°C
External temperature sensor	PT1000 (accuracy ±0.2)	PT1000 (accuracy ±0.2)	-
*Hot* safety indication	50°C	50°C	-
Timer function	-	1min to 99h 59min	-
Data interface	RS232	RS232	-
Protection class	IP42	IP42	IP42
Dimension[WxDxH]	160x280x85mm	160x280x85mm	160x280x85mm
Weight	2.8kg	2.8kg	2.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH



These magnetic stirrers deliver powerful, smooth mixing and safe heating. They are useful in biological, physical, chemical, pharmaceutical laboratories, etc. They are designed to work with weak acid or alkaline solutions in laboratory.

## MS-H280-Pro Hotplate Magnetic Stirrer

### Features

- LED digital display of temperature and speed.
- Temperature and speed control knobs are present below the display screen.
- Maximum temperature and speed ranges are 280°C and 1500rpm respectively.
- Ceramic coated stainless steel workplate with good chemical resistance.
- PT1000 external temperature sensor for precise temperature control accuracy at  $\pm 0.5^\circ\text{C}$ .
- “Hot” safety indication on LED if the plate temperature is above 50°C.



### Specifications

### MS-H280-Pro

Workplate dimension	$\phi 135\text{mm}(5\text{ inch})$
Workplate material	stainless steel coated with ceramic
Motor type	Brushless DC motor
Motor rating input	5W
Motor rating output	3W
Power	515W
Heating output	500W
Voltage	100-120/200-240V 50/60Hz
Stirring positions	1
Max. stirring volume	3L
Max. magnetic bar[length]	50mm
Speed range	200-1500rpm
Speed display	LED
Temperature display	LED
Speed display resolution	$\pm 1\text{rpm}$
Heating temperature range	Room temp.-280, increment 1°C
Temperature control accuracy	$\pm 1^\circ\text{C}(<100^\circ\text{C}) \pm 1\%(>100^\circ\text{C})$
Overheating protection	32°C
Temperature display resolution	$\pm 1^\circ\text{C}$
External temperature sensor	PT1000 (accuracy $\pm 0.5^\circ\text{C}$ )
*Hot* safety indication	50°C
Protection class	IP21
Dimension[WxDxH]	150x260x100mm
Weight	1.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

## MS-H-S10

### 10-Position Magnetic Hotplate Stirrer

#### Features

- Max. of 10 stirring positions on one workplate with an anti-slip silicone mat.
- Stirring speed setting range: 0-1100rpm.
- Single temperature setting at all positions from 0-120°C.
- 490W powerful brushless DC motor.



#### Specifications

	MS-H-S10
Workplate dimension[W x D]	180x450mm
Workplate material	Stainless steel with silicone
Motor type	Brushless DC motor
Motor rating input	12W
Motor rating output	4W
Power	490W
Heating output	470W
Voltage	100-120/200-240V 50/60Hz
Stirring positions	10
Max. stirring volume	0.4Lx10
Max. magnetic bar[length]	40mm
Speed range	0-1100rpm
Speed display	Dial
Temperature display	Dial
Heating temperature range	Room temp.-120°C
Overheating protection	140°C
Protection class	IP42
Dimension[WxDxH]	182x622x65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH





Cat. No.	Description	MS7-H550-Pro	MS7-H550-S	MS-H-Pro <sup>+</sup>	MS-H-Pro <sup>T</sup>	MS-H-S	MS-H280-Pro
①	18900001 Blue carrying plate, use with color quarter pies			√	√	√	√
②	18900065 Blue fixing ring, use with color quarter pies			√	√	√	√
③	18900002 Red quarter pie, 11 holes, 4 mL reaction vessel, Ø15.2mm, 20mm depth	√	√	√	√	√	√
④	18900003 Purple quarter pie, 4 holes, 20 mL reaction vessel, Ø28mm, 24mm depth	√	√	√	√	√	√
⑤	18900004 Blue quarter pie, 4 holes, 30mL reaction vessel, Ø28mm, 30mm depth	√	√	√	√	√	√
⑥	18900005 Black quarter pie, 4 holes, 40mL reaction vessel, Ø28mm, 43mm depth	√	√	√	√	√	√
⑦	18900048 Green quarter pie, 6 holes, 8mL reaction vessel, Ø17.8mm, 26mm depth	√	√	√	√	√	√
⑧	18900049 Golden quarter pie, 4 holes, 16mL reaction vessel, Ø21.6mm, 31.7mm depth	√	√	√	√	√	√
⑨	18101006 Reaction block for 50mL round bottom flask (one flask capacity)			√	√	√	√
⑩	18101007 Reaction block for 100mL round bottom flask (one flask capacity)			√	√	√	√
⑪	18101008 Reaction block for 250mL round bottom flask (one flask capacity)			√	√	√	√
⑫	18101009 Reaction block for 500mL round bottom flask (one flask capacity)			√	√	√	√
⑬	18900016 PT1000-A, length of 230mm	√	√	√	√		√
⑭	18900136 PT1000-B, temperature sensor coated with glass, length of 230mm	√	√	√	√		√
⑮	18900017 Support clamp of PT1000	√	√	√	√		
⑯	18900148 Support clamp of PT1000						√



### Stirrer bars

Stirrer bars and stirrer bar remover(PTFE), use below 150°C

#### Models

MS7-H550-Pro  
MS7-H550-S  
MS-H-Pro\*  
MS-H-Pro†  
MS-H-S  
MS-S

MS-H280-Pro  
MS-PA  
MS-PB

MS-H-S10  
MS-M-S10  
FlatSpin  
EcoStir

Cat. No.	Size of stirrer bars (LxØ)[mm]	Max. stirrer length: 80mm	Max. stirrer length: 50mm	Max. stirrer length: 40mm
18900006	10mmx6mm	✓	✓	✓
18900007	15mmx8mm	✓	✓	✓
18900008	20mmx8mm	✓	✓	✓
18900009	25mmx8mm	✓	✓	✓
12500005	30mmx6mm	✓	✓	✓
18900011	40mmx8mm	✓	✓	✓
12500004	50mmx8mm	✓	✓	
18900013	65mmx8mm	✓		
18900014	80mmx13mm	✓		
18900015	Stirrer bar remover, length of 200mm	✓	✓	✓

## HP550-S LED Hotplate

### Features

- Built-in PID temperature control.
- LED digital display of set and actual temperature.
- Glass ceramic workplate with a max. temperature setting of 550°C.
- Overheating protection at 580°C.
- PT1000 external temperature sensor for precise temperature control accuracy at  $\pm 0.5^\circ\text{C}$ .
- "Hot" safety indication on LED if the plate temperature is above 50°C.



### Specifications

Specifications	HP550-S
Workplate dimension[WxD]	184x184mm(7 inch)
Workplate material	Glass ceramic
Power	1010W
Voltage	100-120/200-240V,50/60Hz
Heating Power	1000W
Heating position	1
Heating temperature range	Room temp.-550°C,increment 5°C
Temperature control accuracy	$\pm 10^\circ\text{C}$
Overheating protection	580°C
Temperature display	LED
Temperature display resolution	$\pm 1^\circ\text{C}$
External temperature sensor	PT1000( $\pm 0.5^\circ\text{C}$ )
"Hot" safety indication	50°C
Protection class	IP21
Dimension[WxDxH]	215x360x112mm
Weight	4.5kg
Permissible ambient temperature and humidity	5-40°C, 80%RH

## MS7-S

### 7" Square Magnetic Stirrer

#### Features

- Speed adjustable from 0-1500rpm with a simple dial knob.
- Max. stirring capacity of 10L[H<sub>2</sub>O].
- Ceramic workplate highly resistance to chemical erosion.



#### Specifications

	MS7-S	MS-S
Workplate dimension[WxD]	184x184mm(7inch)	φ135mm(5 inch)
Workplate material	Glass ceramic	Stainless steel coated with ceramic
Motor type	Shaded pole motor	Brushless DC motor
Motor rating input	15W	18W
Motor rating output	1.5W	10W
Power	30W	30W
Voltage	100-120/200-240V,50/60Hz	100-240V,50/60Hz
Stirring positions	1	1
Max. stirring volume[H <sub>2</sub> O]	10L	20L
Max. magnetic bar[length]	80mm	80mm
Speed range	0-1500rpm	0-1500rpm
Speed display	Dial	Dial
Protection class	IP21	IP42
Dimension[WxDxH]	215x360x112mm	160x280x85mm
Weight	3.8kg	2.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH



## MS-S

### Magnetic Stirrer

#### Features

- Speed adjustable from 0-1500rpm with a simple dial knob.
- Max. stirring capacity of 20L[H<sub>2</sub>O].
- Stainless steel ceramic workplate which can provide good chemical resistance.



## MS-PA LED Digital Magnetic Stirrer

### Features

- Broad speed range from 100-1500rpm.
- Suitable for high speed mixing applications.
- Max. stirring capacity is 3L [H2O].
- LED digital speed control.
- Good chemical resistant workplate.



## MS-PB Magnetic Stirrer

### Features

- Broad speed range from 100-1500rpm.
- Suitable for high speed mixing applications.
- Max. stirring capacity is 3L [H2O].
- Good chemical resistant workplate.



### Specifications

	MS-PA	MS-PB
Workplate dimension[WxD]	φ135(5 inch)mm	φ135(5 inch)mm
Workplate material	Nylon+GF	Nylon+GF
Motor type	Brushless DC motor	Brushless DC motor
Motor rating input	5W	5W
Motor rating output	3W	3W
Power	15W	10W
Voltage	100-120/200-240V,50/60Hz	100-120/200-240V,50/60Hz
Stirring positions	1	1
Max. stirring volume[H <sub>2</sub> O]	3L	3L
Max. magnetic bar[length]	50mm	50mm
Speed range	200-1500rpm	0-1500rpm
Speed display	LED	Dial
Protection class	IP42	IP42
Dimension[WxDxH]	150x260x80mm	150x260x80 mm
Weight	1.8kg	1.8kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH

## MS-M-S10

### 10-Position Magnetic Stirrer

#### Features

- Max. of 10 stirring positions on one workplate with an anti-slip silicone mat.
- Stirring speed setting range: 0-1100rpm.
- Strong magnetism keeps stirrer bars in control.



#### Specifications

#### MS-M-S10

Workplate Dimension[WxD]	180x450mm
Workplate material	Stainless steel with silicone coating
Motor type	Brushless DC motor
Motor rating input	12W
Motor rating output	4W
Power	20W
Voltage	100-120/200-240V,50/60Hz
Stirring positions	10
Max. stirring volume[H <sub>2</sub> O]	0.4L x 10
Max. magnetic bar[length]	40mm
Speed range	0-1100rpm
Speed display	Dial
Protection class	IP21
Dimension[WxDxH]	622x205x65mm
Weight	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH





## FlatSpin

### Ultra-flat Compact Magnetic Stirrer

FlatSpin is a motor less magnetic stirrer available in portable shape and size with high speed range up to 1500rpm. FlatSpin with PET top workplate is suitable for small volume stirring applications.

#### Features

- Light in weight, portable and easy to operate.
- Electronic speed regulation: from 0-1100rpm.
- High resistance to chemicals.
- Maintenance-free ultra-flat magnetic stirrer.
- Auto reverse rotation ensures enhanced mixing.





## EcoStir

### Economical Magnetic Stirrer

EcoStir is designed for small volume of liquids. These portable economical magnetic stirrers are useful in day-to-day regular stirring applications in any biological and chemical laboratories.

#### Features

- Powerful BLDC motor for fast and efficient mixing.
- Maintenance-free ultra model magnetic stirrer.
- Speed is adjustable from 300-2000rpm.
- Compact, noise and vibration free design.
- PET top provides good chemical resistance.

Specifications	FlatSpin	EcoStir
Workplate dimension	φ90mm	φ120mm
Workplate material	PET	PET
Motor type	Motorless	Brushless DC motor
Motor rating output	3W	1.2W
Power	5W	7.2W
Voltage	100-120/200-240V,50/60Hz	100-120/200-240V,50/60Hz
Stirring positions	1	1
Max. stirring volume[H <sub>2</sub> O]	0.8L	1.5L
Max. magnetic bar[length]	40mm	40mm
Speed range	15-1500rpm	300-2000rpm
Speed setting	Touch key	Dial
Protection class	IP65	IP21
Dimension [W x D x H]	175x120x15mm	150x145x50mm
Weight	0.3kg	0.3kg
Permissible ambient temperature and humidity	5-40°C,80%RH	5-40°C,80%RH

OniLab Overhead Stirrers are designed for high volume and high viscosity sample stirring applications. These are used in polymer processing, organic and inorganic solvent mixing, chemical synthesis and many more pharmaceutical applications.

