



EduScience UK



LAB WARE 20



Call Us Today

+447404985528

[www.eduscienceuk.com](http://www.eduscienceuk.com)



## LAB WARE

- Glassware, Plasticsware
- Filtration
- Lab Essentials
- Measuring Instruments
- Electronic & Electrical  
Equipment
- Appliances





**Test Tube**

Manufactured from boro 3.3 glass with fire polished rim , (pack of 100)

- ESL56324      Size : 10 X 75MM
- ESL56325      Size : 12 X 75MM
- ESL56326      Size : 15 X 125MM
- ESL56327      Size : 18 X 150MM
- ESL56328      Size : 25 X 150MM



**Test Tube**

Manufactured from boro 3.3 glass with rim , (pack of 100)

- ESL56332      Size : 10 X 75MM
- ESL56333      Size : 12 X 75MM
- ESL56334      Size : 16 X 125MM
- ESL56335      Size : 18 X 150MM
- ESL56336      Size : 25 X 150MM



**Test Tube Without Rim**

Manufactured from boro 3.3 glass without rim , (pack of 100)

- ESL56339      Size : 10 X 75MM
- ESL56340      Size : 12 X 75MM
- ESL56341      Size : 16 X 125MM
- ESL56342      Size : 18 X 150MM
- ESL56343      Size : 25 X 150MM



**Burette Class B With PTFE Key Stopcock**

With amber graduation (economy model) with detachable PTFE key stopcock

- ESL56346      Capacity: 25 ML
- ESL56347      Capacity: 50 ML



**Burette Class AS With PTFE Key Stopcock**

Clear glass ,with lot. Certificate ,tolerance: 0.05(ML) division: 0.1

- ESL56348      Capacity: 25 ML
- ESL56349      Capacity: 50 ML



**Burette Class B With Detachable PTFE Key Stopcock**

With Amber graduation DIN ISO 385.

- ESL56351      Capacity: 25 ML
- ESL56352      Capacity: 50 ML





**Burette Class B**

With Glass Key Stopcock  
Clear glass with amber graduation din ISO 385.

- ESL56359 Capacity: 25 ML
- ESL56360 Capacity: 50 ML



**Burette Class B**

With Needle Valve PTFE Stopcock  
With amber graduation DIN ISO 385.

- ESL56353 Capacity: 25 ML
- ESL56354 Capacity: 50 ML



**Burette Class As**

With PTFE Key Stopcock  
Un serialized, graduation interval 0.2ML, tolerance +/- 0.1ML

- ESL56362 Capacity: 25 ML
- ESL56363 Capacity: 50 ML
- ESL56364 Capacity: 100ML



**Burette Class As**

With Glass Key Stopcock  
Clear glass with amber graduation , with lot certificate , division 0.1, Tolerance 0.05(ML)

- ESL56357 Capacity: 25 ML
- ESL56358 Capacity: 50 ML



**Pipette Volumetric Class AS**

One mark,with Lot. Certificate

- ESL56365 Capacity : 5 ML
- ESL56366 Capacity : 10 ML
- ESL56367 Capacity : 20 ML
- ESL56368 Capacity : 25 ML



**Pipette Volumetric**

Pipette bulb small, 5ml, (pack of 10)

ESL56371

**Pipette Graduated (Serological), Class B**

	Capacity	Subdivision	Tolerance	colour
ESL56373	2 ML,	0.1ML,	- 0.02ML	green
ESL56374	5 ML,	0.1ML,	- 0.02ML	Blue
ESL56375	10 ML,	0.1ML,	- 0.02ML	orange
ESL56376	25 ML,	0.1ML,	- 0.01ML	white





**Pipette Transfer**

Disposable Graduated Transfer Pipette Non Sterile

- ESL56378 Capacity : 1 ML,
- ESL56379 Capacity : 2 ML,
- ESL56380 Capacity : 3 ML,



**Pipette Transfer**

Disposable Graduated Transfer Pipette Individually Wrapped in a peel off pouch-Sterile.

- ESL56383 Capacity : 1 ML,
- ESL56384 Capacity : 2 ML,
- ESL56385 Capacity : 3 ML,



**Pipette Aid**

Pipette aid mad of polypropylene and silicon

- ESL56392 Capacity : 10 ML,
- ESL56393 Capacity : 25 ML,



**Pipette Stand Rotary Vertical**

Pipette stand rotary vertical pp, 94 places

ESL56395



**Pipette Washer PP**

Pipette washer PP

ESL56398



**Flask Volumetric, Class B**

Volumetric flask , White Polypropylene stopper

- ESL56401 Capacity : 10 ML NS 10/19
- ESL56402 Capacity : 25 ML NS 10/19
- ESL56403 Capacity : 50 ML NS 12/21
- ESL56404 Capacity : 100 ML NS 14/23
- ESL56405 Capacity : 250 ML NS 14/23
- ESL56406 Capacity : 500 ML NS 19/26
- ESL56407 Capacity : 1000 ML NS 24/29
- ESL56408 Capacity : 2000 ML NS 29/32



**Flask Erlenmeyer Narrow Neck**

Erlenmeyer Flasks, Narrow Neck with graduation DIN ISO 1773 with Reinforced thick Rim to reduce chipping & breakage.

- ESL56412 Capacity : 50 ML
- ESL56413 Capacity : 100 ML
- ESL56414 Capacity : 250 ML
- ESL56415 Capacity : 500 ML
- ESL56416 Capacity : 1000 ML





**Flask Erlenmeyer Narrow Neck**

Flask Erlenmeyer, Narrow neck These flasks are made from thick wall and have reinforced thick beaded rim. The flasks are produced to meet ASTM E 1404 TYPE 1 specifications. All the flasks are printed in white enamel.

	Capacity	Subdivision	graduation range
ESL56420	50 ML	10ML	20-50ML
ESL56421	100 ML	0M	20-100ML
ESL56422	250 ML	5ML	50-225ML
ESL56423	500 ML	50ML	100-500ML
ESL56424	1000 ML	50ML	250-1000ML



**Flask Erlenmeyer Wide Neck**

Flask Erlenmeyer, wide neck , These flasks are made from thick wall and have reinforced thick beaded rim. The flasks are produced to meet ASTM E 1404 TYPE 1 specifications. All the flasks are printed in white enamel.

ESL56427	Capacity : 50 ML
ESL56428	Capacity : 100 ML
ESL56429	Capacity : 250 ML
ESL56430	Capacity : 500 ML
ESL56431	Capacity : 1000 ML



**Flask Round Bottom Narrow Neck**

Flask Round Bottom narrow neck, with beaded rim DIN 12347, DIN ISO 1773.

ESL56433	Capacity : 100 ML
ESL56434	Capacity : 250 ML
ESL56435	Capacity : 500 ML
ESL56436	Capacity : 1000 ML
ESL56437	Capacity : 2000 ML



**Flask Flat Bottom Narrow Neck**

Flask Flat Bottom, narrow neck, with beaded rim DIN ISO 1773.

ESL56440	Capacity : 100 ML
ESL56441	Capacity : 250 ML
ESL56442	Capacity : 500 ML
ESL56443	Capacity : 1000 ML
ESL56444	Capacity : 2000 ML



**Flask Volumetric Class A**

Volumetric Flask Class A , With Polypropylene stopper and Lot Certificate

ESL56448	Capacity : 50 ML	NS 12/21
ESL56449	Capacity : 100 ML	NS 14/23
ESL56450	Capacity : 250 ML	NS 14/23
ESL56451	Capacity : 500 ML	NS 19/26
ESL56452	Capacity : 1000 ML	NS 24/29
ESL56453	Capacity : 2000 ML	NS 29/32



**Flask Distillation With Side Arm**

Distillation flask made of Boro silicate glass 3.3

ESL56456	Capacity : 250 ML
ESL56457	Capacity : 500 ML
ESL56458	Capacity : 1000 ML





**Measuring Cylinder , Class B, Hex Base**

Measuring Cylinder , Glass hexagonal base ,Class B,To contain (TC), Double metric , with protection collar.

<b>ESL56500</b>	Capacity : 25 ML	Graduation Interval 1MI, Tolerance +/- 0.25MI
<b>ESL56501</b>	Capacity : 50 ML	Graduation Interval 1MI, Tolerance +/- 0.25MI
<b>ESL56502</b>	Capacity : 100 ML	Graduation Interval 1MI, Tolerance +/- 0.5MI
<b>ESL56503</b>	Capacity : 250 ML	Graduation Interval 1MI, Tolerance +/- 1MI
<b>ESL56504</b>	Capacity : 500 ML	Graduation Interval 5MI, Tolerance +/- 2MI



**Measuring Cylinder ,Class A, Round Base**

Measuring Cylinder , Round base ,Class A, With LOT certificate.

<b>ESL56480</b>	Capacity : 5 ML
<b>ESL56481</b>	Capacity : 10 ML
<b>ESL56482</b>	Capacity : 25 ML
<b>ESL56483</b>	Capacity : 50 ML
<b>ESL56484</b>	Capacity : 100 ML
<b>ESL56485</b>	Capacity : 250 ML
<b>ESL56486</b>	Capacity : 500 ML



**Measuring Cylinder, , Class B, Hex Base**

Measuring Cylinder Graduated Class B, Hex Base, with Double Metric Scale, Cylinders are made to meet ASTM E 1272 norms and are printed in double scale with white enamel. All the cylinders from 10ml to 2000ml comes with the bumper guard.

<b>ESL56492</b>	Capacity : 10 ML
<b>ESL56493</b>	Capacity : 25 ML
<b>ESL56494</b>	Capacity : 50 ML
<b>ESL56495</b>	Capacity : 100 ML
<b>ESL56496</b>	Capacity : 250 ML
<b>ESL56497</b>	Capacity : 500 ML



**Measuring Cylinder, Class B, Hex Base**

Measuring Cylinder , Hexagonal base ,Class B,To contain (TC), Single metric , Low form .

<b>ESL56470</b>	Capacity : 10 ML
<b>ESL56471</b>	Capacity : 25 ML
<b>ESL56472</b>	Capacity : 50 ML
<b>ESL56473</b>	Capacity : 100 ML
<b>ESL56474</b>	Capacity : 250 ML
<b>ESL56475</b>	Capacity : 500 ML
<b>ESL56476</b>	Capacity : 1000 ML



**Measuring Cylinder, Class B , Plastic Base.**

Measuring Cylinder , Plastic base ,Class B,To contain (TC), Single metric , with protection collar.

<b>ESL56461</b>	Capacity : 10 ML
<b>ESL56462</b>	Capacity : 25 ML
<b>ESL56463</b>	Capacity : 50 ML
<b>ESL56464</b>	Capacity : 100 ML
<b>ESL56465</b>	Capacity : 250 ML





**Measuring Cylinder PP Class B**

measuring cylinders - Class B, Material : Polypropylene

- ESL56516 Capacity : 10 ML
- ESL56517 Capacity : 25 ML
- ESL56518 Capacity : 50 ML
- ESL56519 Capacity : 100 ML
- ESL56520 Capacity : 250 ML
- ESL56521 Capacity : 500 ML
- ESL56522 Capacity : 1000 ML
- ESL56523 Capacity : 2000 ML



**Measuring Cylinders- PP**

Measuring Cylinders - Autoclavable Graduations, Material : Polypropylene

- ESL56509 Capacity : 25 ML
- ESL56510 Capacity : 50 ML
- ESL56511 Capacity : 100 ML
- ESL56512 Capacity : 250 ML
- ESL56513 Capacity : 500 ML



**Measuring Cylinder PMP, Class A**

Measuring Cylinder Class A, Material : Polymethylpentene

- ESL56536 Capacity : 10 ML
- ESL56537 Capacity : 25 ML
- ESL56538 Capacity : 50 ML
- ESL56539 Capacity : 100 ML
- ESL56540 Capacity : 250 ML
- ESL56541 Capacity : 500 ML
- ESL56542 Capacity : 1000 ML
- ESL56543 Capacity : 2000 ML



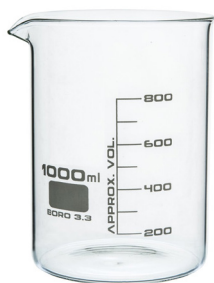
**Measuring Cylinder PMP, Class B**

Measuring Cylinder Class B, Material : Polymethylpentene

- ESL56526 Capacity : 10 ML
- ESL56527 Capacity : 25 ML
- ESL56528 Capacity : 50 ML
- ESL56529 Capacity : 100 ML
- ESL56530 Capacity : 250 ML
- ESL56531 Capacity : 500 ML
- ESL56532 Capacity : 1000 ML
- ESL56533 Capacity : 2000 ML







**Beaker Low Form**

Beaker low form, With graduation and spot , Made of borosilicate glass 3.3 .

- ESL56546 Capacity : 50 ml
- ESL56547 Capacity : 100 ml
- ESL56548 Capacity : 250 ml
- ESL56549 Capacity : 400 ml
- ESL56550 Capacity : 600 ml
- ESL56551 Capacity : 1000 ml
- ESL56552 Capacity : 2000 ml



**Beaker Low Form ,Heavy Duty**

Beaker low form, Heavy duty borosilicate glass 3.3 ,Tolled top rim , Double metric scales.

	Capacity	Graduation interval	graduation range
ESL56554	100 ml	10m	25-200ml
ESL56555	250 ml	25ml	25-200ml
ESL56556	400 ml	25ml	25-325ml
ESL56557	600 ml	50ml	50-500ml
ESL56558	1000 ml	100ml	100-1000ml
ESL56559	2000 ml	200ml	200-1400ml



**Beaker Tall Form**

Beaker Tall form, borosilicate glass 3.3 ,with graduation and spout.

- ESL56561 Capacity : 50 ML
- ESL56562 Capacity : 100 ML
- ESL56563 Capacity : 150 ML
- ESL56564 Capacity : 250 ML
- ESL56565 Capacity : 400 ML
- ESL56566 Capacity : 600 ML
- ESL56567 Capacity : 1000 ML



**Beaker (Euro Design) PP**

Autoclavable with Graduation, Material : Polypropylene

- ESL56581 Capacity : 100 ml
- ESL56582 Capacity : 250 ml

**Beaker Low Form**

Beaker, low form, with slightly flared beaded top, double metric scale

	Capacity	Graduation interval	graduation range
ESL56572	50 ml	10ml	10-40ml
ESL56573	100 ml	10ml	20-80ml
ESL56574	250 ml	25ml	25-200ml
ESL56575	600 ml	50ml	50-500ml
ESL56576	1000 ml	50ml	100-1000ml
ESL56577	2000 ml	50ml	100-2000ml
ESL56578	5000 ml	50ml	100-5000ml





**Beaker Griffin Low Form PMP**

Beaker Griffin Low-form ,Material :Polymethylpentene sold in Packs.

<b>ESL56593</b>	Capacity : 50 ml	12 pcs/pack
<b>ESL56594</b>	Capacity : 100 ml	12 pcs/pack
<b>ESL56595</b>	Capacity : 250 ml	6 pcs/pack
<b>ESL56596</b>	Capacity : 600 ml	4 pcs/pack
<b>ESL56597</b>	Capacity : 1000 ml	3 pcs/pack
<b>ESL56598</b>	Capacity : 2000 ml	1 Pc
<b>ESL56599</b>	Capacity : 5000 ml	1 Pc
<b>ESL56600</b>	Capacity : 10 litre	1 Pc



**Beaker Griffin Low Form PP**

Beaker Griffin Low-form ,Polypropylene, supplied in Pk

<b>ESL56585</b>	Capacity : 50 ml	12 pcs/pack
<b>ESL56586</b>	Capacity : 100 ml	12 pcs/pack
<b>ESL56587</b>	Capacity : 250 ml	6 pcs/pack
<b>ESL56588</b>	Capacity : 600 ml	4 pcs/pack
<b>ESL56589</b>	Capacity : 1000 ml	3 pcs/pack
<b>ESL56590</b>	Capacity : 2000 ml	1 Pc
<b>ESL56591</b>	Capacity : 5000 ml	1 Pc
<b>ESL56592</b>	Capacity : 10 ltr	1 Pc



**Beaker With Handle Low Form PMP,**

Beaker Low-Form With Handle, Material : Polymethylpentene .

<b>ESL56612</b>	Capacity : 100 ML
<b>ESL56613</b>	Capacity : 250 ML
<b>ESL56614</b>	Capacity : 600 ML
<b>ESL56615</b>	Capacity : 1000 ML
<b>ESL56616</b>	Capacity : 2000 ML
<b>ESL56617</b>	Capacity : 5000 ML



**Pycnometer To Gay Lussac, Calibrated, Class A, 10ml**

Pycnometer to gay lussac, calibrated, class a, 10ml, without certificate, with Teflon stopper

ESL56631



**Beaker With Handle Low Form PP**

Beaker Low-Form With Handle ,Made of Polypropylene.

<b>ESL56603</b>	Capacity : 100 ml
<b>ESL56604</b>	Capacity : 250 ml
<b>ESL56605</b>	Capacity : 600 ml
<b>ESL56606</b>	Capacity : 1000 ml
<b>ESL56607</b>	Capacity : 2000 ml
<b>ESL56608</b>	Capacity : 5000 ml



**Weighing Bottle Ground Squat Form 50X25mm**

Weighing Bottles, Ground In Stopper Manufactured from ASTM 438 TYPE 1 boro 3.3 glass 50X25MM

ESL56633



**Desiccators With Lid Plain 150 Mm**

Desiccator with Lid, Plain, Die pressed, Neutral Glass with Porcelain perforated plate.

ESL56620	Diameter 150 MM
ESL56621	Diameter 200 MM
ESL56622	Diameter 250 MM
ESL56623	Diameter 300 MM

**Desiccators Vacuum With Stopcock Lid And Plate**

Complies with IS 6128 Designed for use under vacuum Sturdy construction of borosilicate glass-ground glass flanges Plates are positioned on an internal ledge within the base Comes with glass stopcock at the top Generally used for drying of moist products, and for storage of moisture sensitive substances ,

ESL56625	ID Ground Flange APP. 150 mm.
ESL56626	ID Ground Flange APP. 200 mm.
ESL56627	ID Ground Flange APP. 250 mm.
ESL56628	ID Ground Flange APP. 300 mm.

**Bottle Reagent Amber , Narrow Mouth**

Bottles Reagent narrow mouth, manufactured from ASTM E 438 TYPE 1 BORO 3.3 GLASS in compliance to DIN ISO 4796 - 2 standards with standard ground joint & PP stopper, EN ISO 4796,

ESL56638	Capacity : 50 ML	N/S 19/26
ESL56639	Capacity : 100 ML	N/S 19/26
ESL56640	Capacity : 250 ML	N/S 19/26,
ESL56641	Capacity : 500 ML	N/S 19/26
ESL56642	Capacity : 1000 ML	N/S 19/26

**Bottle Dropping Amber**

Amber glass dropping bottles with interchangeable stopper and rubber teat

ESL56649	Capacity : 30 ML
ESL56650	Capacity : 60 ML
ESL56651	Capacity : 120 ML

**Bottle Reagent Autoclavable Screw Cap And Pouring Ring**

Bottles Reagent narrow mouth, manufactured from ASTM E 438 TYPE 1 BORO 3.3 GLASS in compliance to DIN ISO 4796 - 1 standards autoclavable screw cap and pouring ring, EN ISO 479.

ESL56644	Capacity : 100 ML
ESL56645	Capacity : 250 ML
ESL56646	Capacity : 500 ML
ESL56647	Capacity : 1000 ML

**Bottle Dropping Clear**

Dropping Bottles, Manufactured from ASTM E 438 TYPE 1 BORO 3.3 GLASS fitted with ground in interchangeable stopper and rubber teat.

ESL56652	Capacity : 30 ML
ESL56653	Capacity : 60 ML
ESL56654	Capacity : 120 ML





**Bottle Dropping Glass Pipette**

Pipette dropping bottle having a three piece pipette section comprising a glass dropper, high density polythene stopper with dust- proof head and vinyl teat. Both stopper and teat are highly resistant to chemical attack by acids and alkalis.

<b>ESL56656</b>	Capacity : 30 ml
<b>ESL56657</b>	Capacity : 60 ml
<b>ESL56658</b>	Capacity : 120 ml



**Bottle Reagent, Clear Glass**

Bottles Reagent narrow mouth, manufactured from ASTM E 438 TYPE 1 boro 3.3 glass in compliance to DIN ISO 4796 - 2 standards with standard ground joint & PP stopper, EN ISO 479.

<b>ESL56660</b>	Capacity : 100 ml	N/S 14/23
<b>ESL56661</b>	Capacity : 250 ml	N/S 19/26
<b>ESL56662</b>	Capacity : 500 ml	N/S 24/29
<b>ESL56663</b>	Capacity : 1000 ml	N/S 24/29



**Bottle Round Boston HDPE**

Narrow-Mouth Boston Round Bottle- Made of High density Polyethylene ,sold in packs

<b>ESL56665</b>	Capacity : 4 ml	12pcs/pack
<b>ESL56666</b>	Capacity : 8 ml	12pcs/pack
<b>ESL56667</b>	Capacity : 15 ml	12pcs/pack
<b>ESL56668</b>	Capacity : 30 ml	12pcs/pack
<b>ESL56669</b>	Capacity : 60 ml	12pcs/pack
<b>ESL56670</b>	Capacity : 125 ml	12pcs/pack
<b>ESL56671</b>	Capacity : 250 ml	12pcs/pack
<b>ESL56672</b>	Capacity : 500 ml	12pcs/pack
<b>ESL56673</b>	Capacity : 1000 ml	6pcs/pack



**Bottle Round Boston LDPE**

Narrow-Mouth Boston Round Bottle-Made of low density polyethylene ,sold in packs.

<b>ESL56676</b>	Capacity : 8 ml	12pcs/pack
<b>ESL56677</b>	Capacity : 15 ml	12pcs/pack
<b>ESL56678</b>	Capacity : 30 ml	12pcs/pack
<b>ESL56679</b>	Capacity : 60 ml	12pcs/pack
<b>ESL56680</b>	Capacity : 125 ml	12pcs/pack
<b>ESL56681</b>	Capacity : 250 ml	12pcs/pack
<b>ESL56682</b>	Capacity : 500 ml	12pcs/pack
<b>ESL56683</b>	Capacity : 1000 ml	6pcs/pack



**Bottle Round Boston PP**

Narrow-Mouth Boston Round Bottle-Made of Polypropylene , sold in packs.