## OS20-Pro OS40-Pro LCD Digital Overhead Stirrer

### Features

- Easy and user friendly operation with LCD digital display of set and actual speeds.
- Speed adjustable within 50-2200rpm with precise speed control.
- High performance BLDC motor with overload protection.
- Speed maintains as the viscosity changes.
- RS232 interface to control and data document.
- Microprocessor controlled safety circuits prevent splashing.
- Powerful torque suitable for stirring of highly viscous liquids.



Specifications	OS20-Pro	OS40-Pro
Max. stirring volume[H <sub>2</sub> O]	20L	40L
Motor type	brushless DC motor	brushless DC motor
Motor rating input	60W	120W
Motor rating output	50W	100W
Voltage	100-240V, 50/60 Hz	100-240V, 50/60 Hz
Power	70W	130W
Speed range	50-2200rpm	50-2200rpm
Speed control accuracy	±3rpm	±3rpm
Speed display	LCD	LCD
Torque display	LCD	LCD
Overload protection display	LED indicator	LED indicator
Max. torque	40N-cm	60N-cm
Max. viscosity	10000mPa-s	50000mPa-s
Chuck clamping range	0.5-10mm	0.5-10mm
Dimension[WxHxD]	83x220x186mm	83x 220x 186mm
Weight	2.8kg	2.8kg
Protection class	IP21	IP21
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH
Data interface	RS232	RS232

## OS20-S OS40-S

### LED Digital Overhead Stirrer

#### Features

- Easy and user friendly operation with LED digital display of actual speeds.
- Speed adjustable within 50-2200rpm with precise speed control.
- High performance BLDC motor with overload protection.
- Speed maintains as the viscosity changes.
- Protection class of IP42.
- Microprocessor controlled safety circuits prevent splashing.
- A wide range of shaft accessories for different kinds of applications.



Specifications	OS20-S	OS40-S
Max. stirring volume(H <sub>2</sub> O)	20L	40L
Motor type	brushless DC motor	brushless DC motor
Motor rating input	60W	120W
Motor rating output	50W	100W
Voltage	100-240V, 50/60 Hz	100-240V, 50/60 Hz
Power	70W	130W
Speed range	50-2200rpm	50-2200rpm
Speed control accuracy	±3rpm	±3rpm
Speed display	LED	LED
Overload protection display	LED indicator	LED indicator
Max. torque	40N-cm	60N-cm
Max. viscosity	10000mPa-s	50000mPa-s
Chuck clamping range	0.5-10mm	0.5-10mm
Dimension[WxHxD]	83x220x186mm	83x220x186mm
Weight	2.8kg	2.8kg
Protection class	IP21	IP21
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH

### Universal plate stand

Dimension [W x D x H] :  
200x310x780mm  
Material: stainless steel

Cat. No.

18900258



### Propeller stirrer

shaft length 400mm  
stirrer diameter 50mm

**Material:** 316L stainless steel  
**Application:** Standard stirring element used at medium and high speeds

Cat. No.

1890007



### Straight stirrer

shaft length 40cm  
stirrer diameter 6cm

**Material:** 316L stainless steel  
**Application:** Ideal for the mixing of low viscosity media at medium and high speeds

Cat. No.

18900072



### Paddle stirrer

shaft length 40cm  
stirrer diameter 6.8cm

**Material:** 316L stainless steel  
**Application:** Suitable for samples needed gentle processing at low and medium speeds

Cat. No.

18900073



### Centrifugal stirrer

shaft length 40cm  
stirrer diameter 9cm

**Material:** 316L stainless steel  
**Application:** Two-bladed stirrer of which blades open at an increasing angle as the speed increases. Perfect for stirring in round vessels with narrow necks. Medium to high speeds required.

Cat. No.

18900074



### Propeller stirrer

shaft length 35cm  
stirrer diameter 6.5cm

**Material:** PTFE coated  
**Application:** Standard stirring element, used at medium and high speeds

Cat. No.

18900075



### Straight stirrer

shaft length 35cm  
stirrer diameter 7cm

**Material:** PTFE coated  
**Application:** Ideal for the mixing of low viscosity media at medium and high speeds

Cat. No.

18900076



### Paddle stirrer

shaft length 35cm  
stirrer diameter 6.8cm

**Material:** PTFE coated  
**Application:** Suitable for samples needed gentle processing at low and medium speeds

Cat. No.

18900077



### Centrifugal stirrer

shaft length 35cm  
stirrer diameter 8.5cm

**Material:** PTFE coated  
**Application:** Two-bladed stirrer of which blades open at an increasing angle as the speed increases. Perfect for stirring in round vessels with narrow necks. Medium to high speeds required

Cat. No.

18900078



The vortex mixer is used in most bioscience laboratories for mixing liquids in tubes. In a biochemical or analytical laboratory they may be used to mix the reagents of an assay or to mix the experimental samples.

## MX-S Vortex Mixer

### Features

- Speed adjustable from 0-2500rpm.
- Standard configuration with an adapter for Ø30mm tube or smaller.
- 3 position power switch with touch/continuous modes of operation.
- Wide range of accessories available.
- Shaded pole motor for less maintenance.
- Good corrosion resistant aluminum alloy casing exterior.
- Small rubber vacuum grippers hold the unit during operation.
- LED indicator of power.



## MX-F Vortex Mixer

### Features

- Fixed speed of 2500rpm.
- Standard configuration with an adapter for Ø30mm tube or smaller.
- 3 position power switch with touch/continuous modes of operation.
- Wide range of accessories available.
- Shaded pole motor for less maintenance.
- Good corrosion resistant aluminum alloy casing exterior.
- Small rubber vacuum grippers hold the unit during operation.
- LED indicator of power.

## VT.1.1 standard top (Default)

For <math>\varnothing</math>30mm tubes and small vessels

Cat. No.18900034



## VT.1.3.7 vacuum

Made of rubber

Cat. No.18900158



### Specifications

	MX-S (Adjustable speed)	MX-F (Fixed speed)
Voltage	100-120V/200-240V,50/60Hz	100-120V/200-240V,50/60Hz
Power	60W	60W
Type	Orbital	Orbital
Orbital diameter	4mm	4mm
Motor type	Shaded pole motor	Shaded pole motor
Motor rating input	58W	58W
Motor rating output	10W	10W
Speed range	0-2500rpm	2500rpm
Speed control	Dial	-
Operation mode	Touch / Continuous	Touch / Continuous
Dimension[WxHxD]	127x130x160mm	127x130x160mm
Weight	3.5kg	3.5kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH
Protection class	IP21	IP21



### VT1.2 Tube holding rod

used with tube adapters

Cat. No. 18900044



### VT1.3 Universal top plate

Ø 100mm

Cat. No. 18900035



### VT1.3.1 tube adapter

With 48 holes for Ø6mm test tubes

Cat. No. 18900020



### VT1.3.2 tube adapter

With 15 holes for Ø10mm test tubes

Cat. No. 18900021



### VT1.3.3 tube adapter

With 12 holes for Ø12mm test tubes

Cat. No. 18900022



### VT1.3.4 tube adapter

With 8 holes for Ø16mm test tubes

Cat. No. 18900023



### VT1.3.5 tube adapter

With 8 holes for Ø20mm test tubes

Cat. No. 18900024



### VT1.3.6 platform pad

for <Ø99mm tubes and small vessels

Cat. No. 18900043

## Application of accessories

Accessories	Adjustable speed model (0-2500rpm)	
	Touch mode (High speed area)	Continuous mode (Low speed area)
VTL1	Y	Y
VTL2 + VT1.3.1	Y	
VTL2 + VT1.3.2	Y	
VTL2 + VT1.3.3	Y	
VTL2 + VT1.3.4	Y	
VTL2 + VT1.3.5	Y	
VTL3 + VT1.3.6	Y	
VTL3 + VT1.3.1		Y
VTL3 + VT1.3.2		Y
VTL3 + VT1.3.3		Y
VTL3 + VT1.3.4		Y
VTL3 + VT1.3.5		Y

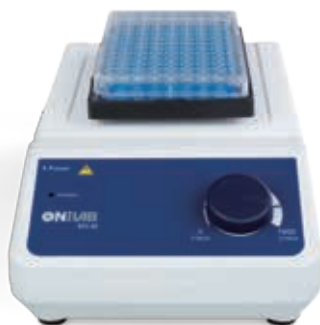


ONiLAB Microplate Mixer is used for holding single or double microplates. The compact shape of MX-M Microplate Mixer occupies less bench space and makes the storage easier. It is widely used in life sciences including microbiology, cell and molecular biology, immunology and biotechnology.

## MX-M Microplate Mixers

### Features

- High efficiency BLDC motor.
- Small and compact design requires minimum bench top space.
- Speed adjustable within 0-1500rpm using speed control knob.
- Designed for mixing of single or double microplates in orbital motion.
- Wide range of accessories are available.
- The standard pack includes a single microplate clamp.



### PS1.1 universal top plate

Used with tube adapters

Cat. No.18900067



### VT1.3.4 tube adapter

With 8 holes for Ø16mm test tubes

Cat. No.18900023



### VT1.3.5 tube adapter

for 8 holes test tubes, Ø20mm

Cat. No.18900024



### VT1.3.1 tube adapter

With 48 holes for Ø6mm test tubes

Cat. No.18900020



### PS1.2 microplate clamp

Cat. No.18900042



### MXM-116 Double microplate clamps

Cat. No.18900079



### VT1.3.2 tube adapter

With 15 holes for Ø10mm test tubes

Cat. No.18900021



### VT1.3.3 tube adapter

With 12 holes for Ø12mm test tubes

Cat. No.18900022

### Specifications

	MX-M
Type	Orbital
Orbital diameter	4.5mm
Max. load (with accessory)	0.5kg
Motor type	Brushless DC motor
Motor rating input	18W
Motor rating output	10W
Speed range	Single microplate: 0-1500rpm Double microplate: 0-1000rpm
Speed control	Dial
Voltage	100-240V,50/60Hz
Power	20W
Dimension	260×150×80mm
Weight	3kg
Permissible ambient temperature and humidity	5-40°C,80%RH
Protection class	IP21



## Rotators

Rotators perform more intense mixing than rollers. Rotators can use rotisserie type or disk type design accessory which holds sample tubes of 1.5mL to 50mL. With adjustable rotation speed, they are useful in various applications which need continuous agitation, such as hematology, blood chemistry and diagnostic applications.

### MX-RD-Pro LCD Digital Rotator

#### Features

- LCD digital control of speed and time.
- Speed adjustable from 10-70rpm.
- Fully adjustable tilt angle up to 90°.
- DC motor with less maintenance.
- Low speed rotation enhances the agitation of biological samples.
- Various types of disk and clip accessories to accommodate most common tubes.



### MX-RD-E Economical Rotator

#### Features

- Speed adjustable from 0-80rpm.
- Low speed rotation enhances the agitation of biological samples.
- Various types of disk and clip accessories to accommodate most common tubes.



#### Specifications

	MX-RD-Pro	MX-RD-E
Motor type	DC motor	DC motor
Tilt angle	0-90°	-
Speed range	10-70rpm	0-80rpm
Speed display	LCD	Dial
Timer display	LCD	Dial
Time setting range	1-1199min	-
Operation mode	Continuous / timer	Continuous
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	40W	20W
Dimension [D×W×H]	280×210×300mm	300×220×310mm
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH
Protection class	IP21	IP21



## MX-RL-Pro LCD Digital Rotator

### Features

- LCD digital control of speed and time.
- Speed adjustable from 10-70rpm.
- Low speed rotation provides effective mixing.
- Various types of rotisserie and clip accessories to accommodate centrifuge tubes of different sizes.
- DC motor with less maintenance.



## MX-RL-E Economical Rotator

### Features

- Speed adjustable from 0-80rpm.
- Low speed rotation provides effective mixing in a variety of centrifuge tubes.
- Various types of rotisserie and clip accessories to accommodate most common tubes.



### Specifications

	MX-RL-Pro	MX-RL-E
Motor type	DC motor	DC motor
Speed range	10-70rpm	0-80rpm
Speed display	LCD	Dial
Timer display	LCD	Dial
Time setting range	1-1199min	-
Operation mode	Continuous/timer	Continuous
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	40W	20W
Dimension[DxWxH]	220x510x260mm	150X530X190mm
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH
Protection class	IP21	IP21



### Disk Accessories Type-1

Used for MX-RD-Pro  
for 60 × 1.5mL centrifuge tubes

**Cat. No.**

18900160



### Disk Accessories Type-2

Used for MX-RD-Pro  
for 16 × 15mL centrifuge tubes

**Cat. No.**

18900161



### Disk Accessories Type-3

Used for MX-RD-Pro  
for 8 × 50mL centrifuge tubes

**Cat. No.**

18900162



### Disk support rods

4pcs in a group  
use with disk accessories

**Cat. No.**

18900140



### Rotisserie Accessory Type-1

Used for MX-RL-Pro, holding  
48 × 1.5mL centrifuge tubes  
horizontally

**Cat. No.**

18900142



### Rotisserie Accessory Type-2

Used for MX-RL-Pro, holding  
24 × 15mL centrifuge tubes  
horizontally

**Cat. No.**

18900143



### Plastic Clips

Used with MX-RL-E/MX-RD-E  
Disk/Rotisserie accessory, for  
50mL, 15mL and 1.5mL  
centrifuge tubes



### Rotisserie Accessory Type-3

Used for MX-RL-Pro, holding  
24 × 50mL centrifuge tubes  
horizontally

**Cat. No.**

18900144



### Rotisserie Accessory Type-4

Used for MX-RL-Pro, holding  
32 × 1.5mL centrifuge tubes  
vertically

**Cat. No.**

18900145



### Rotisserie Accessory Type-5

Used for MX-RL-Pro, holding  
48 × 1.5mL centrifuge tubes  
vertically

**Cat. No.**

18900146



### Rotisserie Accessory Type-6

Used for MX-RL-Pro, holding  
16 × 50mL centrifuge tubes  
vertically

**Cat. No.**

18900147



## Tube Rollers

Tube Rollers are used for uniform mixing of blood samples, viscous liquids, and whole blood components in the anticoagulation tubes or bottles. These rollers can mix samples in any type of liquid containers. Tube rollers are controlled by microprocessor with digital timer.

### MX-T6-Pro Tube Roller

#### Features

- Maximum load of up to 4Kg.
- Gentle mixing in rolling motion with a capacity of 6 tubes.
- LCD digital display of adjustable speed and time.
- Speed adjustable from 10-70rpm and timer from 1-1199min.
- LED overload indicator.



### MX-T6-S Tube Roller

#### Features

- Maximum load of up to 4Kg.
- Gentle mixing in rolling motion with a maximum of 6 tubes capacity.
- Speed adjustable from 0-70rpm.
- LED power indicator.



#### Specifications

	MX-T6-Pro	MX-T6-S
Amplitude	24mm	24mm
Motor type	DC motor	DC motor
Rocking motion	Rocking and rolling	Rocking and rolling
Max. load capacity	4kg	4kg
Number of rollers	6	6
Roller size[length]	280mm	280mm
Speed range	10 -70rpm	0-70rpm
Speed display	LCD	Dial
Timer	Yes	-
Timer display	LCD	-
Time setting range	1-1199min	-
Operation mode	Continuous/timer	Continuous
Voltage	100-240V,50/60Hz	100-240V,50/60Hz
Power	30W	25W
Dimension [DxWxH]	450x260x120mm	450x260x120mm
Weight	5.1kg	4.5kg
Permissible ambient temperature and humidity	5-40°C,80%RH	5-40°C,80%RH
Protection class	IP21	IP21



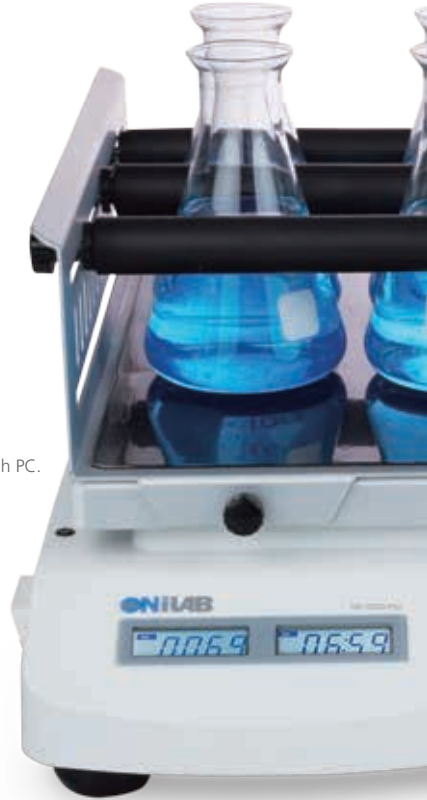
## Orbital and Linear Shakers

Orbital shakers with a variety of accessories are suitable for use in different laboratories in microbiology, chemistry, biochemistry and molecular biology in applications like drug analysis, ELISA, Enzyme immunoassays, protein synthesis, etc.,

### SK-O330-Pro SK-O180-Pro LCD Digital Orbital Shaker

#### Features

- Compact design and small footprint.
- Microprocessor PID control ensures powerful and consistent shaking motion.
- Load capacity up to 7.5Kg (O330) or 2.5Kg (O180) with platform.
- LCD digital control of speed and time.
- Programmable speed ranges from 100-500rpm.
- Easy-to-set digital timer from 1min-19h59min.
- High performance BLDC motor with overspeed detection.
- Variety of accessories suitable for most commonly used vessels.
- RS232 interface for data documentation and external control through PC.



### SK-O180-S LED Digital Orbital Shaker

#### Features

- Load capacity up to 3Kg with platform.
- Independent LED digital control of speed and time.
- Light in weight with low maintenance DC motor.
- Programmable speed ranges from 40-200rpm.
- Variety of accessories are available for most commonly used vessels.



## SK-O180-E

### Economical Orbital Shaker

#### Features

- Max. load capacity up to 3Kg with platform.
- Speed adjustable from 0-200rpm.
- Wide variety of platforms for use with a variety of vessels.
- Light in weight with low maintenance DC motor.



Specifications	SK-O330-Pro	SK-O180-Pro	SK-O180-S	SK-O180-E
Orbital diameter	10mm	4mm	20mm	20mm
Max. load capacity (with platform)	7.5kg	2.5kg	3kg	3kg
Motor type	Brushless DC motor	Brushless DC motor	DC motor	DC motor
Motor rating input	28W	28W	16W	16W
Motor rating output	15W	15W	10W	10W
Speed range	100-500rpm	100-800rpm	40-200rpm	0-200rpm
Speed display	LCD	LCD	LED	Dial
Timer display	LCD	LCD	LED	-
Time setting range	1min-19h59min	1min-19h59min	1min-19h59min	-
Voltage	100-240V,50/60Hz	100-240V,50/60Hz	100-240V,50/60Hz	100-240V,50/60Hz
Power	30W	30W	20W	20W
Weight	13.5kg	8.1kg	3.1kg	3.1kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C,80%RH	5-40°C, 80%RH
Dimension[WxDxH]	370x420x100mm	300x340x100mm	270x330x110mm	270x330x110mm
Protection class	IP21	IP21	IP21	IP21
Data interface	RS232	RS232	-	-

## SK-L330-Pro SK-L180-Pro LCD Digital Linear Shaker

### Features

- Load capacity up to 7.5Kg (O330) or 2.5Kg (O180) with platform.
- Shaking amplitude of 10mm performs gentle motion of samples.
- LCD digital control for speed and time.
- Adjust speed with control knob from 100-350rpm.
- Timer control from 1min-19h59min or unlimited continuous operation.
- High performance BLDC motor with overspeed detection.
- Wide range of accessories and attachments are available.
- RS232 interface for data documentation and external control through PC.



## SK-L180-S LED Digital Linear Shaker

### Features

- Load capacity up to 3Kg with platform.
- Independent LED digital control of speed and time.
- Light in weight with low maintenance DC motor.
- Adjustable speed ranges from 40-200rpm.
- Variety of accessories suitable for most commonly used vessels.



## SK-L180-E Economical Linear Shaker

### Features

- Load capacity up to 3Kg with platform.
- Light in weight with low maintenance DC motor.
- Speed adjustable from 0-200rpm.
- Varieties of accessories are available.



Specifications	SK-L330-Pro	SK-L180-Pro	SK-L180-S	SK-L180-E
Amplitude	10mm	4mm	20mm	20mm
Max. load capacity (with platform)	7.5kg	2.5kg	3kg	3kg
Motor type	Brushless DC motor	Brushless DC motor	DC motor	DC motor
Motor rating input	28W	28W	16W	16W
Motor rating output	15W	15W	10W	10W
Speed range	100-350rpm	100-350rpm	40-200rpm	0-200rpm
Speed display	LCD	LCD	LED	Dial
Timer display	LCD	LCD	LED	-
Time setting range	1min-19h59min	1min-19h59min	1min-19h59min	-
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	30W	30W	20W	20W
Weight	13.5kg	8.1kg	3.1kg	3.1kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH
Dimension[WxDxH]	370x420x100mm	300x340x100mm	270x330x110mm	270x330x110mm
Protection class	IP21	IP21	IP21	IP21
Data interface	RS232	RS232	-	-



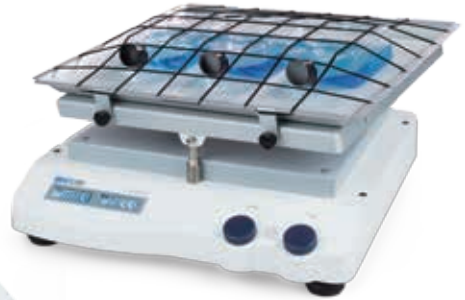
### Rocking and 3D shakers

Rocking & 3D shakers perform efficient mixing of liquids in tubes in a speed range of 40-200rpm (approx.) and are useful in hybridization reactions, gel washing, cell cultures, blood sample mixing by smooth and three dimensional rotations.

### SK-R330-Pro LCD Digital Rocking Shaker

#### Features

- SK-R330-Pro is a large model and the load capacity is 10Kg.
- Speed and time are adjustable from 10-70rpm and 1min-19h59min with LCD display.
- Tilt angle of 9°.
- Wide range of accessories and attachments are available.



### SK-R1807-S LED Digital Rocking Shaker

#### Features

- Tilt angle 7° .
- Max. load capacity is 3kg with platform.
- Speed range of 10-80rpm.
- Double LEDs for independent display of time and speed.
- Wide range of platforms for use with a variety of vessels.





## SK-R1807-E Economical Rocking Shaker

### Features

- Tilt angle of 7° gives best results at economical price.
- Load capacity up to 3Kg with platform.
- Speed adjustable with a control knob from 0-80rpm.
- Wide range of accessories and attachments are available.



Specifications	SK-R330-Pro	SK-R1807-S	SK-R1807-E
Tilt angle	9°	7°	7°
Max. load capacity (with platform)	10kg	3kg	3kg
Motor type	DC motor	DC motor	DC motor
Motor rating input	40W	16W	16W
Motor rating output	24W	10W	10W
Speed range	10-70rpm	10-80rpm	0-80rpm
Speed display	LCD	LED	-
Timer display	LCD	LED	-
Time settings range	1min-19h59min	1min-19h59min	-
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	50W	20W	20W
Weight	9kg	3.2kg	3.2kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH
Dimension[WxDxH]	360x410x200mm	270x330x130mm	270x330x130mm
Protection class	IP21	IP21	IP21

## SK-D3309-Pro

### LCD Digital 3D Shaker

#### Features

- 3D rocking motion gives best mixing results of viscous media at low speed.
- SK-D3309-Pro is a medium sized model and the load capacity is 5Kg.
- Independent LED digital control of speed and time.
- Adjustable speed from 10-70rpm – suitable for cell culture plates.
- Wide range of accessories and attachments are available.



## SK-D1807-S

### LED Digital 3D Shaker

#### Features

- Three-dimensional rocking motion within 7°.
- Max. load capacity is 3kg with platform.
- Speed range of 10-80rpm.
- Double LEDs for independent display of time and speed.
- Various of platform accessories.



## SK-D1807-E Economical 3D Shaker

### Features

- Three dimensional rocking angle of 7° gives best results at economical price.
- Load capacity up to 3Kg with platform.
- Speed adjustable with an analog control knob from 0-80rpm.
- Wide range of accessories and attachments are available.