<b>ESL56697</b>	Capacity : 4 ML	12pcs/pack
<b>ESL56698</b>	Capacity : 8 ML	12pcs/pack
<b>ESL56699</b>	Capacity : 15 ML	12pcs/pack
<b>ESL56700</b>	Capacity : 30 ML	12pcs/pack
<b>ESL56701</b>	Capacity : 60 ML	12pcs/pack
<b>ESL56702</b>	Capacity : 125 ML	12pcs/pack
<b>ESL56703</b>	Capacity : 250 ML	12pcs/pack
<b>ESL56704</b>	Capacity : 500 ML	12pcs/pack
<b>ESL56705</b>	Capacity : 1000 ML	6pcs/pack





**Bottle Round Boston Amber-HDPE**

Amber Narrow-Mouth Boston Round Bottle-Made of High density Polyethylene ,sold in packs

<b>ESL56686</b>	Capacity : 4 ml	12pcs/pack
<b>ESL56687</b>	Capacity : 8 ml	12pcs/pack
<b>ESL56688</b>	Capacity : 15 ml	12pcs/pack
<b>ESL56689</b>	Capacity : 30 ml	12pcs/pack
<b>ESL56690</b>	Capacity : 60 ml	12pcs/pack
<b>ESL56691</b>	Capacity : 125 ml	12pcs/pack
<b>ESL56692</b>	Capacity : 250 ml	12pcs/pack
<b>ESL56693</b>	Capacity : 500 ml	12pcs/pack
<b>ESL56694</b>	Capacity : 1000 ml	6pcs/pack



**Bottle Round Boston HDPE**

Wide-Mouth Boston Round Bottle-Made of low density polyethylene ,sold in packs.

<b>ESL56718</b>	Capacity : 30 ML	12pcs/pack
<b>ESL56719</b>	Capacity : 60 ML	12pcs/pack
<b>ESL56720</b>	Capacity : 125 ML	12pcs/pack
<b>ESL56721</b>	Capacity : 250 ML	12pcs/pack
<b>ESL56722</b>	Capacity : 500 ML	12pcs/pack
<b>ESL56723</b>	Capacity : 1000 ML	6pcs/pack



**Bottle Round Boston LDPE**

Wide Mouth Boston Round Bottle-Made of High density Polyethylene ,sold in packs

<b>ESL56710</b>	Capacity : 30 ML	12pcs/pack
<b>ESL56711</b>	Capacity : 60 ML	12pcs/pack
<b>ESL56712</b>	Capacity : 125 ML	12pcs/pack
<b>ESL56713</b>	Capacity : 250 ML	12pcs/pack
<b>ESL56714</b>	Capacity : 500 ML	12pcs/pack
<b>ESL56715</b>	Capacity : 1000 ML	6pcs/pack



**Bottle Round Boston PP**

Wide-Mouth Boston Round Bottle-Made of Polypropylene , sold in packs.

<b>ESL56734</b>	Capacity : 30 ML	12pcs/pack
<b>ESL56735</b>	Capacity : 60 ML	12pcs/pack
<b>ESL56736</b>	Capacity : 125 ML	12pcs/pack
<b>ESL56737</b>	Capacity : 250 ML	12pcs/pack
<b>ESL56738</b>	Capacity : 500 ML	12pcs/pack
<b>ESL56739</b>	Capacity : 1000 ML	6pcs/pack



**Bottle Round Boston Amber-HDPE**

Amber Wide-Mouth Boston Round Bottle-Made of High density Polyethylene ,sold in packs

<b>ESL56726</b>	Capacity : 30 ML	12pcs/pack
<b>ESL56727</b>	Capacity : 60 ML	12pcs/pack
<b>ESL56728</b>	Capacity : 125 ML	12pcs/pack
<b>ESL56729</b>	Capacity : 250 ML	12pcs/pack
<b>ESL56730</b>	Capacity : 500 ML	12pcs/pack
<b>ESL56731</b>	Capacity : 1000 ML	6pcs/pack





**Bottle Dropping Dispensing -LDPE**

Drop-Dispenser Bottle Made of low density polyethylene,sold in packs

<b>ESL56742</b>	Capacity : 15 ML	12pcs/pack
<b>ESL56743</b>	Capacity : 30 ML	12pcs/pack
<b>ESL56744</b>	Capacity : 60 ML	12pcs/pack
<b>ESL56745</b>	Capacity : 125 ML	12pcs/pack
<b>ESL56746</b>	Capacity : 250 ML	6pcs/pack



**Carboy Rectangular With Stopcock -HDPE**

Rectangular Carboy with Stopcock-Made of High density Polyethylene.

<b>ESL56754</b>	Capacity : 5 LTR
<b>ESL56755</b>	Capacity : 10 LTR
<b>ESL56756</b>	Capacity : 20 LTR



**Carboy With Spigot LDPE**

Carboy with Spigot-Made of low density polyethylene.

<b>ESL56750</b>	Capacity : 10 LTR
<b>ESL56751</b>	Capacity : 20 LTR
<b>ESL56752</b>	Capacity : 50 LTR



**Wash Bottle**

Narrow-Mouth Wash Bottle-White Cap,sold in packs

<b>ESL56760</b>	Capacity : 125 ml	6pcs/pack
<b>ESL56761</b>	Capacity : 250 ml	6pcs/pack
<b>ESL56762</b>	Capacity : 500 ml	6pcs/pack
<b>ESL56763</b>	Capacity : 1000 ml	4pcs/pack



**Wash Bottle 500ML**

Wash bottles 500ml , Material : polyethylene

ESL56758



**Wash Bottle Integral Side Spout**

Wash Bottle-Integral Side Spout 1,sold in Packs.

<b>ESL56774</b>	Capacity : 125 ML	6pcs/pack
<b>ESL56775</b>	Capacity : 250 ML	4pcs/pack
<b>ESL56776</b>	Capacity : 500 ML	4pcs/pack
<b>ESL56777</b>	Capacity : 750 ML	4pcs/pack



**Wash Bottle WM LDPE**

Wide Mouth Wash Bottle made of low density polyethylene ,Safety Labelled -Distilled Water ,sold in packs.

<b>ESL56767</b>	Capacity : 500 ML	6pcs/pack
<b>ESL56769</b>	Capacity : 1000 ML	1 Pc





**Crystallizing Dishes**

Dishes, Crystallizing, with Spout, DIN 12337

- ESL56779 Size : 70 X 40 MM
- ESL56780 Size: 80 X 45 MM
- ESL56781 Size : 95 X 55 MM



**Evaporating Dishes Ceramic, 70 ml**

(EURO DESIGN) 75 x 30 mm( ODXH) made of porcelain, maximum temperature up-to 1150°C

ESL56783



**Petri Dish, Boro 3.3 Glass**

petri dish, manufactured from boro 3.3 glass which can withstand repeated autoclaving. od 100mm, height 17mm

ESL56785



**Mortar & Pestle**

Pestle & Mortar made of porcelain, maximum temperature up to 1150°C

- ESL56792 Size : 100 mm x 70 mm (dxh)
- ESL56793 Size : 130 mm x 80mm (dxh)
- ESL56794 Size : 160 mm x 90mm (dxh)
- ESL56795 Size : 216 mm x 114mm (dxh)

**Petri Dish**

Petri dish disposable

- ESL56788 Size : 100 mm x 14 mm Polypropylene autoclavable
- ESL56789 Size : 90 mm x 14 mm Radiation sterile vent-ps, 90mmx14mm
- ESL56790 Size : 90 mm x 14 mm Radiation sterile non vented-ps, 90mmx14mm



**Funnel Analytical PP , 100Mm -Long Stem**

Funnels- long stem 100mm, Autoclavable  
Material : Polypropylene

ESL56805



**Separating Funnel**

Separating funnel with glass stopcock and pp stopper Squibb shape

- ESL56807 Capacity : 125 ML NS : 29/32
- ESL56808 Capacity : 250 ML NS : 29/32
- ESL56809 Capacity : 500 ML NS : 29/32
- ESL56810 Capacity : 1000 ML NS : 29/32



**Funnel PP,**

Funnel analytical made of polypropylene, with plain surfaces, short stem sold in packs

ESL56811	Diameter 35 mm	12 pcs/pack
ESL56812	Diameter 50 mm	13 pcs/pack
ESL56813	Diameter 55 mm	14 pcs/pack
ESL56814	Diameter 65 mm	15 pcs/pack
ESL56815	Diameter 75 mm	6 pcs/pack
ESL56816	Diameter 90 mm	7 pcs/pack
ESL56817	Diameter 100 mm	4 pcs/pack
ESL56818	Diameter 160 mm	2 pcs/pack

**Crucible Porcelain**

Made of porcelain with glazed high wall supplied with lid

ESL56827	Capacity : 15 ML
ESL56828	Capacity : 20 ML
ESL56829	Capacity : 25 ML
ESL56830	Capacity : 30 ML
ESL56831	Capacity : 40 ML

**Watch Glass**

Work well as lids for flasks and beakers, or holding small samples for observation under a low-power microscope.

ESL56841	DIA 50 MM
ESL56842	DIA 60 MM
ESL56843	DIA 75 MM
ESL56844	DIA 90 MM
ESL56845	DIA 100 MM
ESL56846	DIA 125 MM

**Crucible Porcelain**

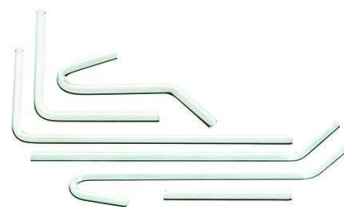
Made of porcelain with glazed medium wall supplied with lid

ESL56821	Capacity : 15 ml
ESL56822	Capacity : 25 ml
ESL56823	Capacity : 50 ml
ESL56824	Capacity : 70 ml
ESL56825	Capacity : 100 ml

**Crucible Porcelain**

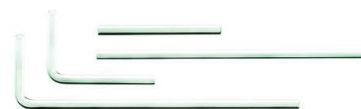
Made of porcelain with glazed low wall supplied with lid

ESL56834	Capacity : 15 ML
ESL56835	Capacity : 20 ML
ESL56836	Capacity : 25 ML
ESL56837	Capacity : 30 ML
ESL56838	Capacity : 40 ML

**Tube Delivery, Set Of 6**

Different shapes tubes mad of borosilicate glass, outside dia. 6 mm Set of 6.

ESL56849

**TUBE DELIVERY, SET OF 4**

Different shapes tubes mad of borosilicate glass, outside dia. 6 mm Set of 4. :1 - Short straight, 70 mm length 1 - Long straight, 170 mm length 1 - 90° bend arms, 60 mm and 160 mm length 1 - 90° bend arms, 60 mm length

ESL56850







**Tiles Porcelain With 12 Cavities**

White, with 12 cavities 22mm diameter.

ESL56852

**Brush Beaker**

- ESL56859 Nylon 400 mm long Stainless steel wire handle. Size 150 x 85 mm
- ESL56860 Bristle Standard beaker brush on a wooden handle. 325mm total length, brush approximately 150mm x 75mm



**Brush Burette**

on stainless steel wire handle, for burette cap. 25ml, and 50 ML

- ESL56862 Nylon For burette cap. 25ml, head dia 16mm, length 610mm
- ESL56863 Nylon For burette cap. 50ml, head dia 19mm, length 760mm
- ESL56865 Bristle For burette cap. 25ml, head dia 16mm, length 610mm
- ESL56866 Bristle for burette cap. 50ml, head dia 19mm, length 760mm



**Brush Flask**

- ESL56868 Nylon For round bottom flask up-to 100 mm dia. on stainless steel wire handle. Overall length 330 mm,
- ESL56869 Bristle For round bottom flask up-to 100 mm dia. on stainless steel wire handle. Overall length 330 mm



**Brush Test Tube**

With fan-shaped end, on stainless steel wire handle.

- ESL56873 Nylon DIA 20 MM L 90 mm, total length 230 mm
- ESL56874 Nylon DIA 35 MM L 100 mm, total length 280 mm
- ESL56876 Bristle DIA 20 MM L 90 mm, total length 230 mm
- ESL56877 Bristle DIA 35 MM L 100 mm, total length 280 mm



**Brush Pipette**

for pipettes and tubes from 8 - 12 mm dia

- ESL56879 Nylon Head size 125 x 10 mm, overall length 650 mm
- ESL56880 Bristle Head size 125 x 10 mm, overall length 650 mm



**Brush Cylinder**

With fan-shaped end on stainless steel wire handle. Suitable for Erlenmeyer flasks, cylinders and beakers

- ESL56882 Nylon Total Length-300 mm, Brush length-110 mm, Brush dia.-40 mm
- ESL56883 Bristle Total Length-450 mm, Brush length-150 mm, Brush dia.-75 mm





### Flask Filtration

Reduced pressure these special flasks serve as collecting vessel for the filtrate. Made of borosilicate glass 3.3 very good chemical resistance minimal thermal expansion high resistance to thermal shocks autoclavable

•• Erlenmeyer shape , with Glass gorse nozzle.

ESL57004	Capacity : 100 ml
ESL57005	Capacity : 250 ml
ESL57006	Capacity : 500 ml
ESL57007	Capacity : 1000 ml
ESL57008	Capacity : 2000 ml
ESL57009	Capacity : 3000 ml



### Funnel Boro Glass

Manufactured from ASTM E 438 TYPE 1 CLASS A BORO 3.3 GLASS. These funnels comply to ISO, DIN AND USP standards.

ESL56796	Diameter 45 MM
ESL56797	Diameter 55 MM
ESL56798	Diameter 65 MM
ESL56799	Diameter 70 MM
ESL56800	Diameter 75 MM
ESL56801	Diameter 80 MM
ESL56802	Diameter 100 MM
ESL56803	Diameter 150 MM



### Filter Paper

Qualitative Analysis filter papers Low Ash content 0.07%(Acid wash treated) High wet strength Made of 100% cotton liners GRADE NO 1

ESL57020	DIA 7 CM
ESL57021	DIA 9 CM
ESL57022	DIA 11 CM
ESL57023	DIA 12.5 CM
ESL57024	DIA 15 CM
ESL57025	DIA 18 CM



### Filter Paper

Quantitative Analysis filter papers Low Ash content 0.07%(Acid wash treated) High wet strength Made of 100% cotton liners GRADE NO

ESL57031	DIA 7 CM
ESL57032	DIA 9 CM
ESL57033	DIA 11 CM
ESL57034	DIA 12.5 CM
ESL57035	DIA 15 CM
ESL57036	DIA 18 CM



### Chlorine Test Strip

ESL57040	5 TEST	0 - 0.5 - 1 - 3 - 5 mg/L Cl <sub>2</sub> 100 strips/Pk
ESL57041	20 TEST	0 - 0.5 - 1 - 3 - 5 - 10 - 20 mg/L Cl <sub>2</sub> 100 strips/Pk
ESL57042	300 TEST	0 - 25 - 50 - 100 - 200 - 300 mg/L Cl <sub>2</sub> 100 strips/pk
ESL57043	1000 TEST	0 - 50 - 100 - 250 - 500 - 1000 mg/L Cl <sub>2</sub> 100 strips/pk



### Funnel Analytical PP , 100Mm Long Stem

Funnels- long stem 100mm autoclavable material : polypropylene

ESL56805



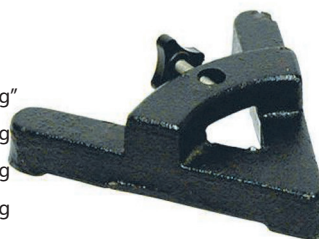
**Stand Base A-Shaped**

Used for stand rod holder.

Hole : 10 mm, without threads

Material : Cast iron Part of Reversible Pendulum.

<b>ESL57067</b>	Side length 120 mm	<b>Dimension :</b> (L) 12.00 x (W) 12.00 x (H) 3.00 cm, <b>Weight :</b> 0.400 kg
<b>ESL57068</b>	Side length 140 mm	<b>Dimension :</b> (L) 14.00 x (W) 14.00 x (H) 3.00 cm, <b>Weight :</b> 0.500 kg
<b>ESL57069</b>	Side length 190 mm	<b>Dimension :</b> (L) 19.00 x (W) 19.00 x (H) 4.50 cm, <b>Weight :</b> 2.000 kg
<b>ESL57070</b>	Side length 240 mm	<b>Dimension :</b> (L) 24.00 x (W) 24.00 x (H) 6.00 cm, <b>Weight :</b> 4.000 kg
<b>ESL57071</b>	Side length 270 mm	<b>Dimension :</b> (L) 270.00 x (W) 26.00 x (H) 6.00 cm, <b>Weight :</b> 6.000 kg, <b>Material :</b> Cast iron



**Stand Road**

Used as pillars in some experiments. Material : Stainless steel solid Part of Mechanics Kit for Senior High School.

<b>ESL57073</b>	DIA 10 X 100 mm,	<b>Dimension :</b> (L) 10.00 x (W) 1.00 x (H) 1.00 cm, <b>Weight :</b> 1.000 kg
<b>ESL57074</b>	DIA 10 X 1500 mm	<b>Dimension :</b> (L) 150.00 x (W) 1.00 x (H) 1.00 cm, <b>Weight :</b> 0.915 kg
<b>ESL57075</b>	DIA 10 X 500 mm	<b>Dimension :</b> (L) 50.00 x (W) 1.00 x (H) 1.00 cm, <b>Weight :</b> 0.200 kg
<b>ESL57076</b>	DIA 9 X 500 mm	<b>Dimension :</b> M8 x 9 mm, Part of Stand Base and Rod, Steel plate
<b>ESL57077</b>	DIA 10 X 1500 mm	<b>Dimension :</b> (L) 1.00 x (W) 1.00 x (H) 150.00 cm, <b>Weight :</b> 0.920 kg



**Base Retort**

Brass dial head about 40mm dia., Divided and marked in 100 divisions, vertical scale 10-0-10mm, fitted on heavy brass disc, with 3 pointed legs, distance between legs 40mm.

<b>ESL57079</b>	16CM X 10CM (length x width)
<b>ESL57080</b>	20CM X 12.5CM (length x width)
<b>ESL57081</b>	25CM X 16CM (length x width)

**Steel Rod**

A range of Steel rods to suit all Stand bases.

<b>ESL57082</b>	50Cm x 11mm (length x dia.)
<b>ESL57083</b>	60Cm x 11mm (length x dia.)
<b>ESL57084</b>	75Cm x 12mm (length x dia.)
<b>ESL57085</b>	100Cm x 12mm (length x dia.)



**Stand Set Base And Road , Steel Base**

Stand Base and Rod, Steel Plate Uses as a tool for assembling laboratory equipment

Size of stand base: 210 x 140mm, thickness 4mm

Stand rod: Dia. 10 x 500mm

Material: Stand base steel plate, stand rod: stainless steel

Set **Consists of :** Square stand base Stand rod

**Dimension :** 51.60 (L) x 22.60 (W) x 3.80cm (H)

**Weight :** 1.426Kg

**ESL57087**

**Clamp Universal**

Clamp for general use.

Size :

Total length : Dia 225 mm

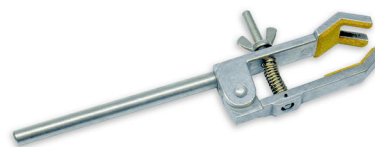
Jaws opening : dia. 70 mm

Material : Aluminium die casting with stainless steel bar Jaws are layered with cork sheet

Completed with spiral spring, butterfly nuts and screw

**Dimension :** (L) 22.00 x (W) 7.00 x (H) 3.00 cm

**Weight :** 0.170 kg



**ESL57107**



**Retort Ring With Boss-head**

Open ring retort support with boss-head made of Nickel chrome plated steel

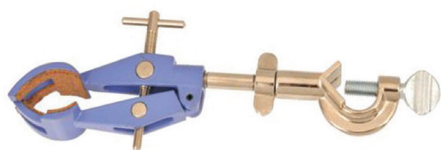
<b>ESL57109</b>	Dia 60 mm
<b>eSL57110</b>	Dia 80 mm
<b>eSL57111</b>	Dia 100 mm





**Burette Clamp**

ESL57094	Single	Polypropylene .Suitable for all burette up-to 100ml.
ESL57095	Double	Polypropylene .Suitable for all burette up-to 100ml.
ESL57098	Advanced, single	Comprising a high strength alloy casting jaws. Suitable for all burettes upto 100ml.
ESL57099	Advanced, double	Comprising a high strength alloy casting jaws. Suitable for all burettes upto 100ml.



**Clamp Universal, Assorted**

ESL57101	4 Finger Cork Lined	Used to hold objects at stative. Size : Grip range 20 - 50 mm, Material : Steel coated with Ni/Cr and paint, Equipped with spring and bolt fasteners, <b>Dimension</b> : (L) 30.00 x (W) 10.00 x (H) 7.50 cm, <b>Weight</b> : 0.180 KG
ESL57102	4 Finger Cork Lined With Bosshead	This universal retort stand clamp is made from aluminium and has 4 jaws. The jaws allow objects from 2 - 90 mm in diameter to be clamped securely. The design of the jaws ensures a firm grip at all angles of opening. The four interlocking jaws are cork lined. Overall length is 24 cm.
ESL57103	3 Finger With Bosshead	PVC coated die-cast jaw, with clamping to my-bar screw through swivels, mounted on 13.5 cm rod of dia. 8 mm jaw. Capacity 100mm and overall length 25 cm.
ESL57104	3 Finger, Swivel	Three Finger Clamp, Swivel used to hold object at stative rod Size: Grip of 2-70mm, Material: Zinc alloy with Ni/Cr plated Without coil spring, The holder can be swivelled and fingers coated with PVC, One end is equipped with clamps and fasteners for mounting on the stative rod, <b>Dimension</b> : 30.00 (L) x 10.00 (W) x 7.50cm (H)"
ESL57105	2 Prong Single Adjustable Universal With Boss-Head	This clamp is ideal for use with straight sides glassware and apparatus such as burette, tubes flask necks. The jaws are coated with non slip vinyl sleeve. Can hold objects of 8-30 mm dia. Overall length 22 cm.