Specifications	SK-D3309-Pro	SK-D1807-S	SK-D1807-E
Tilt angle	9°	7°	7°
Max. load capacity (with platform)	5kg	3kg	3kg
Motor type	DC motor	DC motor	DC motor
Motor rating input	40W	16W	16W
Motor rating output	24W	10W	10W
Speed range	10-70rpm	10-80rpm	0-80rpm
Speed display	LCD	LED	Dial
Timer display	LCD	LED	-
Time setting range	1min-19h59min	1min-19h59min	-
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	50W	20W	20W
Weight	9kg	2.7kg	2.7kg
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH	5-40°C, 80%RH
Dimension[W×D×H]	360×430×106mm	270×330×130mm	270×330×130mm
Protection class	IP21	IP21	IP21
Data connector	-	-	-



Cat. No.	Description	SK-O330-Pro SK-L330-Pro SK-R330-Pro SK-D3309-Pro	SK-O180-Pro/S/E SK-L180-Pro/S/E SK-R1807-S/E SK-D1807-S/E
①	Dish tray with non-slip mat and fixed string (8pcs) Dimension[WxD]: 30x28.5cm	√	
②	Dish tray with non-slip mat Dimension[WxD]: 24x21.5cm		√
③	Large size dish tray with non-slip mat Dimension[WxD]: 30x23cm		√
④	Dish tray with non-slip mat Dimension[WxD]: 28x28cm		√
⑤	Universal attachment with 4 bars Dimension[WxD]: 30x30cm	√	
⑥	Lengthways roller attachment Dimension[WxD]: 30x30cm	√	
⑦	Universal attachment with 3 bars Dimension[WxD]: 24x24cm		√
⑧	Lengthways roller attachment Dimension[WxD]: 24x24cm		√
⑨	Bar for SK330.1 universal attachment	√	
⑩	Bar for SK180.1 universal attachment		√
⑪	Connect sticks for multiple layer shaker	√	√



SK330.2



SK180.2



Cat. No.	Description	SK-O330-Pro SK-L330-Pro SK-R330-Pro SK-D3309-Pro	SK-O180-Pro/S/E SK-L180-Pro/S/E SK-R1807-S/E SK-D1807-S/E
①	Fixing clip attachment	✓	
②	Fixing clip attachment		✓
③	Fixing clip for 25mL flask, used with SK330.2[28pcs] SK180.2[9pcs]	✓	✓
④	Fixing clip for 50mL flask, used with SK330.2[16pcs] SK180.2[9pcs]	✓	✓
⑤	Fixing clip for 100mL flask, used with SK330.2[16pcs] SK180.2 [9pcs]	✓	✓
⑥	Fixing clip for 200/250mL flask, used with SK330.2[9pcs] SK180.2[4pcs]	✓	✓
⑦	Fixing clip for 500mL flask, used with SK330.2[9pcs] SK180.2[2pcs]	✓	✓



## RE100-Pro Digital Rotary Evaporator

RE100-PRO is a digital rotary evaporator with motorized lift suitable for a wide range of applications which involve distillation processes. Rotary evaporator is an essential equipment in most chemical laboratories. These are useful in removal of high boiling point solvents from samples under low pressure.

### Features

- Large LCD digital display indicates rotation speed, heating temperature and time.
- User friendly operation with automatic motor lift. Automatically lift the evaporation flask out of the bath in case of accidental power failure.
- 5L flask capacity heating bath with stainless steel interior, compatible with both water and oil bath. Water/oil heating mode can be changed only through a switch.
- Safety circuits prevent overheating at 220°C and these can be used for high temperature evaporations.
- Chemically resistant PTFE sealing ring designed to be vacuum tight.
- USB interface for data documentation and control through PC.
- Vertical condenser with large surface area of 1700 cm<sup>2</sup> provides excellent cooling effect.
- Wide variety of glassware suitable for various applications.



### Seals and other accessories

Cat. No.	Description	
18202027	PTFE vacuum seal	
18900362	Ultra resistant FFKM seal for applications with highly abrasive solutions	
18900190	Evaporation flask clip(red) CS002440	
18900188	Evaporation flask clip(green) CS002942	

### Specifications

	RE100-Pro
Motor type	Brushless DC motor
Speed range	20-280rpm
Display	LCD (speed, temperature, time)
Clockwise and counter-clockwise	Yes
Heating temperature range	Room temp. to 180°C
Temperature accuracy	water: ±1°C oil: ±3°C
Heating power	1300W
Lifting stroke	150mm by the motor
Timer	Yes
Time setting range	1-999min
Dimension[DxWxH]	465x457x583mm
Weight	15kg
Permissible ambient temperature and humidity	5-40°C, 80%RH
Protection Class	IP20
USB Interface	Yes
Voltage	100-120/200-240V 50/60 Hz
Power	1400 W

## Condenser



Vertical			
Cat. No.	Glassware type	Volume	Cooling surface
18900165	Evaporation flask(NS29/32) Receiving flask(KS35/20)	1000mL	1700cm <sup>2</sup>
18900173	Evaporation flask(NS24/40) Receiving flask(KS35/20)	1000mL	1700cm <sup>2</sup>
18900166	(COATED) Evaporation flask(NS29/32) Receiving flask (KS35/20)	1000mL	1700cm <sup>2</sup>
18900174	(COATED) Evaporation flask(NS24/40) Receiving flask (KS35/20)	1000mL	1700cm <sup>2</sup>
18202410	Evaporation flask (NS 29/32) Receiving flask (KS 35/20)	1000mL	1200cm <sup>2</sup>



Diagonal			
Cat. No.	Glassware type	Volume	Cooling surface
18900163	Evaporation flask(NS29/32)Receiving flask(KS35/20)	1000mL	1700cm <sup>2</sup>
18900171	Evaporation flask(NS24/40)Receiving flask(KS35/20)	1000mL	1700cm <sup>2</sup>
18900164	(COATED)Evaporation flask(NS29/32) Receiving flask (KS 35/20)	1000mL	1700cm <sup>2</sup>
18900172	(COATED)Evaporation flask(NS24/40) Receiving flask (KS35/20)	1000mL	1700cm <sup>2</sup>



Heating Bath		
Cat. No.	Description	Volume
18900201	Rotary Evaporator, 220V	5L
18900202	Rotary Evaporator, 120V	5L
6033100210	LED heating bath, 100V-120/200-240V,50/60HZ	5L





## Glassware



### Evaporation flask

Cat. No.	Volume	Size
18300116	50mL	NS 29/32
18300117	100mL	NS 29/32
18300118	250mL	NS 29/32
18300119	500mL	NS 29/32
18300120	1000mL	NS 29/32
18300121	2000mL	NS 29/32
18300655	50mL	NS24/40
18300201	100mL	NS 24/40
18300202	250mL	NS 24/40
18300203	500mL	NS 24/40
18300204	1000mL	NS 24/40
18300205	2000mL	NS 24/40



### Receiving flask

Cat. No.	Volume	Size
18300107	100ml	KS 35/20
18300108	250ml	KS 35/20
18300109	500ml	KS 35/20
18300110	1000ml	KS 35/20
18300111	2000ml	KS 35/20



### Distilling spider for 5 flasks (without flask)

Cat. No.	Volume	Size
18900194	/	NS 29/32, NS24/29
18900177	/	NS 29/42, NS24/40



### Foam brake

Cat. No.	Volume	Size
18300093	250ml	NS 29/32
18300207	250ml	NS 24/40



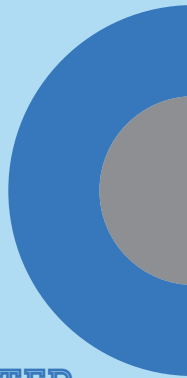
### Vapor tube

Cat. No.	Volume	Size
18100998	/	NS 29/32
18300206	/	NS 24/40



### Connector

Cat. No.	Volume	Size
18300094	/	NS 29/32, NS24/29
18300095	/	NS 29/32, NS19/26
18300096	/	NS 29/32, NS14/23
18300199	/	NS24/40, NS19/22
18300200	/	NS 24/40, NS14/20
18900193	/	NS 24/40, NS 29/42



**ONiLAB**

CENTRIFUGES  
SPECTROPHOTOMETER





## D1008

### Palm Micro Centrifuge

#### Features

- Extremely quiet with noise level  $\leq 45$ dB.
- Compact design for less bench space.
- Easy-to-use, one-button control.
- Powerful motor up to 7000rpm (D1008).
- Suitable for 2mLx8/1.5mLx8 and PCR8x2 rotors.
- Accelerates and brakes in seconds.

#### Specifications

	D1008
Max. speed	7000rpm
Max. RCF	2680xg
Rotor capacity	0.2/0.5/1.5/2.0mLx8; 0.2mLx16 PCR strips or 0.2mLx2 PCR 8 strips
Run control	Close the lid to run and open it to stop
Motor type	DC motor
Power	AC 100-240V/50Hz/60Hz 20W
Noise level	$\leq 45$ dB
Dimension [DxWxH]	160x170x122mm
Weight	0.5kg
Certification	ROSH CE cTUVus FCC MCA



## Available rotors

Cat. No. 19400015



### A08-2

Max. speed: 7000/5000rpm  
Max. RCF: 5460/2680/1360xg  
Rotor capacity: 2mL/1.5mLx8, 0.2mLx8, 0.5mLx8  
Rotor material: high strength plastic  
Available rotor adapters: SA02P2, SA05P2

Cat. No. 19400017



### A02-PCR8

Max. speed: 10000/7000/5000rpm  
Max. RCF: 5460/2680/1360xg  
Rotor capacity: 16 x 0.2mL PCR strips, 2 x 0.2mL PCR 8 strips  
Rotor material: high strength plastic

## Available adapters

Cat. No. 19400029



### SA02P2

0.2mL rotor adapter  
Used with A08-2 rotor  
8pcs/pk

Cat. No. 19400026



### SA05P2

0.5mL rotor adapter  
Used with A08-2 rotor  
8pcs/pk



### High Speed Micro Centrifuge |

High speed micro centrifuges are widely used in physical and chemical analysis, biochemistry, cellular and molecular biology, as well as clinical laboratories. They are also ideal for high-end research applications.

- Sedimentation of cells and viruses.
- Separation of sub-cellular organelles.
- Isolation of macromolecules such as DNA, RNA, proteins or lipids.

### Precise control |

- Brushless DC motor accelerates quickly to the set speed.
- High accuracy of speed at  $\pm 20$  rpm.
- Digital timer adjustable from 30 sec. to 99 min or set for continuous run.
- Timer starts only when the set speed is achieved thus maintains the accuracy of separation time.

### Conforms to international safety standards and regulations |

- ONiLAB centrifuges are compliant with ROHS, CE, cTUVus and FCC requirements. All ONiLAB centrifuges are proven of high level of reliability and confidence according to IEC/ EN 61010-1, and have passed MCA test according to IEC/ EN61010-2-20, including mechanical safety and bio safety tests.
- Quiet operation, high reliability.
- High strength metal casing ensures safety during centrifugal process.
- Dual door interlock design for safety(D3024 & D3024R).
- Gentle braking by slow deceleration for efficient separation.

### Ergonomic design |

- User-friendly large LCD display shows real-time information.
- Set the speed in RPM or RCF ( $\times g$ ).
- The parameters can be modified during running.
- The pulse function starts instantaneously by pressing and holding PULSE key. The centrifuge will accelerate and hold at the target speed.
- The lid lock will be released automatically after centrifuge program (except D3024R) to cool down samples and offer easy access to them.
- Concise display and sound alert.

## D2012 plus High Speed Mini Centrifuge

### Features

- Large LCD display with intuitive menu for quick and easy operational settings.
- Compact design and small foot print.
- Maintenance free motor with a powerful centrifugal force up to 15100xg and max. speed of 15000rpm.
- High efficiency BLDC motor quickly accelerates the rotor to set speed.
- Precise rotation speed and quiet operation with noise level  $\leq 45\text{dB}$ .
- D2012 Plus is not only ROHS, CE, cTUVus and FCC certified, but also passed the most strict mechanical safety test, the MCA test according to IEC/EN61010-2-20.



### Specifications

Specifications	D2012 plus
Speed range	500-15000rpm, increment: 100rpm
RCF range	Up to 15100xg, increment: 100xg
Speed accuracy	$\pm 20\text{rpm}$
Rotor capacity	0.2mL/0.5mL/1.5mL/2mLx12
Time setting range	30sec-99min/Continuous
Motor type	Brushless DC motor
Safety mechanism	Door interlock, Overspeed detection, Overheat detection, Error code runtime display
Power	Single-phase, AC 100V-240V, 50Hz/60Hz, 3A 100W
Noise level	$\leq 45\text{dB}$
Acceleration /Braking time	11s $\uparrow$ /9s $\downarrow$
Dimension[DxWxH]	255x245x140mm
Weight	6kg
Certification	EMC, ROHS, CE, FCC, ICES, cTUVus, CB
Additional features	Speed/RCF switch, Pulse operation (instantaneous centrifugation), Buzzer notification & alert



### Available rotors

Cat. No. 19400010



#### A12-2P

for D2012plus only

Max. speed: 15000rpm  
 Max. RCF: 15100xg  
 Rotor capacity: 2mL/1.5mLx12,0.2mLx12,0.5mLx12  
 Rotor material: high strength plastic  
 Available rotor adapters: A02P2,A05P2

### Available adapters



Cat. No. 19500001

#### A02P2

0.2mL rotor adapter  
 Used with A12-2, A12-2P, AS24-2 and A24-2P rotors  
 24 pcs/pk

Cat. No. 19500002

#### A05P2

0.5mL rotor adapter  
 Used with A12-2,A12-2P, AS24-2 and A24-2P rotors  
 24 pcs/pk





## **D3024** High Speed Micro Centrifuge

### Unique Features

- Microprocessor control with high precision.
- Large LCD digital display with a control knob for parameter settings.
- High performance BLDC motor for fast acceleration/ deceleration.
- Speed is adjustable in both RPM and RCF.
- Triple sealing mechanism of rotor prevents accidental leakage during centrifugal process.
- Five fixed angle rotors are available for use.
- Rotors are fully autoclavable.
- Apply up to 18 × 5.0mL tubes, 24 × 1.5/2.0mL tubes, or 36 × 0.5/0.2mL tubes with adapters.





## D3024R

### Refrigerated High Speed Micro Centrifuge

#### Powerful cooling system for precise temperature control

- Microprocessor control with high precision.
- Large LCD digital display with a control knob for parameter settings.
- High performance BLDC motor for fast acceleration and deceleration.
- Speed is adjustable in both RPM and RCF.
- Inbuilt cooling system with auto lid lock to maintain low temperature within the chamber.
- Sample can be cooled down to 4°C within 7 minutes at maximum speed.
- CFC-free, environmental friendly refrigerants with high energy efficiency.
- Rotors are fully autoclavable at 121°C for 20 minutes and are bio safe.
- Quiet and smooth operation with noise level  $\leq 54$ dB.
- Five(optional) fixed angle rotors are available for use.
  - AS24-2 - 0.2/0.5/1.5/2.0mLx24,
  - AS12-5V - 5mLx12 culture tubes,
  - AS18-5 - 5mLx18,
  - AS36-05 - 0.5/0.2mL x 36,
  - AS4-PCR8 - 0.2mL/PCR8 x 4





Specifications	D3024	D3024R
Speed range	15000rpm(200-15000rpm), increment:10rpm	15000rpm(200-15000rpm), increment:10rpm
Max. RCF	21380xg, increment:10xg	21380xg, increment: 10xg
Speed accuracy	±20 rpm	±20 rpm
Temperature range	-	-20°C-40°C
Rotor capacity	5mLx18, 5mL culture tubex12 0.2mL/0.5mL/1.5mL/ 2mLx24, 0.5mLx36, PCR8x4	5mLx18, 5mL culture tubex12 0.2mL/0.5mL/1.5mL/ 2mLx24, 0.5mLx36, PCR8x4
Time setting range	30sec-99min/Continuous	30sec-99min/Continuous
Motor type	Brushless DC motor	Brushless DC motor
Safety mechanism	Dual door interlock, Over-speed detection, Error code runtime display	Dual door interlock, Overspeed detection, Overheat detection, Error code runtime display
Power	Single-phase, AC200V-400V, 50Hz/60Hz, 5A, AC100V-120V, 50Hz/60Hz, 8A 200W	Single-phase, AC200V-240V, 50Hz/60Hz, 10A, AC100V-120V, 50Hz/60Hz, 10A 400W
Acceleration /Braking time [Sec]	25s ↑ 25s ↓	25s ↑ 25s ↓
Dimension[WxDxH]	280x364x266mm	338x580x324mm
Weight	12kg	30kg
Certification	ROSH CE cTUVus FCC MCA	ROSH CE cTUVus FCC MCA
Advanced features	Speed/RCF switch; Pulse operation (instantaneous centrifuge); Buzzer notification & alert	Speed/RCF switch; Pulse operation (instantaneous centrifuge); Buzzer notification & alert
Noise level	≤64dB	≤56dB



## Rotor Features |

### Fully autoclavable

High strength aluminum alloy rotors are fully autoclavable, at 121°C for 20 minutes, with extended life.

### Bio-safety

D3024 & D3024R rotors are designed to prevent sample leakage. Each rotor is hermetically sealed by three rubber seals.

### Mechanical safety

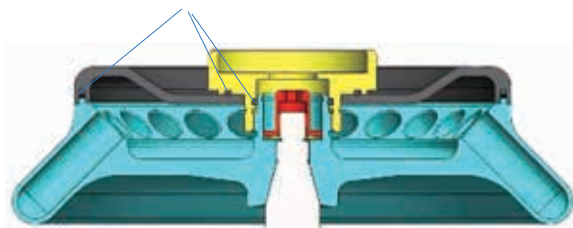
ONiLAB centrifuges have passed the MCA (maximum credible accident) test according to IEC/EN61010-2-20. The test confirms that in the event of an accident caused by partially cutting or overloading rotor assembly, no fragments are expelled from the centrifuge to cause danger to person or the environment.

ONiLAB rotors are made of military grade aluminum alloy with high mechanical strength for precise control and safety.

- All rotors can reach a max. speed of 15000rpm.
- Rotors are seated on a tapered shaft, concentric and self-aligning, perfect to achieve running stability at high speeds.
- Bio-safe rotors for D3024 & D3024R prevent accidental sample leakage and keep the centrifugal process free from microbial contamination risk.
- Powerful ventilation system minimizes rotor heating. D3024 rotors heat up less than 10 °C after running for an hour.



Three rubber seals fitted to achieve bio-safe condition



Seals within the aluminum alloy rotor

## Available rotors

Cat. No. 19400006



### AS24-2

for D3024 & D3024R

Max. speed: 15000rpm  
 Max. RCF: 21380×g  
 Rotor capacity: 2mL/1.5mL×24/0.2mL×24/0.5mL×24  
 Rotor material: aluminum alloy  
 Bio-safe sealing: yes  
 Available rotor adapters: A02P2,A05P2

Cat. No. 19400032



### AS12-5V

for D3024 & D3024R

Max. speed: 15000rpm  
 Max. RCF: 21380×g  
 Rotor capacity: 5mL×12( cone bottom )  
 Rotor material: aluminum alloy  
 Bio-safe sealing: yes

Cat. No. 19400007



### AS36-05

for D3024 & D3024R

Max. speed: 15000rpm  
 Max. RCF: 21380×g  
 Rotor capacity: 0.5mL×36,0.2mL×36  
 Rotor material: aluminum alloy  
 Bio-safe sealing: yes  
 Available rotor adapters: A02P05

Cat. No. 19400008



### AS4-PCR8

for D3024 & D3024R

Max. speed: 15000rpm  
 Max. RCF: 21380×g  
 Rotor capacity: 0.2mL/PCR8×4  
 Rotor material: aluminum alloy  
 Bio-safe sealing: yes

Cat. No. 19400012



**AS18-5**

for D3024 & D3024R

- Max. speed :15000rpm
- Max. RCF:21380×g
- Rotor capacity:5mLx18 ( round botton )
- Rotor material:aluminum alloy
- Bio-safe sealing:yes

**Available adapters**



**A02P2**

Cat. No. 19500001

0.2mL rotor adapter  
Used with A12-2, A12-2P, AS24-2 and A24-2P rotors  
24pcs/pk

**A05P2**

Cat. No. 19500002

0.5mL rotor adapter  
Used with A12-2, A12-2P, AS24-2 and A24-2P rotors  
24pcs/pk

**A02P05**

Cat. No. 19500003

0.2mL rotor adapter  
Used with AS36-05 rotor  
36pcs/pk



## Hematocrit Centrifuges

Hematocrit centrifuges are used to measure the ratio of volume of RBC to whole blood. The information is useful in diagnosis of anemia. Hematocrit centrifuges are widely used in biochemistry, microbiology, blood separation, immunogenetics, etc.

### DM1424

#### Hematocrit Centrifuge

##### Features

- Adjustable speed up to 14000rpm or 19620xg.
- High performance BLDC motor.
- High precision microprocessor control of speed and time.
- Intuitive LCD digital display.
- Pulse operation for instantaneous centrifuge applications.
- Two optional fixed angle rotors are available.  
A24-2P(Tube rotor) - 2mL/1.5mLx24,0.2mLx24,0.5mLx24  
AC24(Hematocrit rotor) - Capillary tubes x24



**Specifications**
**DM1424**

Speed range	200-14000rpm, increment: 10rpm
Max. RCF	18620×g
Speed accuracy	±20
Rotor capacity	2 type
Time setting range	30sec-99min/Continuous
Motor type	Brushless DC motor
Display	LCD
Safety mechanism	Door interlock, Overspeed detection; Overheat detection, Error code runtime display, Automatic rotor identification
Acceleration/Braking time	30s ↑ 30s ↓
Power	Single-phase, 200V-240V, 50Hz/60Hz, 5A; 100V-120V, 50Hz/60Hz, 5A 500W
Dimension[WxDxH]	280×364×266mm
Weight	10kg
Certification	ROSH CE FDA cTÜVus FCC MCA IVD
Additional features	Speed/RCF switch; Pulse operation (instantaneous centrifuge); Buzzer notification & alert



## Available rotors

Cat. No. 19400013



### A24- 2P DM1424

Max. speed: 14000rpm  
 Max. RCF: 18620×g  
 Rotor capacity: 2mL/1.5mL×24,0.2mL×24,0.5mL×24  
 Rotor material: high strength plastic  
 Available rotor adapters: A02P2,A05P2,A10P15 & Mat

Cat. No. 19400046



### AC24 DM1424

Max. speed: 12000rpm  
 Max. RCF: 13680×g  
 Rotor capacity: capillary tubes x24  
 Rotor material: high strength aluminum

## Available adapters



### A02P2

Cat. No. 19500001

2mL to 0.2mL rotor adapter, used with A12-2, A12-2P, AS24-2 and A24-2P rotors, 24pcs/pk

### A05P2

Cat. No. 19500002

2mL to 0.5mL rotor adapter, used with A12-2, A12-2P, AS24-2 and A24-2P rotors, 24pcs/pk

### A02P05

Cat. No. 19500003

Rotor adapter, used with A12-10P, 12pcs/pk



## Low-speed Centrifuges

Low-speed centrifuges are useful for effective and efficient processing of clinical samples with precise and reproducible results. These are useful in separation of clinical samples like serum, urea, blood, preparation of PRP and PRF samples, etc.

### Conforms to international safety standards and regulations

- ONiLAB low-speed centrifuges are compliant with ROHS CE, cTUVus and FCC, and have passed MCA test according to IEC/EN61010-2-20.
- Fully conform to EN61010-2-101:2002 particular requirements for In-Vitro Diagnostic(IVD) medical equipment.
- Excellently balanced high strength plastic rotor for stable operation .
- Double layer enhanced housing ensures mechanical safety.
- Brushless DC motor with precise speed control.



### Precise control

- Powerful microprocessor for easy operation of speed, time and all other parameters.
- High accuracy of speed.
- Digital timer adjustable from 30 sec. to 99 min or set for continuous run .
- Gentle braking at low speeds for efficient separation.

### Ergonomic design

- Easy operation thanks to intuitive menu and easy-to-read display.
- Easily switch between RPM and RCF setting/display.
- Parameters can be modified during running.
- Press and hold the PULSE key to centrifuge instantaneously.
- Automatic lid-lock release.
- Easy-to-read runtime status display and buzzer notification & alert.



## DM0412 Low-speed Centrifuge

### Features

- Efficient BLDC motor with precise speed control.
- Easy setting with LCD digital display.
- Adjustable speed up to 4500rpm or RCF up to 2490xg.
- Pulse operation for instantaneous centrifuge applications.
- Automatic lid-lock and release save your trouble from unnecessary clicking and keep the sample in good ventilation after centrifugation.

ONILAB DM0412 & DM0412S Low-speed Centrifuges support small volumes applications. With proper angle rotor, these centrifuges can hold up to 50mLx6, 15mLx6 (A6-50P), 15mLx8, or 10mL/7mL/5mLx12 (A12-10P) vacuum tubes.