ESL57114



ESL57116



ESL57117



ESL57115



**Boss Head**

ESL57114	Cast alloy	For use with laboratory stands, this popular boss head is made of die caste alloy. It accepts rods up to 16mm in diameter at a right angle to one another. Metal thumbscrews with blue plastic heads allow for adjustment. Measures approximately 11.7 x 3 x 3 cm in size.
ESL57115	Square for rod	Threaded metal one piece clamping screws • Able to hold rods up to 15 mm in diameter • Holds rods orthogonal (90 degrees) to one another. • All metal constructions to carry heavy loads and prevent torque damage
ESL57116	Die caste	Threaded metal one piece clamping screws Able to hold rods up to 16 mm in diameter Holds rods orthogonal (90 degrees) to one another. All metal constructions to carry heavy loads and prevent torque damage
ESL57117	Heavy duty	Thicker than normal 7 mm threaded clamping screws Thicker casting to support more load Accepts up to 16 mm rods Made of high strength powder coated alloy All metal constructions to carry heavy loads and prevent torque damage





**Tong Beaker**

Made of Stainless Steel with Coated Ends Rust free with superior quality Holds beakers from 50mL to 2000mL

- ESL56891 Rubber lined jaw
- ESL56892 Silicon lined jaw



**Tong Crucible Straight**

General purpose straight tongs, with corrugated jaws, used for handling of hot apparatus. Steel Chrome Plated,

- ESL56885 Length : 150 MM St. Steel
- ESL56886 Length : 200 MM St. Steel



**Crucible Tongs With Bow**

Crucible tongs with bow, General purpose tongs with bow and corrugated jaws used for handling hot apparatus.

- ESL57118 Blackened steel 15CM length
- ESL57119 Blackened steel 20CM length
- ESL56888 St. Steel 15CM length
- ESL56889 St. Steel 20CM length



**Tong-Beaker,With Rubber Sleeves Cover**

Jaws covered with rubber sleeves,Overall length of tong 30cm approx. Made of stainless steel

ESL56895



**Tong Flask St. Steel Cork Lined Jaw**

Stainless steel flask tongs with cork lined jaws. Fits flasks of any shape from 100-2000ml

ESL56894



**Suspension Clamps**

Used to suspend a thermometer over a hot plate or a specific heat specimen. Clamp holds items at a distance of 110mm from the support rod. The hook is adjustable and locks at any angle.

ESL57090

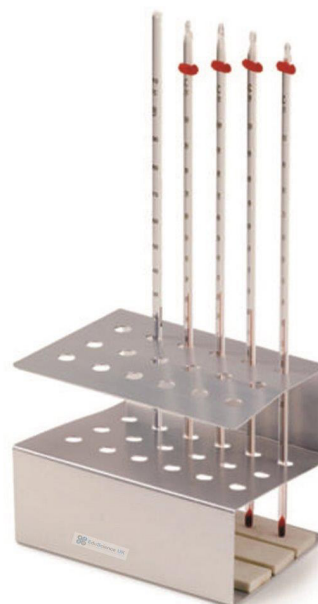


**Test Tube Stand Z Pattern - 200 X 125 X 75mm**

Sturdy, corrosion-resistant (Z) pattern with three rows of holes. Stands can nest together for easy storage. Not suitable for use with solution containing mercury salts.

- Size: 200 x 125 x 75mm
- Five holes: 28mm diameter
- Six holes: 19mm diameter
- Eight holes: 13mm diameter

ESL57123



**Thermometer Stand**

Thermometer Stand Supports 18 mm thermometers. Metal stand with a foam rubber cushion baseplate to protect thermometer bulbs. Size 165 x 120 x 125 mm.

ESL57122





**Funnel Stand**

Wooden, polished, with clamping screws. Rods are approx. 460 mm Length

- ESL57125 Single Rod dia 17.5 mm.  
Single base size 200 x 110 mm.
- ESL57126 Double Rod dia 16 mm.  
Double base size 290 x 110 mm



**Test Tube Rack Plastic**

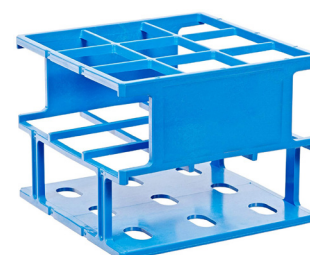
Test Tube Rack, Plastic  
Used for test tube storage 10mm dia. To 16mm dia.  
Material: Plastic injection, knock-down system  
Consists of 12 holes 18mm dia.  
**Dimension :** 18.00 (L) x 6.30 (W) x 10.50 cm (H)  
**Weight :** 0.100Kg

ESL57128

**Test Tube Half Rack**

Poly-wire blue re-enforced nylon

- ESL57130 Dia ,13 MM
- ESL57131 Dia ,16 MM
- ESL57132 Dia ,20 MM
- ESL57133 Dia ,25 MM
- ESL57134 Dia ,30 MM



**Test Tube Stand (Wire Pattern )**

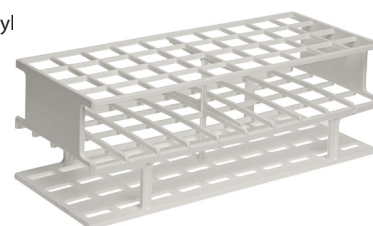
Test tube stand (wire pattern ) - 13mm x 90 Tubes

ESL57129

**Test Tube Rack**

Poly-wire blue-Re-enforced nyl

- ESL57135 Dia ,13 MM
- ESL57136 Dia ,16 MM
- ESL57137 Dia ,20 MM
- ESL57138 Dia ,25 MM
- ESL57139 Dia ,30 MM



**Test Tube Rack Wooden,**

Test tube stand wooden, 2 tier, wooden support with dovetail joining and 12 holes in two rows.

- ESL57144 12 X 22mm.
- ESL57145 12 X 25mm.

**Test Tube Rack**

Poly-grid test tube rack blue polypropylene

- ESL57141 Dia ,16 MM
- ESL57142 Dia ,20 MM
- ESL57143 Dia ,25 MM



**Test Tube Holder Wooden**

Made of hard wood with steel spring , the jaws will accept tubes up to 20 mm diameter.

ESL57148



**Test Tube Holder-Wire Pattern**

Plated spring steel wire holder with finger grip. The jaws will accept tubes up to 40 mm diameter and their alignment maintained by a wire collar. Overall length 16 cm.

ESL57149



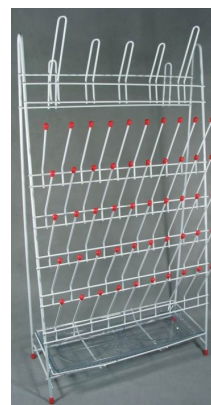


**Drying Rack,**

Wall mounted corrosion free

- ESL57151 20 PEGS
- ESL57152 30 PEGS
- ESL57153 48 Pegs ,coated wire
- ESL57154 55 Pegs,coated wire

Made of abs material  
 Made of steel / polyester  
 Plastic coated steel , wire tip are PVC coated size 500 x 400 mm  
 Coated steel , wire tip are PVC coated size 650 x 360 mm



**Tripod Stand**

all steel welded. Finished plated and legs are bent outward for stability.

- ESL57155 Length of one side 12.5 cm Top triangular,Height 20cm.
- ESL57156 Length of one side 15 cm Top triangular, Height 20cm.
- ESL57158 dia 12.5 cm Top circular,Height 20cm.
- ESL57159 dia 15 cm Top circular,Height 20cm.



**Cork Stopper Bark**

Cat. No	Size	Top	Length	Bottom
ESL57166	000	6	13	4
ESL57167	00	8	13	5
ESL57168	0	10	13	7
ESL57169	1	11	16	8
ESL57170	2	13	17	9
ESL57171	3	14	19	10
ESL57172	4	16	20	11
ESL57173	5	17	22	12
ESL57174	6	19	24	13
ESL57175	7	21	25	15
ESL57176	8	22	27	17
ESL57177	9	24	29	18
ESL57178	10	25	31	20
ESL57179	11	27	31	21
ESL57180	12	29	31	22
ESL57181	13	30	31	24
ESL57182	14	32	31	25
ESL57183	15	33	31	27
ESL57184	16	35	38	27
ESL57185	17	36	38	30
ESL57186	18	38	38	31
ESL57187	19	40	38	33
ESL57188	20	41	32	34

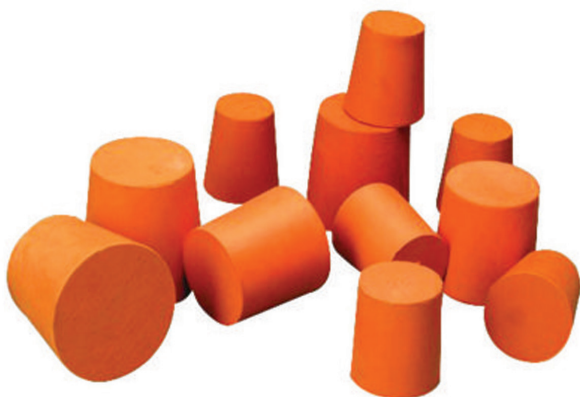


**Laboratory Jack**

Laboratory jack made of Aluminium

- ESL57161 10 X 10 CM Max. Height : 18cm
- ESL57162 15 X 15 CM Max. Height : 25cm
- ESL57163 20 X 20 CM Max. Height : 28cm





**Stopper Rubber**

Made of Solid, superior quality rubber resistance to acid, alkali and ammonia, suitable for schools, colleges and Universities.

Cat. No	Top	Length	Bottom
ESL57195	7	16	5
ESL57196	9	16	6
ESL57197	10.5	20	8
ESL57198	11.5	20	9
ESL57199	12.5	20	10
ESL57200	14	24	11
ESL57201	16	24	13
ESL57202	18	24	15
ESL57203	20.5	26	27
ESL57204	21	26	18
ESL57205	22.5	28	19
ESL57206	24.5	28	21
ESL57207	26.5	28	23
ESL57208	28.5	28	25
ESL57209	31	32	27
ESL57210	31	32	29
ESL57211	36	35	31
ESL57212	38.5	38.5	33
ESL57213	45.5	36.5	35
ESL57214	42.5	40.5	38
ESL57215	49.5	40.5	40



**Stopper Rubber One Hole, Pk Of 50 Pcs**

Assorted containing 7 pcs. Each of size 8, 9, 11, 13, 15mm bottom dia and 3 pcs. Each of 17, 21, 23, 25, 29mm bottom dia with one hole. Pack of 50 pcs. Any other sets can be supplied as per specifications.

ESL57219



**Stopper Rubber Two Holes, Pk Of 50 Pcs**

Assorted containing 7 pcs. Each of size 8, 9, 11, 13, 15mm bottom dia and 3 pcs. each of 17, 21, 23, 25, 29mm bottom dia. With two holes. Pack of 50 pcs. Any other sets can be supplied as per specifications.

ESL57236



**Cork Borer Sharpener**

Cork Borer Sharpener, Die-cast alloy. Suitable for all borers

ESL57279



**Cork Borer Set 6**

Nickel-plated finish. Complete with cleaning rod having good grip and pipes of thick gauge. Set of 6 sizes 4-10mm

ESL57277



**Cork Borer Set 12**

Nickel-plated finish. Complete with cleaning rod having good grip and pipes of thick gauge. Set of 12 sizes 4-18mm

ESL57278







**Stopper Rubber Silicon**

Made of Solid, superior quality Silicon resistance to acid, alkali and ammonia, suitable for schools, colleges and Universities.

Cat. No	Top	Length	Bottom
ESL57253	7	16	5
ESL57254	9	16	6
ESL57255	10.5	20	8
ESL57256	11.5	20	9
ESL57257	12.5	20	10
ESL57258	14	24	11
ESL57259	16	24	13
ESL57260	18	24	15
ESL57261	20.5	26	17
ESL57262	21	26	18
ESL57263	22.5	22	19
ESL57264	24.5	28	20
ESL57265	26.5	28	23
ESL57266	28.5	28	25
ESL57267	31	32	27
ESL57268	31	32	29
ESL57269	36	35	31
ESL57270	38.5	38.5	33
ESL57271	45.5	36.5	35
ESL57272	42.5	40.5	38
ESL57273	49.5	40.5	40



**Tubing Glass**

Made of Borosilicate glass 3.3, light wall, length 0.5mtr approx.

ESL57283	Dia : 5mm
ESL57284	Dia : 6mm
ESL57285	Dia : 7mm
ESL57286	Dia : 8mm
ESL57287	Dia : 9mm
ESL57288	Dia : 10mm
ESL57289	Dia : 12mm
ESL57290	Dia : 14mm
ESL57291	Dia : 16mm
ESL57292	Dia : 18mm
ESL57293	Dia : 20mm
ESL57294	Dia : 25mm



**Tubing Clip**

Tubing clip made of spring steel plated wire according to Mohr

ESL57351	Mohr	For tube dia up to 45 mm
ESL57352	Mohr	For tube dia up to 65 mm

Nickel plated, with projecting plate to prevent damage to tubing by end of screw, with hinged bottom bar for direct fitting and removed without access to ends of tube. Max. Opening 15 mm

ESL57353	Hoffmann	Max. Opening 15 mm
ESL57354	Hoffmann	Max. Opening 25 mm



**Glass Tube Cutter**

Glass tubing cutter, up to an outer diameter of 40mm.

ESL57349



**Tubing Connector**

Polypropylene, ruffled end for rubber tubing. May be autoclaved. To fit tubing nominal bore.

ESL57342	Y SHAPE 4 MM
ESL57343	Y SHAPE 6 MM
ESL57344	Y SHAPE 8 MM
ESL57346	T SHAPE 4 MM
ESL57347	T SHAPE 6 MM
ESL57348	T SHAPE 8 MM

**Tubing Silicon**

Seamless, non toxic, translucent very flexible suitable for connecting to glass, Pack per meter.

ESL57314	2mm x 1mm (Bore x Wall Thickness).
ESL57315	3mm x 1mm (Bore x Wall Thickness).
ESL57316	3mm x 1.5mm (Bore x Wall Thickness).
ESL57317	4mm x 1mm (Bore x Wall Thickness).
ESL57318	4mm x 1.5mm (Bore x Wall Thickness).
ESL57319	5mm x 1mm (Bore x Wall Thickness).
ESL57320	5mm x 1.5mm (Bore x Wall Thickness).
ESL57321	6mm x 1mm (Bore x Wall Thickness).
ESL57322	6mm x 1.5mm (Bore x Wall Thickness).
ESL57323	6mm x 2mm (Bore x Wall Thickness).
ESL57324	6mm x 3mm (Bore x Wall Thickness).
ESL57325	7mm x 1.5mm (Bore x Wall Thickness).
ESL57326	7mm x 2mm (Bore x Wall Thickness).
ESL57327	8mm x 1.5mm (Bore x Wall Thickness).
ESL57328	8mm x 2mm (Bore x Wall Thickness).
ESL57329	8mm x 3mm (Bore x Wall Thickness).
ESL57330	9mm x 2mm (Bore x Wall Thickness).
ESL57331	10mm x 2mm (Bore x Wall Thickness).
ESL57332	10mm x 3mm (Bore x Wall Thickness).
ESL57333	12mm x 2mm (Bore x Wall Thickness).
ESL57334	12mm x 3.5mm (Bore x Wall Thickness).
ESL57335	14mm x 3mm (Bore x Wall Thickness).
ESL57336	14mm x 3mm (Bore x Wall Thickness).
ESL57337	16mm x 3mm (Bore x Wall Thickness).
ESL57338	25mm x 4mm (Bore x Wall Thickness).

**Visking Tubing**

A cellulose based, selectively permeable material, in tube form, which can be used to demonstrate osmosis and dialysis separation techniques. 14mm diameter.

ESL57356	30 Mtr
eSL57357	5 Mtr

**Tubing Rubber**

Soft quality, resistant to acid and alkalis. Pack of 10 meters. Orange Color.

ESL57298	3 mm x 1 mm (Bore x Wall Thickness).
ESL57299	4 mm x 1 mm (Bore x Wall Thickness).
ESL57300	5 mm x 1.5 mm (Bore x Wall Thickness).
ESL57301	6 mm x 1.5 mm (Bore x Wall Thickness).
ESL57302	7 mm x 1.5 mm (Bore x Wall Thickness).
ESL57303	8 mm x 1.5 mm (Bore x Wall Thickness).
ESL57304	9 mm x 2 mm (Bore x Wall Thickness).
ESL57305	10 mm x 2 mm (Bore x Wall Thickness).
ESL57306	12 mm x 2 mm (Bore x Wall Thickness).
ESL57307	15 mm x 3 mm (Bore x Wall Thickness).
ESL57308	16 mm x 3 mm (Bore x Wall Thickness).
ESL57309	19 mm x 3 mm (Bore x Wall Thickness).
ESL57310	20 mm x 3.5 mm (Bore x Wall Thickness).
ESL57311	25 mm x 3.5mm (Bore x Wall Thickness).





**Bunsen Burner Nickel**

Nickel plated burner tube with rotatable air regulator and cylindrical connector. Mounted in pressure die costed base.

- ESL57362 For LPG gas
- ESL57363 For natural gas



**Neoprene Bunsen Burner Hose,**

Connect your burner to a fuel source.

- ESL57359 Length 2 FT (.6M)
- ESL57360 Length 3 FT (.9M)



**Bunsen Burner**

Piezo ignition, Adjustable flame, Refillable butane tank, Applications: Sterilizing, Welding, Heating, Technical Specification, Max. Temperature 1300 Fuel tank capacity 45 g, Working time 60 Min, **Dimension :** (H x W x D) mm 92 x 115 x 79

- ESL57367 PORTABLE
- ESL57368 LAB TORCH
- ESL57369 LAB PORTABLE



**Spirit Lamp**

Methylated Spirit Burner

ESL57371



**Bench Mats**

Made of cork, ideal for use with round bottom flask,

- ESL57372 For flask capacity 50-100 ml Diameter 80 mm
- ESL57373 For flask capacity 250 ml Diameter 100 mm
- ESL57374 For flask capacity 500 ml Diameter 120 mm

**Bench Mats**

Made from calcium silicate, ideal for use under Bunsen burner, well finished edges

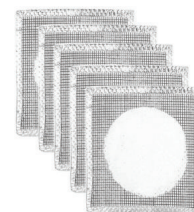
- ESL57375 Size : 150 x 150 mm
- ESL57376 Size : 200 x 200 mm
- ESL57377 Size : 230 x 230 mm
- ESL57378 Size : 300 x 300 mm



**Wire Gauze With Ceramic Centre**

Wire gauze with ceramic centres - high quality and extra strong

- ESL57379 Size : 125 x 125 mm
- ESL57380 Size : 150 x 150 mm



**Wooden Splints**

Soft dry wood for general laboratory use. Size 5 x 140 mm.

- ESL57386 Pack of 100
- ESL57387 Pack of 1000



**Spatula With Spoon**

One end flat and the other end spoon form, polished..

- ESL57390 Total length 12.5 cm
- ESL57391 Total length 15 cm
- ESL57392 Total length 20 cm





**Trowel**

Stainless steel, double ended with trowel-shaped scoops for handling large quantities of material. Length 175 mm and mean width 15 mm

ESL57396



**Stirring Bar**

Dia 10Mm X H - 250 mm PP.

ESL57397



**Magnetic Retriever**

Magnetic Retriever PTFE/Alnico V Magnet, 30cm, 2pcs/pack

ESL57398



**Pip-clay Triangle**

On stout iron wire, pipe-clay stems. Pk/10

- ESL57382 One side length 55 mm
- ESL57383 One side length 65 mm
- ESL57384 One side length 75 mm



**Spatula Chattaway**

One end flat and the other end bent up, polished.

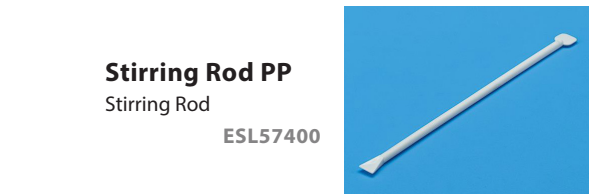
- ESL57388 Total length 15 cm
- ESL57389 Total length 20 cm



**Nuffield Raised Centre 14 cm**

Raised centre section, one end flat and bent up and other end formed into a scoop. Stainless steel, length 14 cm

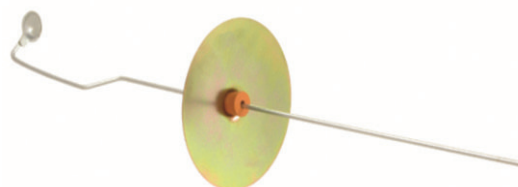
ESL57395



**Stirring Rod PP**

Stirring Rod

ESL57400



**Deflagrating Spoon With Cap**

Steel cup and rod held by cork in aluminium cap, length 35 cm and diameter of cap 90 mm cup 18 mm

ESL57402



**Wire Holder, Plastic Handle**

Wire holder with plastic handle

ESL57408



**Tube Combustion**

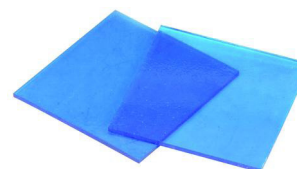
Borosilicate glass, open both ends, for oxidisation and reduction of chemical substances. Length 30 cm.

- ESL57410 OD 24 mm, Bore 20 mm
- ESL57411 OD 22mm, Bore 17mm
- ESL57412 OD 17mm, Bore 11mm

**Tube Combustion, Borosilicate Glass**

Borosilicate glass, for reduction of metal oxides with hydrogen. A small hole in the side of the lower end of the tube allows for escape of gas. Length 15 cm and dia. 2.5 cm.

ESL57413



**Cobalt Glass**

For potassium dry reaction

- ESL57405 SIZE : 7.5 X 5 CM
- ESL57406 SIZE : 5 X 2.5 CM





**Universal Indicator Paper PH 1-14**

This test paper covers the range pH1 to 14. Box of 10 books each of 20 leaves, 65 x 10mm. 12 colour matches are printed on each book cover.

ESL57421



**Cobalt Chloride Test Paper**

Heat sensitive, colour change blue to pink with moisture. Depending upon humidity, papers may be pink on receipt and will need drying before use. Box of 10 books.

ESL57425



**Litmus Paper**

10 books each with 20 strips.  
Red Pk/200 Strips: Range pH 8-5, colour change.

ESL57415

**Blue Pk/200 Strips**

Range pH 8-5, colour change.

ESL57417

**Neutral Pk/200 Strips**

Colour change to red or neutral.

ESL57419



**Parafilm**

No matter whether you wish to seal beakers, Erlenmeyer flasks, weighing bottles or graduated cylinders, the highly elastic and stretchable Parafilm® M laboratory film fits the opening of any vessel. It saves specimens from contamination or evaporating. Furthermore, it prevents fallen over flasks from spilling. Parafilm® M stretches up to 200 % of its original size and clings even around irregular shapes and surfaces.

- ESL57435      Size : 100 mm x 38 mtr
- ESL57436      Size : 100 mm x 75 mtr
- ESL57437      Size : 50 mm x 75 mtr



**Universal Indicator Paper PH 1-11**

Range pH 1 to 11 in clear colour coded steps. Colour chart is on the side of the plastic dispenser. Box of 10 books with twenty strips. 5m of 6mm paper.