They are widely used in medical and veterinary practices for blood and urine samples, and in qualitative analysis of water and soil samples. These centrifuges are also used in universities and research institutes.



## DM0412S

### Economical Low-speed Centrifuge

#### Features

- Economical low-speed centrifuge with low maintenance DC motor.
- Simple LED digital display.
- Speed adjustable from 300-4500rpm or RCF up to 2490xg.
- A12-10P rotor of DM0412/DM0412E suitable for 12 ×15mL cell culture tubes/ 10mL/5mL centrifuge tubes.



Low Speed Centrifuges

ONILAB

Specifications	DM0412	DM0412S
Speed range	300-4500rpm, increment: 100rpm	300-4500rpm, increment:100rpm
Max. RCF	2490×g	2490×g
Speed accuracy	±20rpm	±100rpm
Rotor type	A12-10P	A12-10P
Time setting range	30sec-99min HOLD(Continuous operation)	1sec-99min HOLD(Continuous operation)
Motor type	Brushless DC motor	DC motor
Display	LCD	LED
Safety Mechanism	Door interlock,Overspeed detection; Error code runtime display	Door interlock,Overspeed detection
Acceleration/Braking time	A12-10P: 20s ↑ 13s ↓	23s ↑ 23s ↓
Power	Single-phase, 100V-240V,50Hz/60Hz, 3A 70W	Single-phase,200V-240V,50Hz/60Hz, 3A;100V-120V,50Hz/60Hz, 3A 70W
Dimension[WxDxH]	301×354×217mm	301×354×217mm
Weight	6kg	6kg
Certification	ROSH CE, UL, IVD	-
Additional features	Speed/RCF switch;Pulse operation (instantaneous centrifuge); Buzzer notification & alert	Buzzer notification & alert



## Available rotors

Cat. No. 19200348



### A12-10P

for DM0412 & DM0412S

Max. speed: 4500rpm

Max. RCF: 2490×g

Rotor capacity: 8x15mL, 12x10mL

Rotor material: High strength plastic



Available tubes	Capacity	Dimension (ΦLxmm)	Adapters	Maximum speed(rpm)	Radius (cm)	Maximum RCF (×g)
15mL con 	8	17x120		4500	11	2490
1.5-5mL vacu 	12	13x75	A10P15 & Plug 	4500	9.8	2218
4-7 mL vacu 	12	13x100	A10P15 	4500	11	2490
		16x75			9.8	2218
8.5-10 mL vacu 	12	16x107		4500	11	2490
2.7-3 mL(EU) collection tube 	12	11x66	A10P15 & Plug 	4500	9.8	2218
7.5-8.2 mL(EU) collection tube 	12	15x92	A10P15 	4500	11	2490

Note: A12-10P plastic rotor cannot be sterilized by UV irradiation nor autoclave. Please use any other sterilization procedures.

ONiLAB DM0636 Multi-Purpose Low Speed Centrifuge is ideal for sample centrifugation in clinical chemistry, cytology, research laboratories, industrial laboratories, etc. This centrifuge is suitable for screw cap tubes, blood collection or urine tubes. Swing-out bucket rotors and adapters can be compatible with standard tubes up to 100mL at low speed.

## DM0636 Multi-Purpose Low Speed Centrifuge

### Features

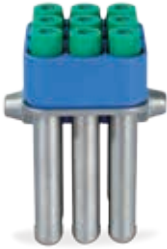
- DM0636 is compatible with swing out rotor as well as fixed angle rotor.
- BLDC motor with high precision microprocessor control of speed.
- Adjustable speed from 300-6000rpm in increments of 10rpm or RCF up to 4300xg.
- Flexible acceleration/deceleration speed settings.
- Up to 9 user-define programs.
- Automatic rotor identification.
- Five compatible rotors:  
SE4-100 100mLx4  
AS12-PCR8 PCR8 strips x 12  
AS30-2 2mL x 30  
AS60-2 2mL x 60  
S2-MP 384-PCR, 96-PCR



### Specifications

### DM0636

Specifications	DM0636
Speed range	300-6000rpm increment:10rpm
Max. RCF	4300xg
Speed accuracy	±20rpm
Max. capacity	100mLx4
Time setting range	30sec-99mins/continuous
Motor type	Brushless DC
Display	LCD
Memory	Up to 9 programs
Safety mechanism	Door interlock; Overspeed detection; Overheat detection
Acceleration/ Deceleration	9 level adjustable acceleration speed / 10 level deceleration
Power	660W; Single-phase AC220V- 240V, 50Hz/60Hz, 6.3A; AC110V- 120V, 50Hz/60Hz, 10A
Dimension[WxDxH]	445x579x269mm
Weight	36kg
Certification	ROSH CE cTUVus FCC IVD
Additional features	Speed/rcf switch; Rotor identification; Rotor imbalance protection



### Uncapping block

for S4-100 rotor

Cat. No. 19400041



### SE4-100

for DM0636 & DM0636R

Max. speed: 4000rpm

Max. RCF: 2910×g

Rotor material: stainless steel body and adapter



19400045



19400044



19400043



19400042

Bucket	x 4										
Nominal volume	3-7mL		10mL	12mL	15mL	50mL	100mL	85mL	50mL	15mL	3-7mL
φ×L mm	13×75	13×100	16×100	17×105	17×120	29.5×100	38×108	38×104	29.5×100	17×120 13×100 13×75	13×100 13×75
Tube											
Adapter	With plug						 A100P80 A100P50 A100P15 A100P10				
Package	36						4		4	8	4
Tubes per rotor	36	36	16	16	16	8	4	4	4	8	20
Radius (cm)	1.4	1.65	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.51	1.47
Max RCF (g-force)	2500	2950	2840	2840	2840	2840	2840	2840	2840	2700	2630

## Available rotors

Cat. No. 19400062



### AS2-MP

D0636

Max. speed: 4000rpm  
Max. RCF: 2200xg  
Rotor capacity: 2 x Micro-plates 384-PCR; 96-PCR  
Rotor material: stainless steel body and aluminum buckets

Cat. No. 19400034



### AS30-2

D0636

Max. speed: 6000rpm  
Max. RCF: 4020xg  
Rotor capacity: 2mLx30  
Rotor material: aluminum  
Bio-safe sealing: yes

Cat. No. 19400037



### AS60-2

D0636

Max. speed: 6000rpm  
Max. RCF: 4020xg  
Rotor capacity: 2mLx60  
Rotor material: aluminum  
Bio-safe sealing: yes

Cat. No. 19400036



### AS12-PCR8

D0636

Max. speed: 6000rpm  
Max. RCF: 4020xg  
Rotor capacity: PCR 8 tripsx12  
Rotor material: aluminum  
Bio-safe sealing: yes



## Available rotors

Cat. No. 19400038



**AS6-50V**  
DM0636

Max. speed: 6000rpm  
Max. RCF: 4020×g  
Rotor capacity: 50mL×6  
Rotor material: aluminum  
Bio-safe sealing: yes

Cat. No. 19400035



**AS18-5V**  
DM0636

Max. speed: 6000rpm  
Max. RCF: 4020×g  
Rotor capacity: 5mL×18  
Rotor material: stainless steel body and aluminum buckets

Cat. No. 19400039



**A8-50**  
DM0636

Max. speed: 5000rpm  
Max. RCF: 3960×g  
Rotor capacity: 50mL×8 or 15mL×16  
Rotor material: aluminum body and stainless steel adapter

Cat. No. 19400040



**A30-15**  
DM0636

Max. speed: 4500rpm  
Max. RCF: 3210×g  
Rotor capacity: 15mL×30  
Rotor material: aluminum body and stainless steel adapter  
Bio-safe sealing: yes

Capacity	3-7mL Blood collection tube	10mL Blood collection tube	12mL urine tube	15mL
φ×L mm	13×100	16×100	17×105	17×120
Tubes per rotor	30	30	30	30



## Spectrophotometer

SP-V1000/SP-UV1000/SP-V1100/  
SP-UV1100

Spectrophotometer is essential in the identification and quantification of different compounds in solutions by measuring the transmission light intensity at specific wavelength in a spectrum of light compared with the light intensity from a standard source.

The instrument measures the absorbance, transmittance (in %) and concentration of the sample and is widely used in metallurgy, geology, physical chemistry, pharmaceutical chemistry, forensic physics, biotechnology and microbiology etc.



Spectrophotometer

### LCD digital display with consistent interface design

Concise LCD digital display provides a user friendly interface to set up and run procedures smoothly. It also supports plot display with 128 x 64 dots.

### Automatic wavelength calibration.

**Data Storage:** 200 groups of data which can also be restored after power failure.

**Auto switch** of tungsten/ deuterium lamps covers a wavelength range of 190-1100nm.

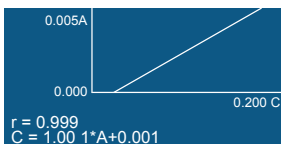
**'Wave Professional' Software:** Connect the spectrophotometer to PC via the USB port and control it with the optional "Wave Professional" Software for data documentation and quantitative analysis.

A wide range of sample holder to accommodate cuvettes of 5-100mm path length.

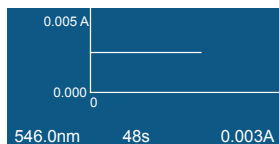
### Basic Mode

546.0nm		0.001A
No.	WL.	Abs.
1	230.0	0.001
2	340.0	0.000
3	450.0	0.002
4	540.0	0.000
5	620.0	0.003

### Quantitative



### Kinetics





Model	SP-V1000	SP-UV1000	SP-V1100	SP-UV1100
Optical system	Single Beam	Single Beam	Single Beam	Single Beam
Light source	Tungsten lamp	Tungsten lamp & Deuterium lamp	Tungsten lamp	Tungsten lamp & Deuterium lamp
Spectral bandwidth	4.0nm	4.0nm	2.0nm	2.0nm
Wavelength range	325-1000nm	200-1000nm	320-1100nm	190-1100nm
Wavelength accuracy	±2nm	±2nm	±0.5nm	±0.5nm
Wavelength repeatability	≤1nm	≤1nm	≤0.3nm	≤0.3nm
Photometric range	-0.3 - 3.0 A, 0 - 200%T	-0.3 - 3.0 A, 0 - 200%T	-0.3 - 3.0 A, 0 - 200%T	-0.3 - 3.0 A, 0 - 200%T
Photometric accuracy	±0.003 A @ 0.5 A, ±0.006 A @ 1.0 A, ±0.5%T @ 100%T	±0.003 A @ 0.5 A, ±0.006 A @ 1.0 A, ±0.5%T @ 100%T	±0.002 A @ 0.5 A, ±0.004 A @ 1.0 A, ±0.3%T @ 100%T	±0.002 A @ 0.5 A, ±0.004 A @ 1.0 A, ±0.3%T @ 100%T
Photometric repeatability	≤0.0015 A @ 0.5 A, ≤0.003 A @ 1.0 A, ≤0.25%T @ 100%T	≤0.0015 A @ 0.5 A, ≤0.003 A @ 1.0 A, ≤0.25%T @ 100%T	≤0.001 A @ 0.5 A, ≤0.002 A @ 1.0 A, ≤0.15%T @ 100%T	≤0.001 A @ 0.5 A, ≤0.002 A @ 1.0 A, ≤0.15%T @ 100%T
Stability	≤0.002 A/h @ 500 nm ( after 2 hours warm up)	≤0.002 A/h @ 500 nm ( after 2 hours warm up)	≤0.002 A/h @ 500 nm ( after 2 hours warm up)	≤0.002 A/h @ 500 nm ( after 2 hours warm up)
Stray light	≤0.2%T @ 360nm	≤0.2%T @ 220&360nm	≤0.05%T @ 360nm	≤0.05%T @ 220 & 360nm
Sample holder	4-position, 10mm pathlength cuvette	4-position, 10mm pathlength cuvette	4-position, 10mm pathlength cuvette	4-position, 10mm pathlength cuvette
Display	LCD	LCD	LCD	LCD
Data interface	USB Port & Parallel Port ( Printer)	USB Port & Parallel Port ( Printer)	USB Port & Parallel Port ( Printer)	USB Port & Parallel Port ( Printer)
Power	110/220VAC, 50/60Hz, 80W	110/220VAC, 50/60Hz, 120W	110/220VAC, 50/60Hz, 80W	110/220VAC, 50/60Hz, 120W
Dimension(LxWxH)	490x360x210mm	490x360x210mm	490x360x210mm	490x360x210mm
Weight	10kg	12kg	10kg	12kg



**Cat. No.** 18900337  
Micro cell holder



**Cat. No.** 18900340  
8-position auto cell changer  
(for SP-V1100&SP-UV1100)



**Cat. No.** 18900331  
4-cell holder for 10mm sq. cuvette



**Cat. No.** 18900332  
4-cell holder for 10mm  
to 50mm sq. cuvette



**Cat. No.** 18900333  
4-cell holder for up to  
100mm sq. cuvette



**Cat. No.** 18900338  
Test tube holder(ø8-ø22mm)



**Cat. No.** 18900334  
cylindrical cell holder(ø16mm)



**Cat. No.** 18900339  
solid sample holder  
(ø1.5-3mmø1 position)



**Cat. No.** 18900335  
10mm water-jacketed 1 cell holder  
(for SP-V1100 & SP-UV1100)



**Cat. No.** 18900336  
10mm water-jacketed 4-cell holder  
(for SP-V1100 & SP-UV1100)



Square cuvettes glass/quartz  
1-5mm/10-100mm



**Cat. No.** 18900341  
12V20W Tungsten lamp

**Cat. No.** 18900342  
Milas deuterium lamp,10V,300mA,  
30W (for SP-UV1000&SP-UV1100)



**ONiLAB**

**THERMAL  
CONTROL**



## TC1000-G Thermo Cycler Gradient

## TC1000-S Thermo Cycler Standard

Thermal cyclers are the instruments used to amplify DNA segments and perform temperature sensitive reactions. These thermal cyclers consist of a block designed to accommodate micro centrifuge tubes or 96-well plates for precise temperature control and uniform operation. They are widely used in molecular genetics research, biotech services and clinical laboratory tests.



### Features

- High precision temperature control with high heating/cooling ramping rates.
- Large LCD digital touch screen for easy programming with clear display and user friendly software.
- The hot lid is flexible to press the tube caps or plate cover uniformly and ensure minimum loss of evaporation.
- Homogeneous temperature across plate wells or PCR tubes.
- Aluminum heating block for efficient heat transfer.
- User defined large program storage system of up to 16 folders and 16 files in each folder.





Specifications	TC1000-G	TC1000-S
Sample capacity	96X0.2mL PCR tube, 8X12 PCR strip or 96 well plate	96X0.2mL PCR tube, 8X12 PCR strip or 96 well plate
Heating temperature range	4-105°C	4-105°C
Lid temperature range	30-110°C	30-110°C
Temperature display accuracy	±0.1°C	±0.1°C
Temperature control accuracy [at 55°C]	±0.3°C	±0.3°C
Temperature uniformity[at 55°C]	<0.3°C	<0.3°C
Max. heating/cooling rate	3°C/Sec	3°C/Sec
Gradient temperature setting range	30-99°C	-
Gradient range	1-42°C	-
Adapter block material	Aluminum	Aluminum
Display	7" LCD 800x480	7" LCD 800x480
Input	Touch panel	Touch panel
User defined file system	Max. 30 segments 99 cycles Up to 16 folder and 16 files each folder	Max. 30 segments 99 cycle Up to 16 folder and 16 files each folder
Power failure protection	Yes	Yes
Voltage	100-120V/200-240V, 50/60Hz	100-120V/200-240V, 50/60Hz
Dimension[WxDxH]	280x370x250 mm	280x370x250 mm
Weight	11kg	11kg



## HB120-S

### Dry Bath

#### Features

- Useful for heating of samples at low temperatures.
- LED digital display of temperature and time.
- A wide range of tube holding blocks to accommodate tubes with different capacities.
- A transparent plastic Lid is available to better preserve the temperature.
- Excellent temperature accuracy and uniformity to minimize the operation error of final test.

#### Specifications

	HB120-S
Functions	Heating
Temperature range	Room temp.-120°C
Temperature control accuracy [at 37°C]	± 0.5°C
Temperature uniformity	± 0.5°C
Max. heating rate	5.5°C/min
Time setting range	0min-99h59min
Display	LED
Overheating protection	140°C
Heating block material	Aluminum
Voltage	100-120V/220-240V,50Hz/60Hz
Power	160W
Dimension[WxDxH ]	175 x 290 x 85mm
Weight	3kg



Cat.No.	Block types	Capacity	Diameter x Depth
18900218		0.2mLx54	6.4mm x 15mm
18900219		0.5mLx40	8.2mm x 26.4mm
18900253		1.5mLx40	11mm x 34.7mm
18900220		2mLx40	11mm x 34.7mm
18900221		5/15mLx28	17mm x 48mm
18900222		50mLx8	29.8mm x 48mm
18900224		0.2mL+0.5mL+1.5/2mL 18+18+18	-
18900223		96 or 384 well plate	-



The Thermo Mix series implement precise and efficient heating and mixing, with excellent temperature accuracy and uniformity, offering a wide range of applications, such as gene synthesis, gene purification, gene and protein denaturation, enzymatic reaction, bacterial culture, etc.



Thermo Mix

ONILAB

## HCM100-Pro & HM100-Pro Thermo Mix

### Features

- Clear and easy-to-read TFT screen.
- Excellent performance for temperature controlled mixing applications.
- Up to 9 user define programs.
- A wide range of heating blocks to accommodate tubes with different capacities.
- Aluminum heating blocks enhance heat transfer.
- Easily interchangeable blocks with magnetic adhesion and without any tools..
- A transparent plastic lid is available to better preserve the temperature.

Specifications	HCM100-Pro	HM100-Pro
Functions	Heating, cooling & mixing	Heating & mixing
Temperature range	15 degrees below room temp. (No less than 0°C) - 100°C	Heating: room temp. - 100 °C
Temperature control accuracy[@ 20-45°C]	± 0.5°C	± 0.5°C
Temperature setting range	0.1-100°C	15-100°C
Temperature uniformity[@ 20-45°C]	Max. ± 0.5°C	Max. ± 0.5 °C
Max. heating rate	5.5°C/min	5.5°C/min
Max. cooling rate	5°C /min(100°C-room temp.) 0.5°C/min(below room temp.)	-
Mixing speed	200-1500rpm	200-1500rpm
Mixing orbit	φ3mm	φ3mm
Display	TFT	TFT
Memory	Up to 9 programs	Up to 9 programs
Overheating protection	150°C	150°C
Heating block material	Aluminum	Aluminum
Voltage	100-240V, 50Hz/60Hz	100-240V, 50Hz/60Hz
Power	200W	200W
Dimension[WxDxH] (without the heating block )	200x235x120mm	200x235x120mm
Weight	7.3kg	7.3kg



## HC110-Pro Dry Bath with Cooling

### Features

- Clear and easy-to-read TFT screen.
- Suitable for heating and cooling.
- Up to 9 user define programs.
- Control temperature from 25 degrees below room temp. (No less than -5°C) to 110°C.
- A wide range of heating blocks to accommodate tubes with different capacities.
- Aluminum heating blocks enhance heat transfer.
- Quick replace of blocks with magnet adhesion without any tools.
- A transparent plastic Lid is available to better preserve the temperature.

Cat.No.	Blocks	Speed	Capacity	Diameter x Depth
18900401		1500rpm	24x0.5mL	8.1x26mm
18900402		1500rpm	24x1.5mL	10.9x30.8mm
18900403		1500rpm	24x2mL	10.9x30.8mm
18900404		1500rpm	8x5mL (round bottom)	13.6x42mm
18900405		1400rpm	8x5mL (cone bottom)	17x51.5mm
18900406		800rpm	8x15mL	16.9x80mm
18900407		600rpm	4x50mL	29.6x80mm
18900420		1500rpm	0.2mLx96 PCR plate	-
18900423		1500rpm	microplate	-

### Specifications

	HC110-Pro
Functions	Heating & cooling
Temperature range	Heating: room temp. - 110°C Cooling: room temp. - below room temp. 25°C
Temperature setting range	-5~110°C
Specifications	
Temperature control accuracy	± 0.5°C
[@20~45°C]	
Temperature uniformity[@20~45°C]	Max ± 0.5°C
Max. heating rate	5.5°C/min
Max. cooling rate	2.5°C/min (100°C-room temp.) 0.5°C/min (below room temp.)
Display	TFT
Memory	Up to 9 programs
Overheating protection	150°C
Heating block material	aluminum
Voltage	100~240V,50/60Hz
Power	200W
Dimension[WxDxH] ( without the heating block )	200x235x120mm
Weight	7.3kg





**ONiLAB** | LIQUID  
HANDLING

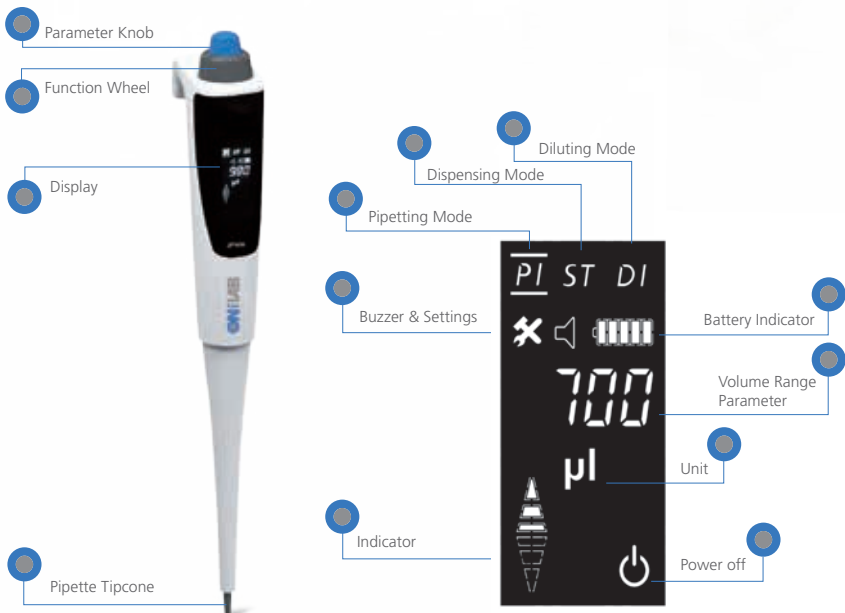


dPette is a handy electronic pipette useful in almost all kinds of research institutes and laboratories. dPette is precise in operation and ergonomic in hand. Motorized operation with LCD digital control reduces the RSI, increases the productivity and revolutionizes the pipetting experience of the user.

## dPette+ Multifunctional Electronic Pipette

### Features

- High efficiency Li-ion battery and extremely light in weight design.
- Precise control of DC motor ensures accuracy and repeatability without errors in pipetting.
- A versatile pipette with pipetting, mixing, stepper and dilution functions.
- Only 2 knobs to minimize the time spending on setting.
- Independent speed settings for aspiration and dispensing for different applications.
- Long lasting Li-ion battery to avoid frequent recharging.
- The unique design of charging stands ensures easy recharge at any time.
- Self-calibration with calibration software when connected to PC via USB.



### Specifications

Channels	Volume range	Increment	Test volume	Permissible errors in accordance to ISO8655-2			
				Accuracy error		Precision error	
	$\mu\text{L}$	$\mu\text{L}$	$\mu\text{L}$	$\mu\text{L}$	%	s.d.* $\mu\text{L}$	CV%*
1	0.5-10	0.01	10	$\pm 0.10$	$\pm 1.00$	0.05	0.50
			1	$\pm 0.035$	$\pm 3.50$	0.03	3.00
1	5-50	0.1	50	$\pm 0.40$	$\pm 0.80$	0.15	0.30
			5	$\pm 0.15$	$\pm 3.00$	0.125	2.50
1	30-300	1	300	$\pm 1.80$	$\pm 0.60$	0.60	0.20
			30	$\pm 0.90$	$\pm 3.00$	0.21	0.70
1	100-1000	5	1000	$\pm 6.00$	$\pm 0.60$	2.00	0.20
			100	$\pm 3.00$	$\pm 3.00$	0.60	0.60

\* s.d. = Standard Deviation

\*CV = Coefficient of Variation

Electronic pipette

ONILAB



## MicroPette plus |

### Features

- Fully autoclavable.
- Light in weight with high quality spring and plunger mechanism.
- Easy volume adjustment with one hand only.
- High accuracy and precision.
- Easy calibration and maintenance.
- Available in 11 different volume ranges covering from 0.1µL to 10mL.
- Comfortable design with less fatigue.