ESL57423

**G Clamp**

- ESL57427      "Drop forged. Length 250 mm
- ESL57428      Drop forged. Length 200 mm
- ESL57429      Drop forged. Length 150 mm
- ESL57430      Drop forged. Length 125 mm
- ESL57431      Drop forged. Length 100 mm
- ESL57432      Drop forged. Length 75 mm
- ESL57433      Drop forged. Length 50 mm

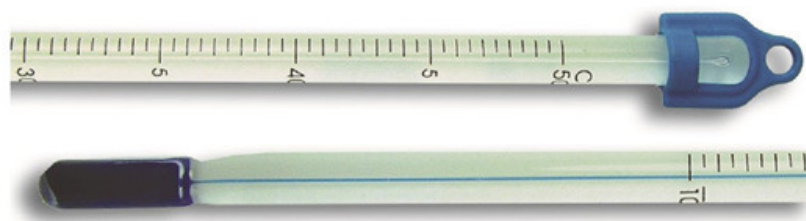


**Weight Ring**

Made of cast iron PVC coated ring for stabilizing Erlenmeyer flask immersed into water .

- ESL57440      For flask sizes: 100 to 500 ML , Weight 0.22 KG
- ESL57441      For flask sizes: 250 to 1000 ML , Weight 0.45 KG



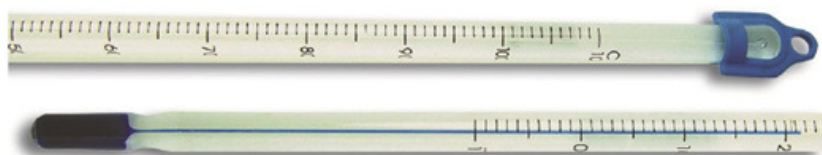


**Lab Thermometer**

Product Material: Glass tube with Kerosene filling (except \* - special brown filling for high range ),

Product Dimension :s 6.5mm dia x length

ESL57544	White bkd blue spirit	Range: -10 to 50 ° C, Division: 0.5 C, Accuracy: /-0.5 C @ 35 C
ESL57545	White bkd blue spirit	Range: -30 to 120 ° F, Division: 1.0 F , Accuracy: /-0.2 F @ 95F
ESL57546	White bkd blue spirit	Range: -35 to 50 ° C, Division: 1.0 C, Accuracy: /-1.0 C @ 35 C
ESL57547	White bkd blue spirit	Range: -20 to 110 ° C &F, Division: 1.0 C&F , Accuracy: /-1.0 C @ 35C
ESL57548	White bkd blue spirit	Range: -20 to 150 ° C&F, Division: 1.0 C&F, Accuracy: /-1.0 C @ 35 C
ESL57549	White bkd blue spirit	Range: 0 to 260 C&F, Division: 1.0 C&F, Accuracy: /-2.0 C @ 90 C
ESL57550	White bkd blue spirit	Range: 0 to 230 F, Division: 2.0 F, Accuracy: /-0.2 F @ 95 F
ESL57551	White bkd blue spirit	Range: -20 to 110 ° C, Division: 1.0 C, Accuracy: /-1.0 C @ 35 C
ESL57552	White bkd blue spirit	Range: -20 to 110°C, Division: 0.5 C, Accuracy: /-1.0 C @ 35 C
ESL57553	White bkd blue spirit	Range: 0 to 300 F, Division: 2.0 F, Accuracy: /-0.2 F @ 95 F
ESL57554	White bkd blue spirit	Range: -20 to 150 C, Division: 1.0 C, Accuracy: /-1.0 C @ 35 C
ESL57555	White bkd blue spirit	Range: 0 to 500 F, Division: 2.0 F, Accuracy: /-0.2 F @ 95 F
ESL57556	White bkd blue spirit	Range: -10 to 260 ° C, Division: 1.0C, Accuracy: /-2.0 C @ 90 C
ESL57557	White bkd blue spirit	Range: -10 to 210 ° C, Division: 1.0 C, Accuracy: /-2.0 C @ 90 C
ESL57558	White bkd brown spirit	Range: -10 to 33° C, Division: 2.0 C, Accuracy: /-2.0 C @ 90 C
ESL57559	White bkd brown spirit	Range: -10 to 300 ° C, Division: 1.0 C, Accuracy: /-2.0 C @ 90 C 4
ESL57560	White bkd brown spirit	Range: -10 to 360 ° C, Division: 2.0 C, Accuracy: /-2.0 C @ 90 C
ESL57561	White bkd blue spirit	Range: -1 to 51 ° C, Division: 0.1 C, Accuracy: /-1.0 C @ 35 C
ESL57562	White bkd blue spirit	Range: -1 to 51 ° C, Division: 0.2 C, Accuracy: /-1.0 C @ 35 C
ESL57563	White bkd blue spirit	Range: -1 to 101 ° C, Division: 0.2C, Accuracy: /-1.0 C @ 35 C



**Lab Thermometer**

Product Material: Glass Tube: Kerosene filled

These spirit filled thermometers use specially selected filling materials covering temperatures down to -200c. Normal fillings are coloured red on a white back glass but alternative colours are available as shown. The -200 ° C range thermometers are filled with a colourless liquid. Thermometers normally supplied with the non roll cap with ring.

ESL57564	White bkd red spirit , Length 200MM	Range: -10 to 60 ° C, Division: 1.0 C, Accuracy: /-1.5 C @ 35 C
ESL57565	White bkd red spirit , Length 250MM	Range: -10 to 150 ° C, Division: 1.0 C, Accuracy: /-1.0 C @ 35 C
ESL57566	White bkd red spirit , Length 305 MM	Range: -10 to 110 ° C, Division: 1.0 C , Accuracy: /-1.0 C @ 35 C
ESL57567	White bkd blue spirit , Length 305MM	Range: -10 to 110 ° C, Division: 1.0 C, Accuracy: /-1.0 C @ 35 C
ESL57568	White bkd red spirit , Length 305MM	Range: -10 to 150 ° C, Division: 1.0 C, Accuracy: /-1.0 C @ 35 C
ESL57569	White bkd blue spirit , Length 305MM	Range: -10 to 200 ° C, Division: 1.0 C, Accuracy: /-2.0 C @ 90 C
ESL57570	White bkd red spirit , Length 305MM	Range: -10 to 110 ° C, Division: 1.0 C, Accuracy: /-1.0 C @ 35 C
ESL57571	White bkd red spirit , Length 305MM	Range: -10 to 110 ° C, Division: 0.5 C, Accuracy: /-2.0 C @ 90 C
ESL57572	White bkd red spirit , Length 205MM	Range: -10 to 150 ° C, Division: 1.0 C, Accuracy: /-2.0 C @ 35 C
ESL57573	White bkd red spirit , Length 205MM	Range: -10 to 110 ° C, Division: 1.0 C, Accuracy: /-1.5 C @ 35 C





**Lab Thermometer**

This entry level range is now available in a choice of red, green or blue spirit filling and have Tri-top, moulded glass non-roll device to help prevent breakage. These thermometers are printed with a clear, easy-to-read scale making them particularly suitable for student use. Dia 76 mm, The initial TM Brand Thermometers are supplied as standard in protective PVC packaging in pack of 10 thermometers.

<b>ESL57574</b>	Red spirit , length 300 mm	Range: -10 to 50 ° C, Division: 0.5 C, Accuracy: /-0.5 C @ 35 C
<b>ESL57575</b>	Red spirit , length 200 mm	Range: -10 to 110 ° C, Division: 1.0 C, Accuracy: /-1.5 C @ 35 C
<b>ESL57576</b>	Red spirit , length 150 mm	Range: -10 to 110 ° C, Division: 1.0 C, Accuracy: /-2.0 C @ 35 C
<b>ESL57577</b>	Blue spirit, length 300 mm	Range: -10 to 50 ° C, Division: 0.5 C, Accuracy: /-0.5 C @ 35 C
<b>ESL57578</b>	Blue spirit, length 300 mm	Range: -10 to 110 ° C, Division: 1.0 C, Accuracy: /-1.5 C @ 35 C
<b>ESL57579</b>	Blue spirit, length 300 mm	Range: -10 to 110 ° C, Division: 1.0 C, Accuracy: /-1.5 C @ 35 C
<b>ESL57580</b>	Blue spirit, length 200 mm	Range: -10 to 110 ° C, Division: C 1.0 C, Accuracy: /-1.5 C @ 35 C
<b>ESL57581</b>	Blue spirit, length 150 mm	Range: -10 to 110 ° C, Division: 1.0 C, Accuracy: /-2.0 C @ 35 C



**Lab Thermometer**

Product Material: Glass Tube

The EduScience break-safe range of laboratory thermometers are encapsulated in PVC to contain any glass or filling material in the event of breakage.

Immersion: 76mm

<b>ESL57582</b>	Filling : Blue LoTox	Range : -10 to 50 ° C, Division: 0.5 C, Length: 305mm, Accuracy: /-0.5 C @ 35 C
<b>ESL57583</b>	Filling : Blue LoTox	Range : -10 to 50 ° C, Division: 0.5, Length: 305mm, Accuracy: /-0.5 C @ 35 C
<b>ESL57584</b>	Filling : Blue LoTox	Range : -10 to 110 ° C, Division: 0.5, Length: 155mm, Accuracy: /-1.0 C @ 35 C
<b>ESL57585</b>	Filling : Blue LoTox	Range : -20 to 110 ° C, Division: 1.0 C, Length: 305mm, Accuracy: /-1.0 C @ 35 C
<b>ESL57586</b>	Yellow Back with Red Spirit Filling	Range : -20 to 110 ° C, Division: 1.0 C, Length: 305mm, Accuracy: /-1.0 C @ 35 C

**Lab Thermometer Kit For Classroom**

Blue plastic tray which fits into standard classroom storage systems. Includes a variety of laboratory thermometers and a set of classroom notes.

- 8 x 150mm initial brand green filled thermometers
- 7 x 300mm initial brand green filled thermometers
- 1 x 300mm un calibrated green filled thermometer

**Boxed Dimensions :** 334 x 232 x 50mm

ESL57587



**Lab Thermometer Investigation Science Kit**

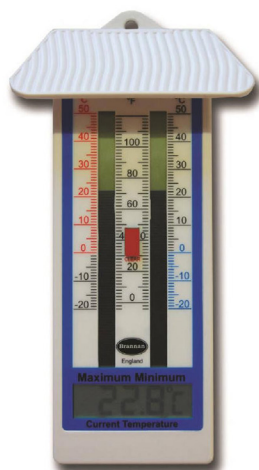
Blue plastic case enclosing a variety of instruments and a set of investigative science notes.

- 4 x 150mm initial brand green filled thermometers
- 4 x 200mm initial brand green filled thermometers
- 2 x small classroom thermometers
- 1 x dial type maximum/minimum thermometer
- 1 x soil temperature thermometer
- 1 x "Spot-check" clinical thermometer

**Boxed Dimensions :** 334 x 232 x 50mm

ESL57588





**Max Min Thermometer Digital Classic Design**

Large digital Max Min thermometer in a classic design with roof for indoor or outdoor use, this Max Min thermometer shows current temperatures and also maximum and minimum temperatures reached since the previous reset. A reliable digital Max Min thermometer complete with batteries included.

**Product Specifications :**

Temperature Range : -20 to 50 ° C&F

Accuracy: /-1 ° C

IP Rating: IP 65

Battery: 1 x AAA

CE ,RoHS/WEE E: Compliant

**LCD Dimensions :** 16 x 52mm (current temperature display)

**Product Dimensions :** 203 x 100 x 30mm (when roof in horizontal position)

**Product Weight :** 135g

ESL57594



**Max Min Thermometer Digital Mini Lidded**

Digital Max Min thermometer in white case with roof. Suitable for outdoor or indoor use. This Max Min thermometer features a triple display which simultaneously shows minimum, maximum and the current temperature. Easy push button to reset the Max and Min temperatures and also comes complete with batteries included.

**Product Specifications :**

Temperature Range : -10 to 50 ° C&F

Display Resolution : 0.1C

Accuracy : /-2 ° C

Sampling Rate : Every 10 seconds

Water Resistant : To IP65

Battery usage : 1 x AAA (Included)

CE ROHS/WEEE : Approved

ESL57595



**Hygrometer Hair Type**

For measuring of relative humidity in air 0-100 x 1% r.h. in plastic case.

ESL57590



**Hygrometer Thermo Hygrometer**

For measuring of relative humidity and temperature both in room and air. Range -10 to 50 ° C for thermometer and 0 to 100% for Hygrometer in plastic case.

ESL57591



**Thermometer Dial**

For measuring temperature range -10 to 50 ° C in plastic case.

ESL57593



**Lab Thermometer Classroom Wall Kit With Chart**

Colourful 380mm plastic wall thermometer and chart for recording temperatures.

**Boxed Dimensions :** 365 x 287 x 10mm

ESL57589







**Max Min Digital Heavy Duty , Green**

Large Digital Max Min Thermometer  
 Suitable for outdoor and indoor use in a green casing. Triple display shows minimum, maximum and current temperature simultaneously. This digital Max Min thermometer can be easily switched from C to F by a push button and it is also easy to reset the Max Min temperature.  
 Temperature Range : -10 to 40 ° C&F  
 Display Resolution : 0.11C  
 Accuracy : +/-1C  
 Sampling Rate : Every 10 seconds  
 Water Resistant : To IP65  
 Battery usage : 1 x AA (Included)  
 CE , ROHS/WEEE: Approved.

ESL57597



**Max Min Thermometer Digital Heavy Duty , White**

Large Max Min Digital Thermometer  
 Suitable for outdoor and indoor use in a white casing. Triple display shows minimum, maximum and current temperature simultaneously.  
 Temperature Range: -10 to 40 ° C&F  
 Display Resolution : 0.11 ° C  
 Accuracy : +/-1 ° C  
 Sampling Rate : Every 10 seconds  
 Water Resistant : To IP65  
 Battery usage : 1 x AA (Included)  
 CE ,ROHS/WEEE : Approved.

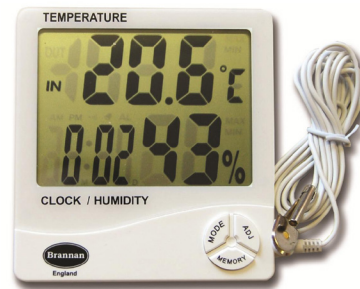
ESL57596



**Max Min Thermometer Digital Waterproof Boxed Grey**

Outdoor Digital Max Min Thermometer  
 Outdoor digital Max Min thermometer in a grey and white case with a large splash-proof display for outdoor and indoor use.  
**Product Specifications :**  
 Temperature Range : -40 to 70 ° C&F  
 Divisions : 0.1 ° C  
 Accuracy : +/-1. ° C  
 Battery : 1.5 volt (AAA) or equivalent (Included)  
 CE,ROHS/WEEE : Approved

ESL57599



**Max Min Thermo&Hygrometer Electronic Jumbo**

Jumbo Digital Max Min Thermometer & Hygrometer  
 Jumbo digital Max Min thermometer featuring large displays for indoor temperature and humidity or outdoor temperature. Complete with 2 metre cable for the outdoor probe.  
**Product Specifications :**  
 Temperature Range: Indoor: -10 to 50 °C&F / Outdoor: -50 to 70 ° C&F  
 Humidity Range: 20 to 99% RH (when humidity 20%, display 10%RH directly)  
 Divisions: 0.1 ° C  
 Accuracy: +/-1 ° C  
 Battery : 1.5 volt (AAA) or equivalent x 1 piece (Included)  
 CE ,ROHS/WEEE: Approved

ESL57598



**Max Min Thermometer Dial (Bimetallic)**

Bimetallic Max Min Thermometer  
 This Bimetallic Max Min Thermometer traditional design is activated by a bi-metal temperature sensing element. The Max Min Thermometer is reset by turning the button in the centre of the dial. A simple instrument to record the highest and lowest temperatures day and night.  
 C and F.  
**Product Specifications :**  
 Thermometer Range : -20 to 50 ° C&F  
 Humidity Range : 0 to 100%RH  
 Thermometer Accuracy : +/- 1 ° C between 0 and 30C, otherwise +/- 2 ° C  
 Humidity Accuracy : +/- 5%RH between 40 and 80%RH, otherwise +/- 9%RH

ESL57600





**Max-Min Thermometer Electronic**

Digital Max Min Indoor Outdoor Thermometer  
 Digital Max Min indoor outdoor thermometer with white moulded case and two displays for outdoor and indoor temperature, each display has a maximum and minimum recording facility and can be displayed in °C or °F. This Max/Min thermometer comes complete with stand and 2.5m cable for the outdoor stainless steel probe and batteries are included.  
 Temperature Range : Indoor: 0 to 50 ° C&F / Outdoor: -50 to 70°C&F  
 Divisions : 0.1 ° C  
 Accuracy : /-2 ° C between -20 and 0°C /-1 ° C between 0 and 50 ° C /-2 ° C between 50 ° and 70 ° C otherwise /-3 ° C  
 Sampling Rate : 10 second  
 Battery : 1.5 volt (AAA) or equivalent x 2 pieces (Included)  
 CE,ROHS/WEEE : Approved

ESL57601



**Max Min Thermometer Lidded Green Push Button**

Euro Lid Max Min Thermometer  
 The Euro lidded Max Min thermometer has a modern design with a green scale on a white back in a moulded green plastic case and features a push button reset. A popular greenhouse Max Min thermometer which is used around the world.

**Product Specifications :**  
 Nominal Range : -35 to 50°C&F  
 Accuracy : /- 2.0°C  
 Tolerance between limbs : /- 1.5°C

ESL57602



**Max Min Thermometer White Quick-Set**

Quick Set Max Min thermometer  
 The Quick Set Max Min thermometers are a popular design in a white casing and blue printed temperature with a push button reset C and F.  
**Product Specifications :**  
 Nominal Range : -35 to 50 ° C&F  
 Accuracy : /- 2.0 ° C  
 Tolerance between limbs : /- 1.5 ° C

ESL57603

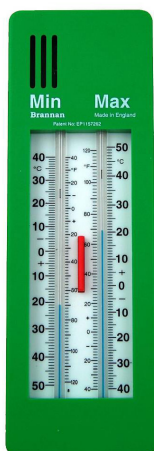


**Max Min Thermometer White Magnet Re-Set**

The Magnet Reset Max Min Thermometer has a modern design with blue coloured scale in moulded white plastic complete with resetting magnet. These Max Min thermometers use a patented blue coloured liquid to replace the mercury but retain the ease of operation of the mercury instruments. °C & °F.

**Product Specifications :**  
 Nominal Range : -35 to 50 ° C&F  
 Accuracy : /- 2.0 ° C  
 Tolerance between limbs : /- 1.5 ° C

ESL57604



**Max Min Thermometer Heavy Duty , Green**

Heavy Duty Max Min Thermometer  
 A classic Max Min thermometer design that has long been popular. This heavy duty Max Min thermometer has a clear and easy to read black temperature scale and is simple to reset with a push button.  
 C and F.

**Product Specifications :**  
 Nominal Range : -40 to 50 ° C&F  
 Accuracy : /- 2.0 ° C  
 Tolerance between limbs : /- 1.5 ° C

ESL57605



**Max Min Thermometer cream Quick-set**

Quick Set Max Min thermometer  
 The Quick Set Max Min thermometers have a popular design and come in a cream moulding with black printed temperature scale. Our low cost Max Min thermometer model ideal for the greenhouse which has a push button resetting device.  
 C and F.

**Product Specifications :**  
 Nominal Range : -35 to 50 ° C&F  
 Accuracy : /- 2.0 ° C  
 Tolerance between limb s : /- 1.5 ° C

ESL57606





**Thermometer Infrared Hand Held**

**Product Features**

Built-in laser pointer Over range indication  
Large backlit LCD Data hold and power off function

**Product Specifications**

Optical Resolution (D:S): 13:1  
Emissivity: Fixed at 0.95  
Response Time: <500ms  
Response Wavelength: 8 to 14mm  
Basic Accuracy: /-2%, /-2°C / 4°F  
Resolution: 0.1°C/°F  
Operating Conditions: 0 to 50°C <95%RH (non-condensing)  
Storage Conditions: -20 to 70°C <80%RH  
Diode Laser: Output <1mW, Wavelength 630 to 670, class II  
Battery: 1 x 9V (included)  
CE & RoHS/WEEE: Compliant

**Product Dimensions :** Packaged: 228 x 133 x 60mm

Unpackaged: 155.5 x 98.8 x 27.5mm

**LCD Dimensions :** 26.5 x 25.6mm

-50 to 550°C (-58 to 1022°F) - 38/702/0

**ESL57612**

-50 to 350°C (-58 to 662°F) - 38/701/0

**ESL57613**

**Thermometer Infrared Compact Hand Held**

**Product Features**

Built-in laser pointer Over range indication Large backlit LCD Data hold and power off function

**Product Specifications :**

Optical Resolution (D:S): 12:1  
Emissivity: Fixed at 0.95  
Response Time: <500ms  
Response Wavelength: 8 to 14m  
Basic Accuracy: /-2%, /-2 C / 4 F  
Resolution: 0.1 C/°F  
Operating Conditions: 0 to 50 C <95%RH (non-condensing)  
Storage Conditions: -20 to 70 C <80%RH  
Diode Laser: Output <1mW, Wavelength 630 to 670, class II  
Battery: 1 x 9V (included)  
CE RoHS / WEEE: Compliant

**LCD Dimensions :** 24.5 x 25mm

**Product Dimensions :** Packaged: 228 x 133 x 60mm

Unpackaged: 134 x 89 x 36mm

-50 to 800°C (-58 to 1472°F)

**ESL57608**

-50 to 500°C (-58 to 932°F)

**ESL57609**



**Thermometer Infrared Dual Laser**

**Product Features**

Precise IR and K-Type input temperature measurement  
Built-in dual laser pointers REC datalogger function for 12 points  
Adjustable emissivity: 0.1 to 1.0 °°F selectable  
MAX/MIN/DIF/AVG record Large backlit LCD  
Trigger lock Adjustable High/Low alarm  
Automatic range selection, data hold and power off function  
Supplied in protective bag

**Product Specifications**

Optical Resolution (D:S): 13:1  
Response Time: <250ms  
Response Wavelength: 8 to 14mm  
IR Basic Accuracy: -50 to 0°/°F: /- 4°/7°F  
0 to 500°/°F: /-1.5% /-2°/3.6°F  
Above 500°/°F: /-2% /-2°/3.6°F  
K-Type Basic Accuracy: -50 to 1370°/°F: /- 1.5% /-1°/1.8°F  
Emissivity: Adjustable 0.1 to 1.0  
Resolution: 0.1°/°F  
Operating Conditions: 0 to 50° <95%RH (non-condensing)  
Storage Conditions: -20 to 70° <80%RH  
Memory: Storage of 12 readings  
Response Time: 1 second  
Battery: 1 x 9V (included)  
CE & RoHS/WEEE: Compliant

**LCD Dimensions :** 35 x 35mm

**Product Dimensions :** Packaged: 250 x 125 x 65mm

Unpackaged: 192 x 97 x 59mm

-50 to 1370°C (-58 to 2498°F)

**ESL57610**

-50 to 1050° (-58 to 1922°F)

**ESL57611**





**Thermometer Infrared Body Temperature**

**Body Temperature Thermometer**  
 Non-contact and hygienic infrared body temperature thermometer specially designed to take the body temperature of a person regardless of room temperature. The body temperature thermometer has a fast response time allowing a greater number of measurements to be taken in a short time. Designed to eliminate the chance of cross-contamination, it is ideally suited for use in schools, business and other environments where a large number of people are coming into contact with one another.