121°C  
FULLY  
Autoclavable



121°C  
FULLY  
Autoclavable

## MicroPette plus Multi Channel

### Features

- 8 and 12 channel pipettes most suitable for 96 well plates.
- Compatible with universally accepted tip brands.
- Fully autoclavable.
- Ergonomic design minimizes RSI.
- Low force tip ejector for easy operation.

**Fully autoclavable |**

The MicroPette Plus pipettes are fully autoclavable, enable easy cleaning and reduce the risk of contamination. Steam autoclaving can be performed at 121°C, 1 bar for 20 minutes in semi-automatic autoclaves. After autoclaving, the pipette must be cooled down and left to dry for 12 hours before use. It is recommended to check the performance of the pipette after each autoclaving. Greasing the pipette piston and seal after every 10 times of autoclaving will secure the performance.



12 channels



121°C  
HALF  
Autoclavable

## MicroPette |

### Features

- Various volume range from 0.1 to 10mL.
- The lower part of the pipettes are autoclavable with semi-automated autoclaves
- Large display for easy volume confirmation.
- High strength plastic material.
- New body design decreases the fatigue due to operation.
- Spring loaded tip cones for easy cleaning and maintenance.

## MicroPette Multi Channel

121°C  
HALF  
Autoclavable

### Features

- The lower part of the pipette is autoclavable at 121°C for 20 minutes in semi-automatic autoclaves.
- 8 and 12 channel pipettes covering a volume range of 0.1-10mL.
- Easy to operate with comfortable finger support.
- Manufactured with chemically resistant materials to secure long lifetime.
- Compatible with universally accepted tips.







**Calibration** |

All ONILAB pipettes are compliant to ISO8655-2:2002 and are supplied with individual calibration certificates. The quality control includes gravimetric test of each pipette with distilled water at 22°C

## Specifications

This list is appropriate for MicroPette and MicroPette plus  
(Adjustable and Fixed volume)

Single-channel Adjustable Volume Pipettes						
Volume range	Increment	Test volume	Permissible errors in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	µL	%	µL
0.1-2.5µL	0.05µL	2.5µL	2.50%	0.0625	2.00%	0.05
		1.25µL	3.00%	0.0375	3.00%	0.0375
		0.25µL	12.00%	0.03	6.00%	0.015
0.5-10µL	0.1µL	10µL	1.00%	0.1	0.80%	0.08
		5µL	1.50%	0.075	1.50%	0.075
		1µL	2.50%	0.025	1.50%	0.015
2-20µL	0.5µL	20µL	0.90%	0.18	0.40%	0.08
		10µL	1.20%	0.12	1.00%	0.1
		2µL	3.00%	0.06	2.00%	0.04
5-50µL	0.5µL	50µL	0.60%	0.3	0.30%	0.15
		25µL	0.90%	0.225	0.60%	0.15
		5µL	2.00%	0.1	2.00%	0.1
10-100µL	1µL	100µL	0.80%	0.8	0.15%	0.15
		50µL	1.00%	0.5	0.40%	0.2
		10µL	3.00%	0.3	1.50%	0.15
20-200µL	1µL	200µL	0.60%	1.2	0.15%	0.3
		100µL	0.80%	0.8	0.30%	0.3
		20µL	3.00%	0.6	1.00%	0.2
50-200µL	1µL	200µL	0.60%	1.2	0.15%	0.3
		100µL	0.80%	0.8	0.30%	0.3
		50µL	1.00%	0.5	0.40%	0.2
100-1000µL	5µL	1000µL	0.60%	6	0.20%	2
		500µL	0.70%	3.5	0.25%	1.25
		100µL	2.00%	2	0.70%	0.7
200-1000µL	5µL	1000µL	0.60%	6	0.20%	2
		500µL	0.70%	3.5	0.25%	1.25
		200µL	0.90%	1.8	0.30%	0.6
1000-5000µL	50µL	5000µL	0.50%	25	0.15%	7.5
		2500µL	0.60%	15	0.30%	7.5
		1000µL	0.70%	7	0.30%	3
2-10mL	0.1mL	10mL	0.60%	60	0.20%	20
		5mL	1.20%	60	0.30%	15
		2mL	3.00%	60	0.60%	12

**8-channel Adjustable Volume Pipettes**

Volume range	Increment	Test volume	Permissible errors in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	µL	%	µL
0.5-10µL	0.1µL	10µL	1.50%	0.15	1.50%	0.15
		5µL	2.50%	0.125	2.50%	0.125
		1µL	4.00%	0.04	4.00%	0.04
5-50µL	0.5µL	50µL	1.00%	0.5	0.50%	0.25
		25µL	1.50%	0.375	1.00%	0.25
		5µL	3.00%	0.15	2.00%	0.1
50-300µL	5µL	300µL	0.70%	2.1	0.25%	0.75
		150µL	1.00%	1.5	0.50%	0.75
		50µL	1.50%	0.75	0.80%	0.4

**12-channel Adjustable Volume Pipettes**

Volume range	Increment	Test volume	Permissible errors in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	µL	%	µL
0.5-10µL	0.1µL	10µL	1.50%	0.15	1.50%	0.15
		5µL	2.50%	0.125	2.50%	0.125
		1µL	4.00%	0.04	4.00%	0.04
5-50µL	0.5µL	50µL	1.00%	0.5	0.50%	0.25
		25µL	1.50%	0.375	1.00%	0.25
		5µL	3.00%	0.15	2.00%	0.1
50-300µL	5µL	300µL	0.70%	2.1	0.25%	0.75
		150µL	1.00%	1.5	0.50%	0.75
		50µL	1.50%	0.75	0.80%	0.4

**Fixed Volume Pipettes**

Volume range	Increment	Test volume	Permissible errors in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	µL	%	µL
5µL	-	5µL	1.3%	0.065	1.2%	0.06
10µL	-	10µL	0.8%	0.08	0.8%	0.08
20µL	-	20µL	0.6%	0.12	0.5%	0.1
25µL	-	25µL	0.5%	0.125	0.3%	0.075
50µL	-	50µL	0.5%	0.25	0.3%	0.15
100µL	-	100µL	0.5%	0.5	0.3%	0.3
200µL	-	200µL	0.4%	0.8	0.2%	0.4
250µL	-	250µL	0.4%	1.0	0.2%	0.5
500µL	-	500µL	0.3%	1.5	0.2%	1.0
1000µL	-	1000µL	0.3%	3.0	0.2%	2.0
2000µL	-	2000µL	0.3%	6.0	0.15%	3.0
5000µL	-	5000µL	0.3%	15	0.15%	7.5

Large LCD display indicating battery power level and speed settings

Select the desired coarse speed by pressing the button +/-

Aspirating button

Dispensing button



## Levo Plus Pipette Filler

### Features

- LCD display to observe battery level, aspiration/ dispensing speed.
- Light in weight and ergonomic design.
- Compatible with volumetric and serological pipettes.
- Compatible pipette volume range from 0.1-100mL.
- Integrated with replaceable, hydrophobic filter of 0.45µm.
- Different speeds of selection for aspiration and dispensing.
- Lithium-ion battery enables more than 8 hours of intermittent use.



Hydrophobic filter 0.45µm

Silicone adapter for 0.1-100mL pipette tip, fully autoclavable

### Specifications

Aspiration speed	25mL<7s (8 shift)
Dispensing speed	Motor (8 shift)/Gravity
Battery	Lithium-ion
Battery service life	More than 8 Hours of Intermittence Use
Charging time	2-3 Hours
Pipette types	Glass or Plastic Pipette (0.1-100mL), Pasteur Pipettes
Filter	0.45µm Hydrophobic
Weight	200g

**Levo**  
Pipette Controller

**Features**

- Designed for simple and precise pipetting control.
- Integrated with 3µm replaceable filter placed within silicone adapter.
- Aspiration and dispensing can be controlled with a sensitive lever.
- Light in weight design reduces the risk of RSI.
- Easy for both left and right handed operations.



Compress the suction bellows before attaching the pipette

Button to expel residual liquid when using blow-out pipette

Aspiration and dispensing comfortably achieved with a sensitive lever



3µm replaceable hydrophobic filter

Silicone adapter for 0.1-100µL pipette tip, fully autoclavable





## dTrite Electronic Digital Titrator

dTrite is a titrator coupled with magnetic stirrer for efficient operation and accurate titration results. It is a high precision, electronically controlled bottle top titrator.

### Features

- It works on positive displacement principle.
- Adjustable dispensing speed of 16 levels for the titrant.
- Accuracy error down to 0.2% and precision error down to 0.07%.
- Real-time display of dispensed volume through remote control panel prevents errors by reading the used volume from a burette with naked eyes.



### Specifications

Volume range	0.01 mL-99.99 mL, max piston lift of 10 mL, resolution at 10 $\mu$ L
Volume accuracy	R=0.2% CV=0.07%
Dispensing speed	16 levels adjustable
Operating temperature range	10°C-30°C
Quality standard	DIN EN ISO 8655
Control type	Separated controller with programming interface, and stirrer



## dFlow

### Electronic Bottle Top Dispenser

#### Features

- Easy to operate, light in weight and compact design.
- Operation through separated control panel minimizes the repetitive strain injury.
- Two modes of operation: Dispenser or Stepper.
- Operational volume ranges from 0.1-99.9mL.

#### Specifications

Volume range	0.1-99.9mL, max piston lift of 10mL, resolution at 100 $\mu$ L
Volume accuracy	Dispenser: R = 10mL $\pm$ 30 $\mu$ L; CV = 10ml $\pm$ 10 $\mu$ L Stepper: R = 1mL $\pm$ 6 $\mu$ L; CV = 1mL $\pm$ 9 $\mu$ L
Operating temperature Range	10 $^{\circ}$ C-30 $^{\circ}$ C
Quality standard	DIN EN ISO 8655
Contro type	Separated controller

## DispensMate Bottle-Top Dispenser

### Features

- Material of high chemical resistance.
- All parts that get in contact with liquid are made up of PTFE/FEP/BSG or PP.
- DispensMate works on positive displacement principle.
- Autoclavable at 121°C.
- Available in four different volume ranges: 0.5-5mL, 1.0-10mL, 2.5-25mL, 5.0-50mL
- Operating conditions:
  1. Vapor pressure max. 500mbar; 2. Viscosity max. 500mm<sup>2</sup>/s;
  3. Temperature max. 40°C; 4. Density max. 2.2g/cm<sup>3</sup>
- Easy to operate with volume adjustment slide.
- DispensMate is supplied with adapters of different sizes to fit with most common bottles.



### Accessories

Cat. No.	Description
----------	-------------

17100553	GL45, Adapter, 45mm
17000069	S40, Adapter, 45/40mm
17400131	GL32, Adapter, 45/32mm
17400132	GL38, Adapter, 45/38mm
17400133	GL25, Adapter, 32/25mm
17400134	GL28, Adapter, 32/28mm
17400037	Reagent bottle (Brown, 1L, Optional)
17400021	Filling tube(m)
17100073	Discharge tube(m)

### Specifications

Cat. No.	Volume range mL	Graduation mL	A $\leq$ ±		CV $\leq$	
			%	$\mu$ L	%	$\mu$ L
7032100001	0.5-5	0.1	0.5	25	0.2	10
7032100002	1.0-10	0.2	0.5	50	0.2	20
7032100003	2.5-25	0.5	0.5	125	0.2	50
7032100004	5.0-50	1.0	0.5	250	0.2	100



SafeVac is designed for safe disposal of laboratory liquid waste with chemical, biological or toxic hazard. SafeVac is useful in safety dependent applications like separation of wash solutions after centrifugation, microplate waste removal and any other liquid separation or recovery.

## SafeVac

### Vacuum Aspiration Systems

#### Features

- Portable with light in weight design and built-in vacuum pump.
- Vacuum range adjustable from 0-600mbar to reach aspiration speed of 1-15 mL/s.
- Integrated hydrophobic filter of 0.45µm prevents the back-flow of liquid into the vacuum pump.
- Supplied with both single channel and 8-channel needles to facilitate even 96 well-plate applications.
- Wetted parts like waste collection bottle, tubing and handle are fully autoclavable.( At 121°C 1 bar for 20 minutes. After autoclaving the equipment must be cooled down before use. )



Hydrophobic filter  
0.45µm  
Φ6mm

#### Specifications

Vacuum range	0-600mbar
Aspiration speed	1-15mL/s
Autoclavable component	tubing; waste bottle; operation handle;
Dimension[W×D×H]	180×240×450mm
Weight	3kg
Voltage	100-240VAC, 50/60 Hz
Bottle capacity	4L





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