**Features**

- Easy and safe
- Selectable C or F
- Set alarm value
- Selectable body or surface temperature
- Memorization of the last 32 measurements
- Supplied with battery, full instructions and protective bag
- Laser targeting
- Trigger lock
- Automatic data hold
- Backlit LCD display

**Products Specifications**

Measuring Range: In Body Mode: 32 to 42.5C (90 to 108°F) - In Surface Temp Mode: 0 to 60 C (32 to 140 F)  
 Operating Temp: 10 to 40°C (50 to 104°F)  
 Storage Temp: 0 to 50°C (32 to 122°F)  
 Accuracy: +/-0.3°C (or 0.54°F)  
 Response Time: 0.5 second  
 Relative Humidity: <85%  
 Emissivity: 0.95 fixed value  
 Measuring Distance: 5 - 15cm  
 Resolution: 0.1°C (0.1°F)  
 Battery: 2 x AA (Supplied)

ESL57614



**Thermometer Infrared Forehead**

**Infrared Forehead Thermometer**  
 Ease of Use  
 Taking measurements of forehead temperature is quick, simple and non intrusive with this infrared forehead thermometer.  
 Can measure both forehead temperature and the surface temperature of object.  
 Measurements can be taken while the patient is asleep.  
 Stores up to 20 readings in the internal memory which helps track changes in the temperature of the patient.  
 Device will warn user if the temperature of the patient is too high or too low by way of a fever alarm.

**Safe and Hygienic**  
 Non contact measurements avoid the accumulation of bacteria, and reduce the need for cleaning and sterilisation of the forehead thermometer during normal use.  
 No danger from broken glass or swallowing the thermometer filling liquid (mercury or spirit).  
 Robust ergonomic design manufactured from tough engineering plastics.  
 More comfortable and convenient than anal and oral reading thermometers, especially for children.  
**Energy Efficient**  
 The forehead thermometer will automatically switch off after 10 seconds of inactivity.

**Details**

Forehead Thermometer Temp. Mode: 32 to 42.2°C ( 89.6 to 108°F)  
 Milk Temp. Mode: 0 to 100°C ( 32 to 212°F)

**Products Specifications**

Temperature Measurement Range:  
 Forehead Temp. Mode: 32 to 42.2°C ( 89.6 to 108°F)  
 Milk Temp. Mode: 0 to 100°C ( 32 to 212°F)  
 Accuracy: +/-0.2°C ( /-0.4°F)  
 Response Time: 1 second  
 Battery: 2 x AAA (battery life approx 1000 operations)  
 CE, ROHS/WEEE: Approved  
**Product Weight :** 119g  
**Product Dimensions :** 143mm x 60mm x 50mm

ESL57615





**Thermometer Infrared Ear Thermometer**

Infrared Digital Ear Thermometer

A quick and easy infrared ear thermometer suitable for all ages. The infrared ear thermometer with digital display and memory comes complete with protective bag and 20 X replacement probe covers. Especially suited with use with babies, young children and the elderly. Pack of 20 replacement probe covers also available.

**Product Specifications :**

- Measuring Temperature Range : 35.5 to 42°C°F
- Displayed Temperature Range : 34 to 44°C°F
- Operating Temperature Range : 16 to 35°C ( 60.8 to 95.0 ° F)
- Operating Relative Humidity : 80%RH
- Divisions : 0.1°C°F
- Accuracy : /-0.2°C Between 35 and 42°C ( /-0.4°F between 95.9 and 107.6°F)
- Battery : 2 x AAA (Supplied)
- LCD **Dimensions :** 10mm x 20mm
- Product Dimensions :** 140mm x 70mm x 40mm

ESL57616



**Clinical Thermometer Digital Flexi-Head**

Easy to use digital flexi-head thermometer suitable for all ages especially babies, young children and the elderly. This model is the waterproof flexible probe model, suitable for oral use. Packaged in a clear plastic case with full instructions

**Product Specifications :**

- Temperature Range: 32 to 42°C
- Divisions: 0.1°C
- Accuracy: /-0.1°C Between 35.5°C and 42°C, otherwise /-0.2°C
- Response Time:\* Rectal: Approx 9 - 11 seconds
- Axillary: Approx 23 - 29 seconds
- Oral: 15 - 19 seconds
- Battery: LR41 or equivalent x 1 piece (Included)

ESL57621



**Thermometer Digital Probe With Timer**

Digital hand-held test thermometer with alarm function, twin displays, 1m cable and 235mm stainless steel probe. Featuring data hold and Max Min function. Includes battery, and hanger, stand and magnetic fixtures.

**Product Features:**

- Dual display for temperature and timer, Programmable high/low alarm,
- Wide measurement range, Maximum/Minimum temperature memory,
- Celsius and Fahrenheit interchangeable, Data hold function, 99 hour countdown timer, Timer setting memory
- Timer elapse time display, Stainless steel probe, Wall mount keyhole, Magnetic attachment, Flip out desk stand

ESL57617

**Thermometer Digital Probe With Timer**

Digital hand-held test thermometer with alarm function, twin displays, 1m cable and 235mm stainless steel probe. Featuring data hold and Max Min function. Includes battery, and hanger, stand and magnetic fixtures.

**Product Features:**

- Dual display for temperature and timer, Programmable high/low alarm,
- Wide measurement range, Maximum/Minimum temperature memory,
- Celsius and Fahrenheit interchangeable, Data hold function, 99 hour countdown timer, Timer setting memory
- Timer elapse time display, Stainless steel probe, Wall mount keyhole, Magnetic attachment, Flip out desk stand

ESL57617



**Thermometer Digital Oral**

Easy to use digital oral thermometer suitable for all ages especially babies, young children and the elderly. This oral thermometer is the standard rigid probe model, suitable for oral use. Packaged in a clear plastic case with full instructions and battery included.

**Product Specifications :**

- Temperature Range: 32 to 42°C
- Ambient Temperature during use: 5 to 35°C (80% RH)
- Storage Temperature : -25 to 55°C (95% RH)
- Divisions : 0.1°C
- Accuracy : /-0.1°C between 35.5 and 42°C, otherwise /-0.2°C
- Battery: LR41 or equivalent x 1 piece (Included)

ESL57619





### Balance 2 Pan, Plastic

Designed specially for small students use. Made from not-toxic high quality plastic, with no sharp corners. The total balance comprises of only 6 components, which can be easily assembled and disassembled. Both of the weighing containers are of different colours and bucket shaped for use with either of liquids or solids and are washable. Since the buckets are pivoted, the objects can be placed even on the edge without affecting the accuracy of measurement. Includes a broad tip-resistant base sliding poise for easy zeroing and check rod for support of off-centre load. Capacity 2kg Readability 1g.

ESL57623



### Balance, Physics Balance 2 Pan, Hydrostatic

Hydrostatic Balance is useful for specific gravity experiments. Similar to analytical balance without any casing, but with one additional pan suspended through smaller frame. This pan has a hook underneath for suspending items in specific gravity experiments. Balance has detachable pans and is mounted on well-polished wooden base. Capacity 250g Sensitivity 5mg.

ESL57626



### Balance Triple Beam

Single top pan, low form, suspension. Three graduated beams with notches for positioning sliding masses. Spring loaded zero adjust and magnetic damping gives stability and accuracy. Weighing capacity 610g with accuracy of 0.1g, expandable to 2610g with the use of supplementary masses.

Stainless Steel Pan, 150mm Diameter

Supplementary Masses: 2 x 1000g 1 x 500g.

Three notched Weighing Beams: 10g x 0.1g, 100g x 10g, 500g x 100g

ESL57630



### Balance Table Top 2 Pan, Roberval, 2 Kg

Simple model, suitable for teaching, made of steel plate and pans are of metal. 2 kg

ESL57627



### Bathroom Scale Mechanical

Bath room scale mechanical measuring range 0 - 180 kg

ESL57692



### Bathroom Scale Digital

Bath room scale digital measuring range 0 - 180 kg

ESL57694



### Height & Weight Scale Basic

Height and weight scale, measuring range 0-200 kg

ESL57689



### Height & Weight Scale Advance

Height and weight scale, measuring range 0-200 kg

ESL57690





**Spring Balance**

Newton Meters, robust plastic transparent body, overall length 285mm approx. with upper and lower suspension hooks, with zero adjustment, scales are both in grams and Newtons.

- ESP60047 Measuring : 100gm/1n, 1gm
- ESP60048 Measuring : 250gm/2.5N, 5gm
- ESP60049 Measuring : 500gm/5n, 10gm
- ESP6005 Measuring : 1kg/10n, 20gm
- ESP60051 Measuring : 2kg/20n, 40gm
- ESP60052 Measuring : 3kg/30n, 60gm
- ESP60053 Measuring : 5kg/50n, 100gm



**Spring Balance**

PRECISION DYNAMOMETER, The Precision Dynamometer is available in range of weight capacities and scales. They are incredible precise and are suitable for measuring weights, masses and forces. Each different weight capacity is colour coded for ease of identification. As well as offering a high level of precision, these dynamometer are also easy to read enabling accurate readings to be taken quickly and precisely.

- ESP60060 Measuring : 100gm/1n, 2gm
- ESP60061 Measuring : 250gm/2.5N, 5gm
- ESP60062 Measuring : 500gm/5n, 10gm
- ESP60063 Measuring : 1kg/10n, 20gm
- ESP60064 Measuring : 2kg/20n, 40gm
- ESP60065 Measuring : 3kg/30n, 60gm
- ESP60066 Measuring : 5kg/50n, 100gm



**Spring Balance**

force meter, Balance designed to work for mass and force activity. Dual calibrated in grams and Newtons.

- ESP60054 Measuring : 250gm/2.5N, 5gm
- ESP60055 Measuring : 500gm/5n, 10gm
- ESP60056 Measuring : 1kg/10n, 20gm
- ESP60057 Measuring : 2kg/20n, 40gm
- ESP60058 Measuring : 3kg/30n, 60gm
- ESP60059 Measuring : 5kg/50n, 100gm



**Spring Balance**

balance spring pocket size, moulded in plastic, reading scale on both sides.

- ESL57633 Measuring : 1.5 Kg, 25gm
- ESL57634 Measuring : 3 kg, 50gm
- ESL57635 Measuring : 6 kg, 100gm
- ESL57636 Measuring : 10 kg, 250gm



**Balance Digital- 600G/0.01G**

Xlogger Digital Balance - 600g/0.01g  
A superb digital balance for a competitive price. The XLE1054 offers multiple unit conversions, RS232 interface, parts counting, percentage weighing and dynamic weighing.

The unit has two backlit digital displays, one as seen above and a second at the rear so that the whole class may see the results displayed.

The XLE1054 may also be used to supplement the Xlogger data logging system. The Xlogger interface may be connected directly to the USB port of a computer running Excel and data is automatically imported and may be processed in a multitude of ways.

The balance comes complete with low voltage power adapter (It also operates on 6 x AA cells), wind shield, 500.00g calibration weight and full user instructions.

ESL57663





### Balance Digital Basic

High precision load cell. Rugged Plastic Housing. Big size Stainless Steel Platter. High contrast easy to read LCD display. Built-in rechargeable battery. Height adjustable feet. Full capacity subtraction. Stabilization time 1.5 seconds. Overload Protection.

Below Balance Weighing Facility. Checking Weighing, piece counting function. Can be contain bubble level. Pan size: 143 X 192mm

<b>ESL57664</b>	Capacity : 500 G , Readability : 0.1 G
<b>ESL57665</b>	Capacity : 1000 G , Readability : 0.1 G
<b>ESL57666</b>	Capacity : 2000 G , Readability : 0.1 G
<b>ESL57668</b>	Capacity : 5000 G , Readability : 0.1 G



### Balance Digital Basic

High precision load cell. Rugged Plastic Housing. Big size Stainless Steel Platter. High contrast easy to read LCD display. Built-in rechargeable battery. Height adjustable feet. Full capacity subtraction. Stabilization time 1.5 seconds. Overload Protection.

Below Balance Weighing Facility. Checking Weighing, piece counting function. Can be contain bubble level. Pan size: 128 X 157mm

<b>ESL57669</b>	Capacity : 300 G , Readability : 0.01 G
<b>ESL57670</b>	Capacity : 600 G , Readability : 0.01 G
<b>ESL57671</b>	Capacity : 1000 G , Readability : 0.01 G
<b>ESL57672</b>	Capacity : 2000 G , Readability : 0.01 G



### Balance Digital Precision

High precision load-cell, compact design. Full plastic housing. Stainless steel Platter. Super bright LCD display with back-light. Mains adapter supplied as standard. Height adjustable feet. Full Capacity subtraction. Simple 5 key panel for easy operation. Stabilization time 1.5 seconds. Overload Protection. Below Balance Weighing Facility. Selectable measure units, g,oz,ct. Checking Weighing, Piece counting function. CE approvals

<b>ESL57674</b>	Capacity : 300 G , Readability : 0.1 G
<b>ESL57675</b>	Capacity : 600 G , Readability : 0.1 G
<b>ESL57676</b>	Capacity : 1000 G , Readability : 0.1 G
<b>ESL57677</b>	Capacity : 2000 G , Readability : 0.1 G
<b>ESL57678</b>	Capacity : 200 G , Readability : 0.01 G
<b>ESL57679</b>	Capacity : 600 G , Readability : 0.01 G
<b>ESL57680</b>	Capacity : 1000 G , Readability : 0.01 G
<b>ESL57681</b>	Capacity : 2000 G , Readability : 0.01 G



### Balance Digital Analytical

Electromagnetic Force Compensation Technology. Aluminium Alloy die cast base and ss platter. Super Bright LCD display with back-light. RS232C Interface Clear Glass Windshield as standard. Over load protection, Bubble Level Adjustment, Under hook

Full capacity Subtraction Multi Weighing unit conversation g/mg/ct/oz. Check Weighing, Parts counting, percentage weighing Universal power adaptor supplied as standard Certificated calibration weight supplied as standard. Internal calibration system CE approval

<b>ESL57683</b>	Capacity : 300 G , Readability : 1 Mg
<b>ESL57684</b>	Capacity : 600 G , Readability : 1 Mg
<b>ESL57685</b>	Capacity : 1000 G , Readability : 1 Mg
<b>ESL57686</b>	Capacity : 220 G , Readability : 0.1 Mg
<b>ESL57687</b>	Capacity : 310 G , Readability : 0.1 Mg







**Balance Weight Physical**

**ESP60079** Capacity 500Gm

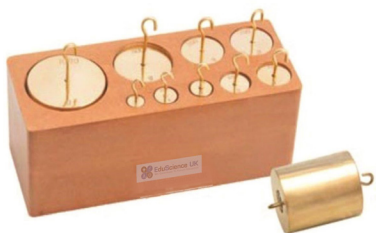
Comprising 1 x 200gm, 2 x 100gm, 1 x 50gm, 1 x 20gm, 2 x 10gm, 1 x 5gm, 2 x 2gm, 1 x 1gm. Polished Brass, supplied with Wooden block, as illustrated.

**ESP60080** Capacity 1000Gm

Comprising 1 x 500gm, 1 x 200gm, 2 x 100gm, 1 x 50gm, 1 x 20gm, 2 x 10gm, 1 x 5gm, 2 x 2gm, 1 x 1gm. Polished Brass, supplied with Wooden block, as illustrated.

**ESP60081** Capacity 2000Gm

Comprising 1 x 1000gm, 1 x 500gm, 1 x 200gm, 2 x 100gm, 1 x 50gm, 1 x 20gm, 2 x 10gm, 1 x 5gm, 2 x 2gm, 1 x 1gm. Polished Brass, supplied with Wooden block, as illustrated.



**Weight Set Hooked Weight**

Brass with hooks on both sides. Recessed bottoms to enable the weights to be hooked together. The bottom is flat when placed on a flat surface. Set of 9 weights. 10 - 1000g in wooden block.

ESP60082



**Weight Set Primary Weight**

These weights are polished and lacquered Brass weight sets fitted in a durable hardwood storage box as illustrated. 1 each of 1gm, 5gm, 20gm, 100gm and two each of 2gm and 10gm

ESP60083



**Slotted Masses And Hanger**

Slotted Masses and Hanger 100 gr (9 Loads), EduScience plated Brass  
Material : EduScience Plated Brass

**Consists of :**

- 1 x Masses hanger 10g
- 9 x Slotted Load 10g

**Dimension :** 2.50 (L) x 2.50 (W) x 5.70 cm (H)

**Weight :** 0.100g

ESP60085



**Slotted Masses And Hanger Brass**

Slotted Masses and Hanger 1000 gr (9 Loads), Brass  
Masses, disc shape and hanger. Used for many kind of experiments  
Total mass: 1000g, accuracy 5%  
Material : Brass

**Consists of :**

- 1 x Slotted Hanger Mass 100g
- 9 x Slotted Mass 100g

**Dimension :** 3.70 (L) x 3.70 (W) x 17.00cm (H)

**Weight :** 1.000kg

ESP60088



**Weight Slotted Masses And Hanger,**

Slotted set of masses and hanger. Set of 9 slotted masses, one hanger  
This improved set comprises masses of Brass with slots, brass hangers with hook. The design of the slots ensures that the masses may be easily removed and replaced but will not fall off accidentally.

**ESP60089** Total 100gm Set of 9 slotted masses, one hanger each of 10gm.

**ESP60090** Total 250gm Set of 9 slotted masses, one hanger each of 25gm .

**ESP60091** Total 1000gm Set of 9 slotted masses, one hanger each of 100gm

**ESP60092** Total 250gm Set of 4 slotted masses, one hanger each of 50gm

**ESP60093** Total 100gm Set of one hanger 20gm, three slotted masses 20g one mass 10gm and two masses 5gm

**ESP60094** Total 250gm. Set of one hanger 50gm, nine slotted masses 20gm, one mass of 10gm and two masses of 5gm





**Weight Hooked Masses**

Hooked masses cylindrical, Chromium plated with cylindrical weight with long hook. Loose or in wooden box.

- ESP60095 10gm each weight
- ESP60096 20gm each weight
- ESP60097 50gm each weight
- ESP60098 100gm each weight
- ESP60099 500gm each weight
- ESP60100 1000gm each weight
- ESP60101 200gm each weight



**Weight Masses Hexagonal With Lifting Ring**

Hexagonal with lifting ring. Within international tolerance. Set of 6 (50gm, 100gm, 200gm, 500gm, 1kg 2kg)

ESP60103



**Weights Hooked Flat**

Weights, Brass, with hooks on both sides. Set of 9 Pcs ,Capacity 500 gm ,comprises of 1 x 200gm, 2 x 100gm, 1 x 50gm, 1 x 20gm, 2 x 10gm and 2 x 5gm

ESP60106

**Melting Point Apparatus Digital**

Melting point apparatus, 1°C resolution, with pack of 100 melting point tubes, closed at one end, 240V ,Digital Selection and Display of Temperature High Accuracy

Easy to Operate with Plateau Facility

Number of Samples : 2

Temperature Range : Ambient to 300°C (572°F)

Temperature Accuracy : ±1.0°C @ 20°C (68°F), ±2.5°C @ 300°C (572°F)

Display : 3-digit LED (no display hold) | Display Resolution : 1°C

Ramp Rates : 20°C (68°F) per minute to plateau, 2°C (3.6°F) per minute to melt

**Dimensions :** 160 W x 220 D x 170 mm H (6.4 x 8.7 x 6.8")

**Weight :** 1.8 kg (4 lb) | Electrical Supply : 120/240V, 50/60 Hz, 75 W

ESL57725



**Melting Point Apparatus Analogue**

Melting point apparatus, with thermometer and pack of 100 melting point tubes,

open both ends, 240V, NIST Certificate, UK & European Power Cords , Number of Samples: Up to 3

Temperature Range : 50 to 250°C (122 to 482°F)

Heating Rate : 1 to 10°C (34 to 50°F) per minute

**Dimensions :** 370 W x 140 D x 110 mm H (15 x 5.5 x 4.3")

**Weight :** 1.7 kg (3.7 lb)

Electrical Supply : 120/240V, 50/60 Hz, 50 W

IP Rating : 40

Easy to Operate—Ideal for Educational Use

Supplied with Safe Spirit Filled Thermometer

ESL57726



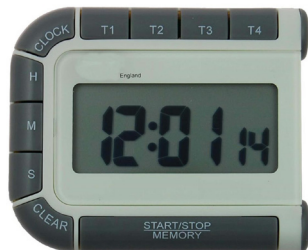


**Timer , Dual Timer And Clock**

The dual timer features two 24 hour countdown timers and also a 12/24 hour clock display. Counts in 1 second increments up to 24 hours. Complete with magnetic clip and stand. Batteries included.

**Product Specifications :**

- Timer Count: 1 second countdown/up to 24 hours
- 12/24 hour clock
- Time Accuracy Standard: +/- 60 sec/month
- Key Durability: Rubber key - 500,000 times (@200g +/- 20g)
- Contact switch - 200 times (vertical press)
- Battery : 1 x LR44 (Supplied)
- Battery Life : Approx 150 days
- CE , ROHS/WEEE: Approved
- Operating Temperature : 0 to 40°C (95% RH)
- Operating Voltage: 1.2V to 1.7V x 2
- Current Consumption :10mA (Stand-by current)
- 25mA (average alarm current)
- Electrostatic discharge ESD : +/-8kV
- LCD Dimensions :** 12mm x 32mm
- Product Dimensions :** 50mm x 60mm x 12mm



**Timer , Four Way Timer And Clock**

This device features 4 timers in one compact unit with 24 hour countdown and count up function. It also benefits from a large easy to read display and a 12/24 hour clock. Complete with stand and magnetic clip. Batteries included.

**Product Specifications :**

- Timer Count: 24 hour countdown and up
- 12/24 hour clock
- Time Accuracy Standard: +/- 60 sec/month
- Battery : 2 x LR44 (Included)
- Battery Life : Approx 150 days
- Operating Temperature : 0 to 40°C (95% RH)
- Operating Voltage : 1.2V to 1.7V x 2
- Key Durability : Rubber key - 500,000 times (@200g +/- 20g)
- Contact switch - 200 times (vertical press)
- CE,ROHS/WEEE: Approved
- Current Consumption :10mA (Stand-by current)
- 25mA (average alarm current)
- Electrostatic discharge ESD : +/-8kV
- Alarm Sound : 70dB
- LCD Dimensions :** 22mm x 50mm
- Product Dimensions :** 62mm x 75mm x 15mm

ESL57740



**Stop Clock**

Two sweep hands, one indicating seconds, the other recording minutes. Start-stop lever on the left hand side, zero reset lever on right hand side. Movement housed in metal case. Diameter of dial 100mm divided 0-60 x 1. Fitted in powder coated metal case.

ESL57733

ESP59918



**Stopwatch Budget**

Budget Stopwatch

1/100 second stopwatch with split timer function, calendar and time. Comes complete with lanyard cord. Batteries included.

Features:

1/100 second stopwatch, Split timing function, Up to 23 hours, 59 minutes, 59 seconds, Clock shows hours, minutes, seconds, 12/24 hour selectable, Calendar shows day, month, year, Includes lanyard,

**Product Specifications :** Timer Count: 1/100 second  
Battery: 1 x LR44 (Included), CE, ROHS/WEEE: Approved,

**LCD Dimensions :** 12mm x 27mm, Product  
**Dimensions :** 80mm x 55mm x 17mm



**Timer Bench Top**

**Product Specifications :**

- Timing Period : Up to 9 hours / 59 minutes / 59 seconds
- Time Accuracy Standard: Within +/- 1 second
- Resolution: 1/100 second for 30 minutes then 1 second thereafter
- Product Material: ABS
- Battery : 1 x AA (supplied)
- Operating Temperature : 0 to 50°C
- Storage Temperature : -10 to 60°C
- CE,ROHS/WEEE : Approved
- LCD Dimensions :** 63.7 x 19.7mm
- Product Weight :** 197g
- Product Dimensions :** 100 x 97 x 70.5mm

ESL57739

ESL57735



**Timer Triple Timer And Clock****Product Specifications :**

Timer Count: 20 Hour x 3  
 Time Accuracy Standard : +/- 60 sec/month  
 Key Durability: Rubber key - 500,000 times (@200g +/- 20g)  
 Contact switch - 200 times  
 Battery : 2 x LR44 (Included)  
 Battery Life : Approx 1 year  
 CE , ROHS/WEEE : Approved  
 Operating Temperature : 0 to 40°C (95% RH)  
 Operating Voltage : 1.2V to 1.7V  
 Current Consumption: 15A (stand-by current)  
 10mA (average alarm current)  
 Alarm Sound Level : 70dB Min 1ft from product  
 Electrostatic discharge ESD : +/-8kV

**LCD Dimensions :** 45mm x 41mm**Product Weight :** 60g**Product Dimensions :** 92mm x 69mm x 13mm

ESL57737

**Timer , Digital Kitchen Timer And Clock**

Digital timer featuring 99 minutes 59 Seconds countdown count up timer with memory function, and 12 / 24 hour clock. Comes with hanger, stand and magnetic fixing. Battery included.

**Product Specifications :**

Timer Count : 99 minutes / 59 seconds  
 Battery : 1 x AAA (Supplied)  
 CE , ROHS/WEEE : Approved  
 Operating Temperature : 0 to 40°C (95% RH)

**LCD Dimensions :** 48mm x 20mm**Product Dimensions :** 67mm x 77mm x 27mm

ESL57741

**Stopwatch Analogue**

Time measurement. One button have function to Start, Stop and Reset. In Stopwatch can be found freeze over round.

Size : Overall 50mm diameter

Thickness : 16mm

Scale : 0-60 x 0.2 sec., 0-30 x 1min

Material : Stainless steel

Mechanical (analogue) type timer

One button type for start button, reset and mechanic rotator spring

**Dimension :** 6.50 (L) x 6.50 (W) x 1.50cm (H)**Weight :** 0.085 kg

ESL57745

**Timer Slimline**

Budget Stopwatch

1/100 second stopwatch with split timer function, calender and time. Comes complete with lanyard cord. Batteries included.

Features :

1/100 second stopwatch  
 Split timing function  
 Up to 23 hours, 59 minutes, 59 seconds  
 Clock shows hours, minutes, seconds  
 12/24 hour selectable  
 Calendar shows day, month, year  
 Includes lanyard

**Product Specifications :**

Timer Count : 1/100 second

Battery : 1 x LR44 (Included)

CE ,ROHS/WEEE: Approved

**LCD Dimensions :** 12mm x 27mm**Product Dimensions :** 80mm x 55mm x 17mm

ESL57738

**Timer , Countdown Digital Large**

Large Digital Countdown Timer

Large digital countdown timer covering 99 minutes 59 Seconds. The timer is supplied with stand, clip and magnetic fixing. All of our timers are supplied with batteries included.

**Product Specifications :**

Timer Count: 99 minute / 59 second

Time Accuracy Standard: +/- 60 sec/month (@ 25°C)

Battery : 1 x AAA (Supplied)

Battery Life : Approx 1 year

Operating Temperature : 0 to 40°C (95% RH)

Operating Voltage : 1.2 to 1.7V

Slide Switch Reliability : 5000 cycles

Key Durability: Rubber key - 500,000 times (@200g +/- 20g)

Contact switch - 200 times (vertical press)

Current Consumption :15 A (Stand-by current)

10mA (average alarm current)

Electrostatic discharge ESD : +/-8kV

Alarm Sound : 70dB Min 1ft from product

**LCD Dimensions :** 38mm x 64mm**Product Dimensions :** 70mm x 80mm x 20mm

ESL57742

**Timer , Countdown Digital Mini**

Mini digital timer featuring 99 minutes 59 Seconds countdown and memory function. Complete with stand, clip and magnetic fixing. All of our timers are supplied with batteries included.

**Product Specifications :**

Timer Count: 99 minute / 59 second countdown

Time Accuracy Standard: +/- 60 sec/month

Key Durability: Rubber key - 100,000 times (@200g +/- 20g)

Contact switch - 5000 times (vertical press)

Battery : 1 x AAA (Supplied)

Battery Life : Approx 2 year

Operating Temperature : 0 to 40°C (95% RH)

Operating Voltage: 1.2 to 1.7V

Current Consumption :10?A (Stand-by current)

&amp;12mA (average alarm current)

Electrostatic discharge ESD : +/-8kV

**LCD Dimensions :** 38mm x 64mm**Product Dimensions :** 55mm x 55mm x 25mm

ESL57743





**PH Meter Pen Type**

The most cost effective pH tester, widely applied for general precision requirement in various water analytical situations.

The smallest and thinnest shape: 148×29×14mm. The diameter of the electrode: 10mm..

The best function: automatic calibration, automatic temperature compensation, automatic power off, low voltage alarm, pH electrode invalidation display, etc.

The easiest to use : single button operation.

The reliable structure design: meet IP57 waterproof, replaceable batteries, calibration solution, electrode soaking solution and standby batteries in a portable case.

The most cost-effective pen tester.

ESL57749



**PH Meter Pocket Type**

Economy pH tester, meet general requirements, cost-effective.

Automatic calibration, no temperature compensation.

Low voltage alarm display.

10 minutes automatic shut-down.

Replaceable electrode configuration calibration solution.

IP 57 waterproof rating.

Measuring range : 0~14.0 pH

Resolution : 0.1 pH

Accuracy : ±0.1pH±1 digit

Temperature compensation : No

Automatic Calibration :

1 point calibration (7.00 pH)

Power :

2 AAA batteries, 1.5V × 2, more than 100 hours of continuous using

Size and weight : 39×25×176 mm/95g

ESL57747



**PH and Conductivity Meter Desk Top**

pH + Conductivity Double-Parameter measurement meter which is suitable for general measurement in laboratory. It is suitable for measuring the pH value of moderate ionic strength aqueous solution, and conductivity values of conventional solution

- The most widely used pH + Conductivity Double-Parameter measurement meter.

- Meter meets with the requirement of international GLP standards. Its features up to automatic calibration, automatic temperature compensation, data storage, timing measurement, clock display, RS-232 output, function setting and self-diagnose etc.

- There are three different measurement modes: stable display mode; time measurement mode; continuous measurement mode.

- Automatically recognize pH buffer solution. User can choose anyone from three series of standard buffer solutions: Europe & USA series, NIST series and China series.

- Adopt advanced and original conductivity measurement technology, use 1 pc of conductivity electrode (K=1), it can meet measuring accuracy requirement for range within 0.5µS/cm ~ 200mS/cm by using only one-point calibration.

Can switch Conductivity, TDS, Salinity and Resistivity.

Meter has the only product serial number.

Dust-proof and waterproof meter meets IP54 standards. All sockets are seal protected by the silica gel caps.

ESL57759



**PH Meter Desk Top**

Lab pH Meter DESK TOP

General laboratory bench pH meter, which is suitable for measuring moderate ionic strength solutions, such as surface water, lake water and industrial wastewater. It can be used in most of the areas related to water quality analysis. Meter meets with the requirement of international GLP standards. Its features up to automatic calibration, automatic temperature compensation, data storage, timing measurement, clock display, RS-232 output, function setting and self-diagnose etc.

- There are three different measurement modes: stable display mode; time measurement mode; continuous measurement mode.

Automatically recognize pH buffer solution.

Meter has the only product serial number.

Dust proof and waterproof meter meets IP54 standards. All sockets are seal protected by the silica gel caps. pH .

ESL57753





### PH Meter Potable Hand-held

Portable advanced single measurement water quality meter  
Smart electrode interchangeable water quality measurement with single input, multi-parameters readable. Easy operation, meter powered by six AAA batteries, receptacle device is built-in for tripod mountable enable to do long time monitoring purposes.

#### FEATURES :

Professional look design accurate portable meters with large LCD display, BNC connector.

All electrodes with BNC connector compatible to any other electrodes.

Hold function, low battery icon indicator, automatic power off in 15 minutes and may disable.

Built-in different temperature compensation selectable: PT100, PT1000 (pH electrode only), Thermistor 30K, 10K ohm.

RFS (Recover to Factory Setting) function is included.

3 points pH calibration: 4, 7, 10 (Adjustable). Calibration buffer solution are included with soaking solution.

Conductivity calibration points: 1413uS. Calibration solution is included. Conductivity electrode may convert to TDS and Salinity concentration, adjustable conductivity to TDS conversion factor from 0.4 to 1.0. Three in one conductivity electrode (Cond. EC.TDS. Salinity measurement).

Conductivity cell constant (K) selectable: 0.1, 1.0, 10 (Selectable and adjustable).

DO 100% self-calibration is convenient and simple. Calibrated both Saturated DO/zero DO (Na<sub>2</sub>SO<sub>3</sub>) before shipment.

Compact DO electrodes supplied with 3M cable and membrane cap, electrolyte.

Galvanic electrodes do not require long warm up time as polarographic type electrodes. (Polarization is required about 10-215 minutes.)

Tripod receptacle mountable design for long time monitoring purposes.

All sensors are well calibrated before shipment. Warranty period is two years. Long life sensors

#### SUPPLIED :

Meter

Battery-AAA x 6 pcs

Operation manual

Electrodes

Black carrying case

pH buffer solution x 3 pcs ( pH 4 ,pH7, pH10)

1413uS buffer solution x1

(3M) Soaking Solution x 1

#### Specifications :

Data Hold:Freeze the display reading.

Meter **Dimension** : 180mm x 58mm x 32mm (With BNC connector)

Power supply:AAA batteries x 6 pcs / 9V AC/DC (Option)

Temperature:0~90 (PH) 0~90 (Cond/TDS/Salt/)

Temp. accuracy: 0.5

PH:

Measurement range PH: 0 to 14 pH

Accuracy 1% of full scale 1 digit

Resolution:0.01(pH)

ESL57751



### Electrode Holder Flexible

Three electrodes can be put into electrode holder that is used with electro-chemistry instrument.

The arc-type bracket of attractive appearance can be turned to any direction and lifted up and down vertically, with the electrode standing vertically anywhere.

The material of holder is ABS, of axis of rotation is stainless steel, which is sturdy and durable.

Base of holder is made up of ABS hull, cast iron counter weight and axis of rotation of stainless steel. All of these lead to professional design, attractive appearance and stability.

Three electrodes can be put into electrode chuck (electrode capΦ16 mm)

ESL57761





**Conductivity Meter Pocket Type**

Economy conductivity tester, meet general requirements, cost-effective  
 Long measurement range, automatic switching range.  
 Automatic calibration, automatic temperature compensation (without temperature display.)  
 Low voltage alarm display.  
 10 minutes automatic shut down.  
 Conductivity calibration solution configuration.  
 IP57 waterproof rating.  
 Measuring range Divided into three sections, automatic switching range:  
 (0~99.9) $\mu$ S/cm(100~999) $\mu$ S/cm (1.00~10.00)mS/cm  
 Resolution : 0.1/1 $\mu$ S/cm:0.01 mS/cm  
 Accuracy  $\pm$ 1%FS  
 Temperature compensation : (0~50) $^{\circ}$ C (Auto)  
 Automatic Calibration 1 point calibration(1413 $\mu$ S/cm)  
 Power : 2 AAA batteries, 1.5V  $\times$  2, more than 100 hours of continuous using  
 Size and **Weight** : 39 $\times$ 25 $\times$ 176 mm/ 87g

ESL57755



**Conductivity Meter Pen Type**

The most cost effective pen conductivity tester, ability to switch among conductivity, TDS, salinity and resistivity, widely applied in surface water, sewage, drinking water, soil less, printing, wash water of plating tank, aquarium, fish pond, swimming pool, hot spring, etc.  
 Compared with similar products: the widest measurement scope 0~50mS/cm, more measurement parameters, ability to switch among conductivity, TDS, salinity and resistivity, multinomial calculation for TDS and salinity to ensure the conversion precision of the full scale.  
 The smallest and thinnest shape : 148 $\times$ 29 $\times$ 14mm. The diameter of the electrode: 10mm.  
 The best function: automatic calibration, automatic temperature compensation, automatic switch of range, automatic power off, low voltage alarm, etc.  
 The easiest to use : single button operation.  
 Meet IP57 waterproof rating, replaceable batteries, calibration solution and standby batteries in a portable case.

ESL57757

**Spectrophotometer UV VIS Smart**

UV-VIS Smart Spectrophotometer is a high-precision, intelligent instrument used for measuring the absorbance and transmittance of samples in the UV and visible light regions. It features a large LCD display, a built-in printer, and a USB interface for data transfer. The instrument is designed for ease of use and accuracy, making it suitable for laboratory and field applications. It includes a variety of measurement modes and a wide range of wavelength options. The UV-VIS Smart Spectrophotometer is a reliable and accurate instrument for measuring the absorbance and transmittance of samples in the UV and visible light regions. It features a large LCD display, a built-in printer, and a USB interface for data transfer. The instrument is designed for ease of use and accuracy, making it suitable for laboratory and field applications. It includes a variety of measurement modes and a wide range of wavelength options.

ESL57764





### Spectrophotometer Single Beam

Optical System : Single Beam  
 Spectral Band Width : 1.8 nm (190 to 1100 nm)  
 Wavelength Range : 190 to 1100 nm  
 Accuracy :  $\pm 0.3$  (at D2 Peak 656.1nm, 486.0nm)  
 Reproducibility :  $\pm 1.0$   
 Slew Rate : 5000 nm/Min  
 Scanning Speed : maximum 3000 nm/Min  
 Photometric Range : -4.0 ~ 4.0  
 Accuracy (Abs) :  $\pm 0.004$  (at 1.0),  $\pm 0.002$  (at 0.5)  
 Reproducibility (Abs) :  $\pm 0.002$  (at 1.0),  $\pm 0.001$  (at 0.5)  
 Stray Light (%T) : 0.05 (220nm, 340nm)  
 Baseline flatness (ABS/h) :  $< \pm 0.001$  (at 550nm)  
 Baseline Flatness (ABS) :  $< \pm 0.001$  (200 ~ 1100nm)  
 Noise Level (A) :  $< 0.001$   
 Drift (A/hr) : 0.002 (at 340nm)  
 Monochromatic Modified Czerny-Turner type with 1200 lines/mm blazed Grating  
 Light Source Tungsten-Halogen Lamp & Deuterium Lamp  
 Lamp Change Wavelength 340~410 (Default 370), include Auto Position System  
 Standard Cell Holder Automatic Rotary type 8-position Multi-Cell Holder  
 Interface Ports USB, Serial ports, Parallel ports  
 Power Requirement Free Voltage  
**Overall Dimensions** : (W x D x H) 544mm x 381mm x 180mm  
**Weight** : 9.1kg

ESL57763



### Photometer Portable Round Cell Holder

Accessory for spectrophotometer

ESL57769



### Spectrophotometer Double Beam UV VIS

Optical System Double beam optics  
 Spectral Band Pass Width (nm)  $< 1.0$   
 Wavelength range (nm) 190~1100  
 Accuracy (nm) :  $< \pm 0.3$  (at D2 Peak 656.1nm, 486.0nm)  
 Reproducibility (nm)  $< \pm 1.0$   
 Setting (nm) 0.1  
 Slew rate (nm/Min) about 5000  
 Scanning speed (nm/Min) maximum 3000  
 Photometric Range (Abs) -4.0 ~ 4.0  
 Accuracy (Abs)  $\pm 0.004$  (at 1.0),  $\pm 0.002$  (at 0.5)  
 Reproducibility (Abs)  $\pm 0.002$  (at 1.0),  $\pm 0.001$  (at 0.5)  
 Stray light (%T) 0.05 (220nm, 340nm)  
 Baseline flatness (ABS/h)  $< \pm 0.001$  (at 550nm)  
 Baseline Flatness (ABS)  $< \pm 0.001$  (200 ~ 1100nm)  
 Noise Level (A)  $< 0.001$   
 Drift (A/hr) 0.002 (at 340nm)  
 Monochromatic Modified Czerny-Turner type with 1200 lines/mm blazed Grating  
 Light Source Tungsten-Halogen Lamp & Deuterium Lamp  
 Lamp Change Wavelength 340~410 (Default 370), include Auto Position System  
 Standard Cell Holder Automatic Rotary type 8-position Multi-Cell Holder  
 Interface Ports USB, Serial ports, Parallel ports  
 Power Requirement Free Voltage  
**Overall Dimensions** : (mm) 600(W)x400(D)x250(H)  
**Weight** : 16kg (Only Main System)

ESL57765

### Photometer Portable Mini

Optical System Reflectance Monochromatic with Optical LED  
 Detector Photo-diode  
 Photo-diode 128x64 dot matrix graphic LCD  
 Printer Small label printer (Optional)  
 Power requirement Four 1.2V Ni-MH rechargeable batteries  
 DC 9V 1A Adapter  
 Inhibition Reproducibility  $\pm 3\%$   
 Data save Maximum 2000  
 Interface Ports USB communications RS-232C serial  
 Data download PC S/W Provided (Optizen MiNiView)  
 Time setting Extraction 5min/Reaction 10min  
**Overall Dimensions** : 110(W) x 48(H) x 245(D)  
**Weight** : 500g

ESL57767

### Photometer Portable Cell Holder Cover

Accessory for photometer portable mini

ESL57768





## Spectrophotometer

ESL-1000VI /ESL-1000UVI/ESL-1100VI/  
ESL-1000VIU

The spectrophotometer is an indispensable instrument routinely used in colleges, universities and research institutes for quantitative analysis in fields including biotechnology and quality control of new material developed. V-Series provide high resolution, high performance and excellent stability.



Spectrophotometer

Labware

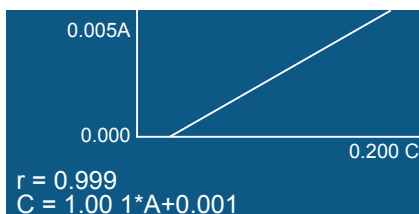
### Features

- **User Friendly Operation and Information Rich LCD Display:** The large 128 x 64 dots, backlit LCD screen with adjustable brightness control displays a large array of data also in graphical format
- **On-Board Data Storage:** The System can save the test results, up to 200 group datas and 200 standard curves in the RAM memory
- Data can be restored after a sudden power failure
- **Auto setting wavelength:** Setting wavelength automatically to calibrate the system through arrow keys to avoid operation errors
- **Automatic Switching:** Tungsten & Deuterium lamps switching is automatic. Wavelength range are selectable from 190 to 1100nm
- **PC control through application software:** The spectrophotometer is fully equipped and capable of executing all functions in stand-alone mode. The optional application software '**Wave Professional**' provides computer control through the built-in USB port, apart from other functions such as spectrum scan, time scan(kinetics), multiwavelength scanning & Nucleic Acid / Protein measurement. (ESL-1100UV/ESL-1100UVI)
- **Large sample compartment:** To accommodate 5–100mm path length cuvettes with optional holders. A variety of optional accessories are available

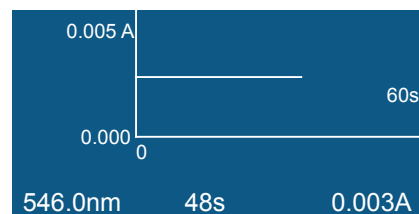
#### Basic Mode

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

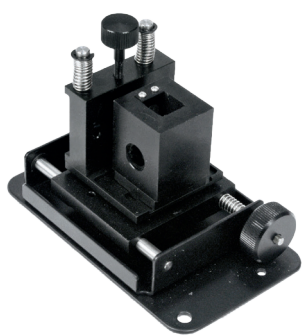


Spectrophotometer



Model	ESL-1000UV	ESL-1000UVI	ESL-1100UV	ELS-1100UVI
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	-0.3-3.0A, 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 preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)
Stray Light	≤0.2%T @ 360nm	≤0.2%T @ 220&360nm	≤0.05%T @ 360nm	≤0.05%T @ 220 & 360nm
Sample Compartment	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
Output	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	12kg	14kg	12kg	14kg

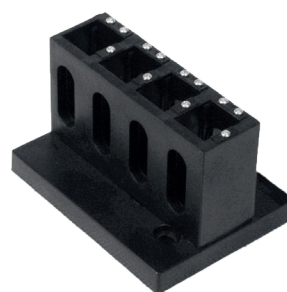




**Cat. No.** 18900337  
Micro Cell holder



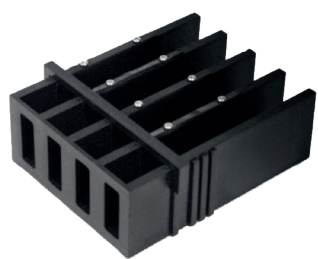
**Cat. No.** 18900340  
8-position auto cell changer  
(for ESL-1100UV&ESL-1100UVI)



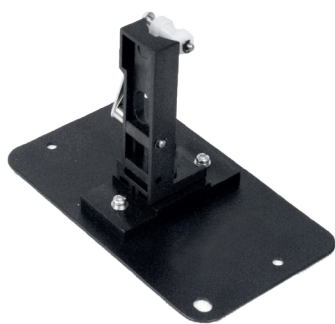
**Cat. No.** 18900331  
4-cell holder for 10mm sq. cuvette



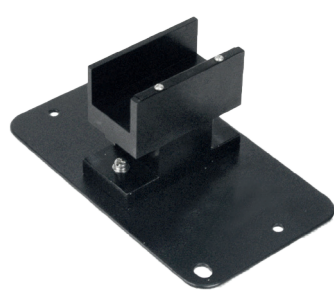
**Cat. No.** 18900332  
4-cell holder for 10mm  
to 50mm sq. cuvette



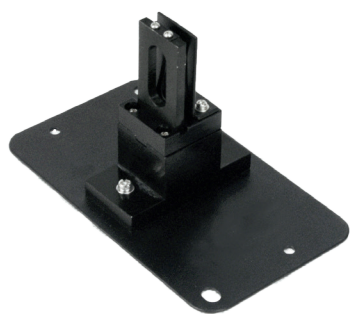
**Cat. No.** 18900333  
4-cell holder for up to  
100mm sq. cuvette



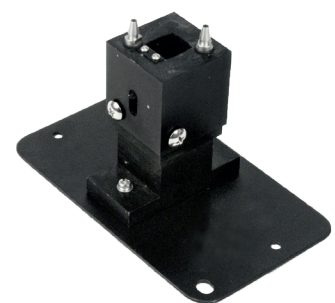
**Cat. No.** 18900338  
Test tube holder(ø8-ø22mm)



**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 ESL-1100UV & ESL-1100UVI)



**Cat. No.** 18900336  
10mm water-jacketed 4-cell holder  
(for ESL-1100UV & ESL-1100UVI)



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



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



**Cat. No.** 18900342  
Milas deuterium lamp,10V,300mA, 30W  
(for ESL-1000UV&ESL-1100UV)



# Disc Polarimeter

## ESL-P1



Range	$\pm 180^\circ$
Scale Value	$1^\circ$
Vernier	$0.05^\circ$
Magnifier	3X
Light Source	Sodium lamp
Wavelength	589nm
Tube Length	50, 100, 200mm
Power	220V/50Hz
Dimensions	500(L) $\times$ 135(W) $\times$ 330(H)mm
Weight	5kg
Package	600(L)200(W) $\times$ 400(H)mm

### Options

Cat. Number	Descriptions
POL11001	Poalrimer Tube 100mm
POL11002	Poalrimer Tube 200mm
POL11003	Sodium Lamp 589nm



# ESL-R03AR Series Abbe Refractometer

## ESL-R03

Model “ESLR03 ” is a simple yet highly reliable Abbe refractometer with a digital thermometer. Liquid, solid and pasty samples can be evaluated. This refractometer is robust, accurate and easy to use. Optionally a solide aluminium case for transport and storage is available. It measures the refractive index (nD).

The main scope of applications is:

- Sugar industry: such as cane sugar
- Pharmacy
- Beverage industry
- Food industry
- Chemical industry
- Oil industry/Refinery
- Laboratories
- Training



- Industry: Monitoring of lubricants for process and quality control
- Food industry: Beverages, fruits and sweets
- Agriculture: Determination of the degree of ripeness of fruits for quality control in harvesting
- Restaurants and large-scale catering establishment

Model	Scales	Range	Resolution	Accuracy
ESLR03	Brix Refractive Index	0-95% 1.3000-1.7000nD	±0.1 ±0.0002nD	0.25% 0.0005nD





**Flexible Desk Lamp**

Versatile flexible neck  
 • Metal and plastic construction  
 • Integral on/off switch  
 • Height: 340mm approx

ESL57877



**Lamp Bulbs, Round**

M.E.S. Cap, 1.25V

ESL57890

**Lamp Bulb E 10, 1.5v/0.2a (10pcs/Pack)**

Lamp Bulb E 10, 1.5V/0.2A (10pcs/pack)  
 Voltage: 1.5V  
 Ampere: 0.2A  
 Packaging: 10pcs/pack  
**Dimension :** 14.00 (L) x 9.00 (W) x 2.00cm (H)

ESL57889

**Lamp Holder Mounted SBC**

Solid steel Small Bayonet Cap (SBC) lamp holder with a tough powder coat paint finish and a solid brass lamp holder with 2 x 4mm electrical sockets. Ready to use. Pack of 10

ESL57880 ( 12V 21W lamp), PK OF 10

ESL57881 (12V- 36W Axial lamp), PK OF 10

ESL57882 (12V - 24W Axial lamp), PK OF 20



**Lamp Bulb E 10, 2.5v/0.5a (10 Pcs/Pack)**

Lamp Bulb E 10, 2.5V/0.5A (10 pcs/pack)  
 Voltage: 2.5V  
 Ampere: 0.5A  
 Packaging: 10pcs/pack  
**Dimension :** 14.00 (L) x 9.00 (W) x 2.00 cm (H)  
**Weight :** 0.013kg



ESL57888

**Lamp Bulbs, Lens Ended**

2.2V, 0.25A, lens ended, M.E.S. Cap.

ESL57891



**Battery UV Unit**

Battery powered Ultra Violet light source ideally suited to demonstration use. Comes complete with on/off switch. Requires 4 x AA batteries (not supplied).

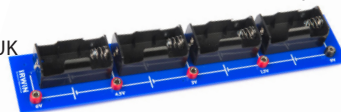
Dimensions (L x H x W): 165 x 35 x 41mm.

ESL57898

**Battery Holders Pk Of 10**

The Irwin Tapped pack of 10 battery holders hold 4 x D (R20) batteries with outputs at 1.5, 3, 4.5 and 6V. Batteries and leads not supplied. Each output has a 4mm socket. Manufactured in the UK from premium strong perspex.

Manufactured in the UK



ESL57899

**Battery Holder**

Size: Overall : 175 x 62mm , thickness 10mm for D size battery  
 Material : Brass and plastic  
 Positive and negative given plate attached to plastic base with bolts and given alligator clip, each battery with nuts and bolts of the base



ESL57901

**Cell holder**

Cell-holder Made of unbreakable plastic to hold battery, curved sides help prevent battery from falling out when it is upside down.

ESL57903

Single For 'D' Size Battery

ESL57904

Double For 'D' Size Battery

ESL57905

Double For 'AA' Size Battery

ESL57906

Single For 'AA' Size Battery

ESL57907

Stackable



**Mini Motor DC**

This little yet powerful motor is idea for hundreds of electrical experiments and projects. Voltage requirements are 1.5V ~ 4.5V, 0.2A ,DC volts.

ESP59128 Power requirements : 1.5V ~ 4.5V, 0.2/

ESP59129 Power requirements : 3V ~ 6V, 0.2A

ESP59130 Power requirements : 6V ~ 12V, 0.2A



**De-soldering Pump**

High sucking power, plastic body with sturdy metal rod, easy to clean and maintain.

ESP59606



**Soldering Iron**

With wooden / Bakelite handle, lightweight body, element tested for high insulation, with long life

pencil bit

ESP59601 25 Watts

ESP59602 65 Watts

ESP59603 125 Watts



**Soldering Iron Stand**

Soldering iron with stand

ESL57453



**Copper Wire**

Bare copper wire roll - measured by mass, lengths  
Includes: 1 Spool

- ESL57928 500g roll - 14 SWG (12 AWG) - 0.08" (2.0 mm) Dia. Approximate length is 50 ft.
- ESL57929 500g roll, 16 SWG (14 AWG) - 0.064" (1.6 mm) Dia. Approximate length is 85 ft.
- ESL57930 250g roll, 18 SWG (16/17 AWG) - 0.048" (1.2 mm) Dia. Approximate length is 80 ft.
- ESL57931 250g roll, 20 SWG (19 AWG) - 0.036" (0.91 mm) Dia. Approximate length is 140 ft.
- ESL57932 250g roll, 22 SWG (21 AWG) - 0.028" (0.71 mm) Dia. Approximate length is 225 ft.
- ESL57933 250g roll, 24 SWG (23/24 AWG) - 0.022" (0.56 mm) Dia. Approximate length is 375 ft.
- ESL57934 250g roll, 26 SWG (24/25 AWG) - 0.018" (0.46 mm) Dia. Approximate length is 550 ft.
- ESL57935 250g roll, 28 SWG (29/30 AWG) - 0.0148" (0.38 mm) Dia. Approximate length is 800 ft.
- ESL57936 250g roll , 30 SWG (32/33 AWG) - 0.0124" (0.32 mm) Dia. Approximate length is 1150 ft.
- ESL57937 250g roll , 32 SWG (33/34 AWG) - 0.0108" (0.27 mm) Dia. Approximate length is 1500 ft.



**Chromium Resistance**

This is chromium wire that can be used in many applications in the classroom or lab. It's functional characteristics are the same as nichrome wire. It's makeup is 15% Cr, 4% Al, Balance Fe. Maximum operating temperature is 1150°C. Density is 6.74g/cm<sup>3</sup>  
Many industrial and hobby hot wire foam cutters also use chromium wire. Chromium wire is also commonly used in ceramics, as an internal support structure to help some elements of clay sculptures hold their shape while they are still soft. Chromium wire is used because of its ability to withstand the high temperatures.

- ESL57943 18 GAUGE SWG - 16/17 AWG - 0.048" DIA. Includes: (1) 125g Roll
- ESL57944 20 GAUGE SWG - 19 AWG - 0.036" DIA. Includes: (1) 125g Roll
- ESL57945 22 GAUGE SWG - 21 AWG - 0.028" DIA. Includes: (1) 125g Roll
- ESL57946 24 GAUGE SWG - 23/24 AWG - 0.022" DIA.. Includes: (1) 125g Roll
- ESL57947 26 GAUGE SWG - 24/25 AWG - 0.018" DIA. Includes: (1) 125g Roll
- ESL57948 28 GAUGE SWG - 29/30 AWG - 0.0148" DIA. Includes: (1) 125g Roll
- ESL57949 30 GAUGE SWG - 32/33 AWG - 0.0124" DIA. Includes: (1) 125g Roll
- ESL57950 32 GAUGE SWG - 33/34 AWG - 0.0108" DIA. Includes: (1) 125g Roll



**Lamp Bulbs, Round**

D Battery Holder with Socket Terminals  
Used as battery holder size UM1 or D  
Size: 120 x 70mm, with 4mm socket terminal  
Material: Plastic  
Can be mounted on the board  
**Weight :** 0.029kg



ESL57900

**Crocodile Clip Pk/10**

Crocodile clip without sleeve Pk/10

ESL57955



**Crocodile Clip With Plastic Sleeved Red Pk/10**

Spring-loaded, serrated jaws, with screw to clamp end of lead held in tubular extension, both sides insulated. Length 50 mm and jaws open 9 mm, Red Colour

ESL57956



**Crocodile Clip With Plastic Sleeved Black Pk/10**

Spring-loaded, serrated jaws, with screw to clamp end of lead held in tubular extension, both sides insulated. Length 50 mm and jaws open 9 mm, Black Colour

ESL57957



**Safety Socket For Banana Plugs**

Safety socket 4mm for Banana plugs in improved design.

- ESL57910 Black
- ESL57911 Fdc
- ESL57912 Yellow
- ESL57913 Green
- Banana Plugs With wire** 4mm Stackable Plug Lead
- ESL57914 Length 50 cm , Red
- ESL57915 Length 50 cm , Black
- ESL57916 Length 25 cm , Red
- ESL57917 Length 25 cm , Black
- ESL57918 Length 75 cm , Red
- ESL57919 Length 75 cm , Black
- ESL57920 Length 100 cm , Red
- ESL57921 Length 100 cm , Black





### Water Bath Thermostatic Digital

Digital baths are designed for general use and are economically priced without compromising quality. Simple digital controller for setting temperature in 1°C increments. Designed for immersion of flasks, bottles and racks in a highly stable temperature environment. Available in 4, 14 and 22 litre options.

#### High quality build and features

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature antibacterial finish with good chemical resistance. Fitted with side lifting handles for easy lifting.

High quality build and features Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature antibacterial finish with good chemical resistance. Fitted with side lifting handles for easy lifting.

#### Controls and safety

Temperatures can be easily and rapidly set with the push button, wipe clean control panel in 1°C increments. Temperature setting is retained in memory, even after 'power off'. Water baths are pre-calibrated for consistent accuracy. Thermal cut out fitted in the heater. IP rated, illuminated on/off power switch and heater indication lamp. Bath fitted with non-slip rubber feet.

#### Temperature

Display/resolution: Digital LED/1°C

Temp. Range: Ambient + 5°C - 99°C

Temp. Setting: Push button

Stability/uniformity:  $\pm 0.2^\circ\text{C}/\pm 0.1^\circ\text{C}$

Temperature memory: Retained in memory even after 'power off'.

<b>ESL58188</b>	Capacity : 4 Ltr	Dimensions External: 332w x 185d x 290h mm Internal: 300w x 150d x 150h mm
<b>ESL58189</b>	Capacity : 14 Ltr	Dimensions External: 361w x 332d x 290h mm Internal: 325w x 300d x 150h mm Water level maximum: 130mm shelf fitted working depth 115mm
<b>ESL58190</b>	Capacity : 22 Ltr	Dimensions External: 538w x 332d x 290h mm Internal: 500w x 300d x 150h mm Water level maximum: 130mm shelf fitted working depth 115mm

All models have 3 year warranty

Complete with perforated shelf for even heat distribution

Side lifting handles

UK manufactured

Accessory lids, racks and baskets available







### Water Bath Thermostatic Unstirred Digital

Clifton digital baths provide a stable temperature environment ideal for meeting quality control requirements, featuring PID temperature control for precision.

Designed for immersion of flasks, bottles and racks for a wide variety of laboratory applications.

#### High quality build and features

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature antibacterial finish with good chemical resistance. Fitted with side lifting handles for easy lifting.

Heaters and temperature sensor are concealed under the tank providing a clutter free working area which is easy to wipe clean. Supplied with a removable sturdy low height stainless steel perforated shelf, for even heat distribution. The shelf provides a deeper volume of water, for standing containers and accessory test tube racks in the bath. Three year warranty and comprehensive customer support. Accessory lids available. Above 60°C it is recommended that to achieve optimum performance the bath should be covered with a lid. Clifton Range®

#### Controls and safety

Temperatures can be easily and rapidly set with the push button, wipe clean control panel, featuring a bold LED display. The high precision PID temperature controller, ensures that accuracy and repeatability is guaranteed. Temperature is set in increments of 0.1°C and retained in memory, even after 'power off'. Water bath features a thermal safety cut out which is fitted to the heater. There is an over temperature alarm automatically set at 4°C above set temperature, including a visual indicator and safety heating cut out, to protect samples from over heating. Water baths are pre-calibrated at two separate temperatures for consistent accuracy. IP rated, illuminated on/off power switch and heater indication lamp. Bath fitted with non-slip rubber feet.

#### Temperature

Display / resolution: Digital LED / 0.1°C

Temp. Range: Ambient + 5°C - 99°C

Temp. Setting: push button in 0.1°C increments

Stability/uniformity:  $\pm 0.2^\circ\text{C}/\pm 0.1^\circ\text{C}$

Temperature memory: Retained in memory even after 'power off'.

<b>ESL58192</b>	Capacity : 4 Ltr	Dimensions External: 332w x 185d x 290h mm Capacity Nominal Tank Capacity: 4 Litres	Internal: 300w x 150d x 150h mm Brimful Capacity: 6 litres
<b>ESL58193</b>	Capacity : 8 Ltr	Dimensions External: 332w x 270d x 290h mm Capacity: Nominal Tank Capacity: 8 Litre	Internal: 300w x 240d x 150h mm Brimful Capacity: 10 litres
<b>ESL58194</b>	Capacity : 14 Ltr	Dimensions External: 361w x 332d x 290h mm Capacity Nominal Tank Capacity: 14 Litres	Internal: 325w x 300d x 150h mm
<b>ESL58195</b>	Capacity : 22 Ltr	Dimensions External: 538w x 332d x 290h mm Capacity Nominal Tank Capacity: 22 Litres Drain outlet fitted, large 12mm bore for fast emptying an accessory tap can be added for convenience.	Internal: 500w x 300d x 150h mm

All models have 3 year warranty

Complete with perforated shelf for even heat distribution

Side lifting handles

UK manufactured

Accessory lids, racks and baskets available





### Water Bath Thermostatic Unstirred Analogue

Analogue boiling baths are designed for applications that require continuous boiling. This range has the flexibility where the controls can be regulated from a

Gentle simmer to a vigorous boil.

#### High quality build and features

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature antibacterial finish with good chemical resistance. The bath, which is simmer-statically controlled, is ideally suited to prolonged periods of boiling. Fitted with side lifting handles for easy lifting.

Fitted with a sheathed immersion element and thermal safety cut out. The heater is directly immersed in water providing rapid boiling. Fitted with a constant level device, that maintains a fixed level of liquid which eliminates the need to regularly top up the bath. Three year warranty and comprehensive customer support. Accessory lids available. Above 60°C it is recommended that to achieve optimum performance the bath should be covered with a lid. Deep chamber option (product code: NE1B-18W) can be fitted with an accessory tray to conveniently raise or immerse items in boiling water and is suitable for immersion of tall vessels. Clifton Range®

#### Controls and safety

Easy to use analogue dial pointer for setting temperature in 10°C increments. The bath can control the amount of boiling from a gentle simmer to a vigorous boil. Thermal cut out fitted in the heater.

Always connect the constant level with laboratory tubing to a water supply, adjust the flow to gently top up the water level, whilst maintaining boiling. IP rated, illuminated on/off power switch and heater indication lamp. Bath fitted with non-slip rubber feet.

Temperature

Temp. Range: Simmer to boiling at 100°C

Temp. Setting: analogue dial pointer

Temp. Control: Energy regulator controls the amount of boiling from a gentle simmer to vigorous boil

**ESL58196**

Capacity : 14 Ltr

**Dimension** :s (mm) Overall - 361w x 332d x 290h / Working - 325w x 300d x 150h

Electrical supply: 230v

Power consumption: 2500w

**ESL58197**

Capacity : 18 Ltr

**Dimension** :s (mm) Overall - 362w x 332d x 290h / Working - 325w x 300d x 200h

Electrical supply: 230v

Power consumption: 2500w

Drain outlet: Drain outlet fitted, large 12mm bore for fast emptying

Deep fill chamber: can be fitted with accessory tray to raise or immerse items into boiling water

Accessory tray: ST-1 - Raise and lower sterilizing tray.

SA01409 - Pair of guide rail assemblies for ST1 Tray and NE1B-18W

All models have 3 year warranty

Complete with shelf for good water circulation

UK manufactured

Accessory lids, racks and baskets available





### Water Bath Thermostatic

Clifton digital stirred baths provide a stable temperature environment ideal for meeting quality control requirements, featuring PID temperature control for precision. Designed for immersion of flasks, bottles and racks for a wide variety of laboratory applications.

High quality build and features

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature antibacterial finish with good chemical resistance. The thermostirrer is robust and entire casing is constructed from stainless steel for durability.

Supplied with a removable stainless steel shelf, ensuring good water circulation throughout the chamber. Three year warranty and comprehensive customer support. Accessory lids, racks, coolers and shelves available. Above 60°C or below ambient it is recommended that to achieve optimum performance the bath should be covered with a lid. Clifton Range®

#### Controls and safety

Temperatures can be easily and rapidly set with the push button, wipe clean control panel, featuring a bold LED display. The high precision PID temperature controller, ensures that accuracy and repeatability is guaranteed. Temperature is set in increments of 0.1°C and retained in memory, even after 'power off'.

When a low liquid level is detected "FILL" message automatically appears on the display and heating is suspended. Once refilled, heating is restored and temperature control resumes automatically. There is an over temperature alarm automatically set at 4°C above set temperature, including a visual indicator to protect samples from over heating.

Water baths are pre-calibrated at two separate temperatures for consistent accuracy. Illuminated on/off power switch and heater indication lamp. Bath fitted with non-slip rubber feet.

#### Temperature

Display / resolution: Digital LED / 0.1°C

Temp. range: Ambient + 5°C - 99°C

Ambient to -20°C with accessory immersion dip cooler (DC1-300 or DC2-300)

Temp. setting: push button in 0.1°C increments

Stability/uniformity: ± 0.05°C/± 0.01°C

Temperature memory: Retained in memory even after 'power off'.

Timer : Variable 00:01 to 99.59 hh:mm.

Audible alarm and visual 'end' message

Safety feature: Low liquid level warning

#### ESL58198

Capacity : 14 Ltr

**Dimension** :s (mm) Overall - 361w x 332d x 170h / Working - 219w x 298d x 150h  
Electrical / power supply: 120v or 230v models available/ 1250w

#### ESL58199

Capacity : 28 Ltr

**Dimension** :s (mm) Overall - 537w x 332d x 240h / Working - 395w x 298d x 200h  
Electrical / power supply: 120v or 230v models available / 1250w

All models have 3 year warranty

Complete with shelf for good water circulation

UK manufactured

Accessory lids, racks and baskets available





### Water Bath Thermostatic Digital Oil Heating Circulator

Clifton® Digital Water and Oil Heating Circulator are designed for external circulation of temperature controlled water and heat transfer fluids in a closed circuit or for maintaining a stable temperature environment in the bath for the immersion of flasks, bottles and racks.

Thermocirculator can be fitted to water baths, tanks and containers using accessory Mount Bracket.

Clifton® Thermostirrer is a durable stainless steel construction, painted surfaces are powder painted with tough anti-bacterial finish with good chemical resistance. Easy to use controls that wipe clean and have an anti-bacterial finish. Immersed components are corrosion resistant. Quiet running in use and providing excellent water temperature stability. Indication of heating, over temperature alarm and timer running.

When a low liquid level is detected a "FILL" message automatically appears and heating is suspended. Once refilled, heating is restored and temperature control resumes automatically.

Over and under temperature alarms automatically protect work in the water bath, providing heater cut off, visual message and indicator.

A second safety device can be set just above the working temperature, protecting samples.

Thermocirculator pump comes with convenient push-fit and lock fittings on both inlet and outlet ports for secure external liquid circulation.

### Controls

Featuring a bold LED display of measured temperatures in real-time and in increments of  $\pm 0.1^{\circ}\text{C}$ , using a precision PID temperature controller. Setting for water temperature only or combination of temperature and time. Timer setting variable in 1-minute increments from 00:01 [hh:mm] to 99:59 [hh:mm] with "end" message on completion of the timed period. Time and temperature settings are retained in the memory, even after the unit has been turned off.

Easy to use controls, utilising touch keypads for setting time and temperature values with indicators for heating, over temperature alarm and timer.

The heater unit can be set to run at a set temperature or commence the timer once the water reaches set temperature.

Features auto setting over and under temperature alarm protecting your work at set temperature.

Every unit undergoes a factory calibration at two temperatures for validation.

A second safety device can be set just above the working temperature, protecting samples.

<b>ESL58200</b>	Capacity : 14 ltr	"Dimension : External: 361w x 332d x 170h mm Thermocirculator additional 120mm to bath height Internal: 219w x 298d x 150h mm - working area of the bath Capacity Nominal Tank Capacity: 14 Litres"
<b>ESL58201</b>	Capacity : 22 ltr	"Dimension : External: 537w x 332d x 170h mm Internal: 395w x 298d x 150h mm Capacity Nominal Tank Capacity: 22 Litres"

All models have 3 year warranty

Complete with shelf for good water circulation

UK manufactured

Accessory lids, racks and baskets available





### Water Bath Thermostatic 2 Ltr Shallow, Comp. W. S. steel Perforated False Base

Clifton shallow Baths™ are available in digital or analogue option. Their small footprint provides a stable temperature environment for life science preparations. Perfect for heating small height samples such as micro tubes, micro plates and bottles.

#### High quality build and features

Comprising of a high quality corrosion resistant stainless steel tank, with a bright clean finish housed in a durable painted outer case. Painted surfaces feature antibacterial finish with good chemical resistance. The shallow chamber is perfect for heating smaller samples.

Heaters and temperature sensor are concealed under the tank providing a clutter free working area which is easy to wipe clean. Supplied with a removable sturdy low height stainless steel perforated shelf, for even heat distribution. Three year warranty and comprehensive customer support. Accessory lids available. Above 60° it is recommended that to achieve optimum performance the bath should be covered with a lid. Clifton Range®

#### Controls and safety

Digital bath option allows temperatures to be easily and rapidly set with the push button, wipe clean control panel, featuring a bold LED display. High precision PID temperature controller that ensures accuracy and repeatability is guaranteed. Temperature setting in increments of 0.1°C and temperature setting retained in memory, even after 'power off'.

Thermostatic bath option has an easy to use analogue dial pointer for setting temperature in 5°C increments.

All Shallow Baths™ have IP rated, illuminated on/off power switch and heater indication lamp. Features a thermal safety cut out which is fitted to the heater. Digital baths feature an over temperature alarm automatically set at 4°C above set temperature, including a visual indicator and safety heating cut out, to protect samples from over heating. Shallow Bath™ fitted with non-slip rubber feet.

#### Temperature

##### Digital

Display / resolution: Digital LED / 0.1°C

Temp. Range: Ambient + 5°C - 99°C

Temp. Setting: push button

Stability/uniformity: ± 0.2°C/± 0.1°C

Temperature memory: Retained in memory even after 'power off'.

##### Thermostatic

Temp. Range: Ambient + 5°C - 99°C

Temp. Setting: analogue dial pointer

Stability/uniformity: ± 0.25°C/± 0.1°C

**ESL58202**

Capacity : 2 ltr

**Dimension** :s (mm) Overall - 332w x 185d x 135h / Working - 300w x 150d x 65h  
Electrical / power supply: 120v or 230v models available / 200w

All models have 3 year warranty

Complete with shelf for good water circulation

UK manufactured

Accessory lids, racks and baskets available





### Water Bath Thermostatic Triple

Clifton analogue Triple-baths™ feature three independently controlled unstirred water baths in one space saving unit. Ideal for heating samples in micro centrifuge tubes and for other molecular biology applications.

#### High quality build and features

Comprising of 3 high quality corrosion resistant stainless steel tanks, with a bright clean finish housed in a durable painted outer case. Each chamber can be set to a different temperature and used simultaneously. Painted surfaces feature antibacterial finish with good chemical resistance.

Triple 4 litre bath is fitted with side lifting handles for easy lifting. These shallow baths require less water and less process chemicals, so are therefore economical to use.

Heaters and temperature sensors are concealed under the tanks providing a clutter free working area which is easy to wipe clean. Supplied with 3 removable sturdy low height stainless steel perforated shelves, for even heat distribution. Triple-baths™ are available in two sizes, 3 x 2 litre and 3 x 4 litre chambers.

Accessory lids available. Above 60°C it is recommended that to achieve optimum performance the chambers should be covered with a lid. Covering the bath also reduce energy consumption and running costs. Three year warranty and comprehensive customer support.

#### Controls and safety

Easy to use analogue dial pointer for setting temperature, graduated in 5°C divisions for each tank. With 3 independent controllers, each chamber can be operated separately and simultaneously. The Triple-bath™ includes IP rated, illuminated on/off power switch and heater indication lamp for each tank.

Water baths are pre-calibrated for consistent accuracy. Thermal cut out fitted in the heater. Bath fitted with non-slip

Rubber feet.

#### Temperature

Temperature control: Analogue dial pointer - graduated in 5°C divisions

Temp. range: Ambient + 5°C - 99°C

Temp. setting: Turn dial pointer

Stability/uniformity: ± 0.5°C/± 0.5°C

<b>ESL58203</b>	Capacity : 2 Ltr	<b>Dimension</b> : External : 535w x 332h x 135h mm Internal: 300w x 150d x 65h mm Capacity Nominal Tank Capacity: Triple bath tanks, 2 Litres each.
<b>ESL58204</b>	Capacity : 4 Ltr	<b>Dimension</b> : External : 535w x 332h x 290h mm Internal: 300w x 150d x 150h mm Capacity Nominal Tank Capacity: Triple tanks, 4 Litres each

All models have 3 year warranty

Complete with shelf for good water circulation

UK manufactured

Accessory lids, racks and baskets available





### Water Bath Digital Triple-bath

Clifton digital Triple-baths™ feature three independently controlled unstirred water baths in one space saving unit. Ideal for heating samples in micro centrifuge tubes and for other molecular biology applications.

#### High quality build and features

Comprising of 3 high quality corrosion resistant stainless steel tanks, with a bright clean finish housed in a durable painted outer case. Each chamber can be set to a different temperature and used simultaneously. Painted surfaces feature antibacterial finish with good chemical resistance.

Triple 4 litre bath is fitted with side lifting handles for easy lifting. These shallow baths require less water and less process chemicals, so are therefore economical to use.

Heaters and temperature sensors are concealed under the tanks providing a clutter free working area which is easy to wipe clean. Supplied with 3 removable sturdy low height stainless steel perforated shelves, for even heat distribution. Triple baths™ are available in two sizes, 3 x 2 litre and 3 x 4 litre chambers.

Accessory lids available. Above 60°C it is recommended that to achieve optimum performance the chambers should be covered with a lid. Covering the bath also reduce energy consumption and running costs. Three year warranty and comprehensive customer support.

#### Controls and safety

Temperatures can be easily and rapidly set with the push button, wipe clean control panel. Temperature displayed clearly with bright LED display in 1°C increments. Temperature setting is retained in memory, even after 'power off'. With 3 independent controllers, each chamber can be operated separately and simultaneously.

The Triple-bath™ includes IP rated, illuminated on/off power switch and heater indication lamp for each tank.

Water baths are pre-calibrated at two separate temperatures for consistent accuracy. Thermal cut out fitted in the heater. Bath fitted with non-slip rubber feet.

#### Temperature

Display/resolution: Digital LED/1°C

Temp. Range: Ambient + 5°C - 99°C

Temp. Setting: Push button

Stability/uniformity:  $\pm 0.25^{\circ}\text{C}/\pm 0.1^{\circ}\text{C}$

Temperature memory: Retained in memory even after 'power off'

ESL58205	Capacity : 2 ltr	<b>Dimension</b> :s External: 535w x 332h x 135h mm
		Internal: 300w x 150d x 65h mm Capacity Nominal Tank Capacity: Triple tanks, 2 Litres each

ESL58206	Capacity : 4 ltr	<b>Dimension</b> :s External: 535w x 332h x 290h mm
		Internal: 300w x 150d x 150h mm Capacity Nominal Tank Capacity: Triple tanks, 4 Litres each

All models have 3 year warranty

Complete with shelf for good water circulation

UK manufactured

Accessory lids, racks and baskets available





**Hinged Lid Assymoulded Lid New Style Clear Plastic**

Hinged lid assymoulded lid new style clear plastic

ESL58209



**Stainless Steel Gabled Lid**

Stainless steel gabled lid

ESL58210

**Test Tube Rack Stainless Steel 18 X 19mm**

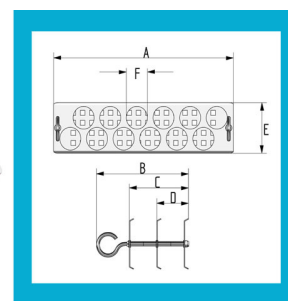
Test tube rack stainless steel 18 x 19mm

ESL58211

**Test Tube Rack Stainless Steel 12 X 32mm**

Test tube rack stainless steel 12 x 32mm

ESL58212



Labware



**Water bath Irwin school**

The Irwin water bath specifically designed for School Science Departments. It is built around a Gratnells deep tray and so can be stored in a Gratnells trolley. Water capacity is from 2 to 8 litres. Because of the shallow profile of the heating element, 3 litres of water gives the equivalent depth to 8 litres in a EduScience Bath, thus it reaches temperature much faster. Digital temperature control will maintain the water temperature within 1 degree Centigrade. Separate temperature sensor which can control the whole bath or an individual test tube. 500W silicone heating element. Particularly suitable for hard water areas as the element may be easily removed and cleaned. Gives additional bench space in the prep room. Light and easy to carry with safety cut-out sensor. Even temperature distribution, no stirrer required. Student proof temperature lock. Large capacity will take up to 4 test tube racks. Cost effective and practical solution for all your water bath needs. Comes complete with a lid and Z type test tube rack. Available in either 60 degrees centigrade or 100 degrees Centigrade options.

ESL58207

60 degrees C

ESL58208

100 degrees C

**Ultrasonic Bath**

- Frequency: 53KHz, • Heating: No, • Degas: Yes, • Timer (minute): 1-99, • Housing: SUS304,
- Drain : No, • Stainless steel cover: Yes
- Ultrasonic power(W): 100, • Heating power(W): No, • Degas power(W): 100,



ESL58245

Capacity : 3 Ltr

Tank size (LxWxD) cm : 24x14x10  
Overall size (LxWxD) cm : 27x16x24  
Tank capacity (litre): 3

ESL58246

Capacity : 6 Ltr

Tank size (LxWxD) cm : 30x15x15  
Overall size (LxWxD) cm : 33x18x29  
Tank capacity (litre): 6





## Water Bath

The water bath is widely used for the day to day bacteriological and laboratory applications requiring incubation as well as general tests and procedures in variety of research and testing laboratories. Water baths also have a variety of usages in tissue culture application, enzyme reaction studies, growth observation studies, Fermentation analysis and various other general and specialized application in various laboratories.

### ESL-20S Water Bath

#### Features

- Rapid heating, the temperature remains constant after reaching the set temperature
- High temperature accuracy with overheating protection
- High temperature resistant and corrosion free lid made up of 304 stainless steel
- Electronic components are easy to disassemble. Safe and easy to maintain



#### Specifications

Display
Temperature range [°C]
Temperature stability at 37°C[ °C]
Temperature accuracy at 37°C[ °C]
Bath volume [L]
Circulating pump
Overheating protection
Temperature sensor
Dimension[mm]
Housing
Parts touch water (including lid)
Weight[kg]
Voltage[V]
Heating power[W]
Ambient temperature[°C]
Ambient humidity[% RH]

#### ESL-20S

LED
Room temp.+5-80
±0.5
±0.3
20
No
yes
PT1000
667x349x357
Q235 Plastic panel
Stainless steel
16.2
220V, 50/60Hz
1000
+10-40
<80





### Water Bath Ultrasonic, Thermostatic Heated And Timed ,Ultrasonic -230V

Clifton industrial strength ultrasonic baths are designed for demanding applications and suitable for continuous operation. Featuring heating and timer controls with ultrasonic boost, degas and sweep functions. Ideal for cleaning delicate or fragile components and glassware, especially where there may be a risk of breakage as a result of manual cleaning.

#### High quality build and features

High quality stainless steel tank and construction for durability. Fitted with side lifting handles for easy lifting. Featuring ultrasonics with sweep function for perfect and even distribution of ultrasonic activity. Features an ultrasonic boost function for 25% more power. The auto-degassing function is useful for liquid changes in the tank, de-carbonating and degassing HPLC solutions.

Three year warranty and comprehensive customer support. Accessory lids available. It is recommended that to achieve consistent heating, minimise evaporation and to prevent contamination when ultrasonic bath is not in use, it should be covered with a lid. Clifton Range®

#### Controls and safety

Temperature, time and activating sonic can be easily and rapidly set with the push button, wipe clean

Control panel, featuring an illuminated bold display. Splash proof controls with a drip bar above control panel, guides spills and drips away from the easy to use temperature and timer dials.

Touch keypads for boost, sweep, degas with start/stop and on/off functions. Temperature is set with analogue dial in increments of 5°C, time values in 1 minute increments with indication of time remaining as well as a permanent 'on' function. Bath will switch off after 12 hours if no keys have been activated, to prevent unintended operation.

Heating elements are controlled electronically to reduce energy demand and prevent overheating if allowed to run dry. Illuminated on/off power switch. Bath fitted with non-slip rubber feet. This range is designed for intermittent and permanent 'on' use. Do not allow items to touch base of the tank, we recommend accessory baskets.

#### Temperature

Display / resolution : Digital LED / 0.1°C

Temp. Range : 30°C - 80°C

Temp. Setting: Analogue dial pointer in increments of 5°C

Timer: Time setting 1 minute with indication of time remaining or permanent 'on' function.

ESL58205	Capacity : 1 ltr	<b>Dimension</b> :s (mm) Overall - 200w x 100d x 180h / Working - 190w x 85d x 60h
		Electrical / power supply: 120v or 230v models available / 60w Ultrasonic effective output: 30w Ultrasonic peak power / frequency: 240w / 38kHz Accessory basket: BSK-1

ESL58206	Capacity : 12 ltr	<b>Dimension</b> :s (mm) Overall - 365w x 278d x 321h / Working - 300w x 240d x 200h
		Electrical / power supply: 120v or 230v models available / 800w Ultrasonic effective output: 200w Ultrasonic peak power / frequency: 800w / 38kHz Accessory basket: BSK-12

All models have 3 year warranty

Complete with shelf for good water circulation

UK manufactured

Accessory lids, racks and baskets available

ESL58244





**Drying Cabinets**

Fitted with toughened glass doors.

Extras: Can be fitted with an interior fan and dial thermostat control for faster and safer drying Ideal for keeping products dry or testing electronic assemblies

<b>ESL58255</b>	Capacity : 113 LTR	Shelves supplied is 2 shelves, External dimension (mm) : 545 x 730 x 360 Internal dimension (mm) 460 x 728 x 341
<b>ESL58256</b>	Capacity : 226 LTR	Shelves supplied is 3 shelves, External dimension (mm) : 652 x 928 x 449 Internal dimension (mm) : 567 x 926 x 430
<b>ESL58257</b>	Capacity : 540 LTR	Shelves supplied is 3 shelves, External dimension (mm) : 1550 x 581 x 600, Internal dimension (mm) : 1650 x 583 x 610



**Ovens Drying Moisture Extraction**

The forced air extractor is a bolt-on unit and can be retro-fitted to our other ovens if required. (OPTIONAL EXTRA).

- Capacities: 150 Litres
- Temperature range: 40 C to 250 ° C
- Interior : CLAD coated steel
- Circulation : Fan assisted and extract unit
- Output vent : for 50mm opening/diameter tubing
- Temperature control : direct reading hydraulic
- Safety: Thermostat with warning indicator.
- CE compliant.

ESL58262



**Ovens Incubators Dual Purpose**

Manufactured with economy and a dual function in mind. These units are ideally suited to laboratories requiring an incubator and an oven in one convenient cabinet. These can be used as a general purpose incubator, yet at the flick of a switch can be used as either a 250 ° C oven or steriliser making it the obvious cost-effective solution for many laboratories.

- Capacities: 150 Litres
- Optional/Extras: Can be fitted with:
  - Digital controller, and/or a run back timer
  - Stainless steel chamber
  - PID Digital control & readout (DIG)
  - Dial thermometer readout
  - Programmable timers. CE compliant.

ESL58265





### Oven General Purpose

Suit most laboratory applications including drying, heating and general use.

Temperature Range: 40 C to 250 °C

Fluctuation: typically  $\pm 1$  °C

Exterior: Easy clean powder coated body

Interior: Aluminium clad steel chamber as standard (Stainless steel also available)

Controls: Calibrated dial thermostat

Safety: Independent overheat safety thermostat

Warranty: Full UK 1 year parts labour

Circulation: Internal forced air.

CE compliant.

<b>ESL58268</b>	Capacity : 10 LTR	Shelf positions:1, No. Of shelves: 1, External dimension (HxWxD): 415x375x350mm, Internal dimension (HxWxD): 150x275x243mm, Max load height: 105mm, Power: 350watts
<b>ESL58269</b>	Capacity : 20 LTR	Shelf positions: 2, No. Of shelves: 2, External dimension (HxWxD): 540x375x382mm, Internal dimension (HxWxD): 275x275x275mm, Max load height: 190mm, Power: 500 watts
<b>ESL58270</b>	Capacity : 30 LTR	Shelf positions: 3, No. Of shelves: 2, External dimension (HxWxD): 570x415x422mm, Internal dimension (HxWxD): 305x315x315mm, Max load height: 220mm, Power: 750 watts
<b>ESL58271</b>	Capacity : 40 LTR	Shelf positions: 3, No. Of shelves: 2, External dimension (HxWxD): 670x415x422, Internal dimension (HxWxD): 404x315x315, Max load height: 320mm, Power: 1000 watts
<b>ESL58272</b>	Capacity : 50 LTR	Shelf positions: 3, No. Of shelves: 2, External dimension (HxWxD): 625x590x422 mm, Internal dimension (HxWxD): 325x490x315 mm, Max load height: 240mm, Power: 1000 watts
<b>ESL58273</b>	Capacity : 75 LTR	Shelf positions: 3, No. Of shelves: 2, External dimension (HxWxD): 625 x 590 x 567mm, Internal dimension (HxWxD): 333x490x460mm, Max load height: 248mm, Power: 1250watts
<b>ESL58274</b>	Capacity : 100 LTR	Shelf positions: 4, No. Of shelves: 3, External dimension (HxWxD): 735x590x567mm, Internal dimension (HxWxD): 445x490x460mm, Max load height: 360mm, Power: 1250watts
<b>ESL58275</b>	Capacity : 120 LTR	Shelf positions: 4, No. Of shelves: 3 , External dimension (HxWxD): 735x560x659mm, Internal dimension (HxWxD): 445x490x552mm, Max load height: 360mm, Power: 1500watts
<b>ESL58276</b>	Capacity : 150 LT R	Shelf positions: 4, No. Of shelves: 3, Power: 1500watts





**Incubators General Purpose**

Suit most laboratory applications including drying, curing, and general use.  
 Temperature Range : Ambient 10 C to 100 ° C  
 Fluctuation: typically +/-0.75 ° C  
 Exterior: Easy clean powder coated body  
 Interior: Aluminium clad steel chamber as standard (Stainless steel also available)  
 Controls: Calibrated dial thermostat  
 Safety: Independent overheat safety thermostat  
 Warranty : Full UK 1 year parts & labour  
 CE compliant.

<b>ESL58295</b>	Capacity : 10 LTR	Shelf positions: 1, No. Of shelves: 1, External dimension (HxWxD): 415x375x350mm, Internal dimension (HxWxD): 150x275x243mm, Max load height: 105mm, Power: 250watts
<b>ESL58296</b>	Capacity : 20 LTR	Shelf positions: 2, No. Of shelves: 2, External dimension (HxWxD): 540x375x382mm, Internal dimension (HxWxD): 275x275x275mm, Max load height: 190mm, Power: 350watts
<b>ESL58297</b>	Capacity : 30 LTR	Shelf positions: 3, No. Of shelves: 2, External dimension (HxWxD): 570x415x422mm, Internal dimension (HxWxD): 305x315x315mm, Max load height: 220mm, Power: 500 watts
<b>ESL58298</b>	Capacity : 40 LTR	Shelf positions: 3, No. Of shelves: 2, External dimension (HxWxD): 670x415x422mm, Internal dimension (HxWxD): 404x315x315mm, Max load height: 320mm, Power: 500 watts
<b>ESL58299</b>	Capacity : 50 LTR	Shelf positions: 3, No. Of shelves: 2, External dimension (HxWxD): 615x590x422mm, Internal dimension (HxWxD): 325x490x315mm, Max load height: 240mm, Power: 500 watts
<b>ESL58300</b>	Capacity : 75 LTR	Shelf positions: 3, No. Of shelves: 2, External dimension (HxWxD): 623x590x567mm, Internal dimension (HxWxD): 333x490x460mm, Max load height: 248mm, Power: 750 watts
<b>ESL58301</b>	Capacity : 100 LTR	Shelf positions: 4, No. Of shelves: 3, External dimension (HxWxD): 735x590x567mm, Internal dimension (HxWxD): 445x490x460mm, Max load height: 360mm, Power: 750 watts
<b>ESL58302</b>	Capacity : 120 LTR	Shelf positions: 4, No of shelves: 3, External Dimension (HxWxD): 735x590x659mm, Internal Dimension (HxWxD): 445x490x552mm, Max load height: 360mm, Power: 1500 watts
<b>ESL58303</b>	Capacity : 150 LT R	Shelf positions: 4, No of shelves: 3, Max load height: 360mm, Power: 1500 watts,

**Sterilizer Hot Air**

Manufactured to conform with the strict requirements of hot air sterilization up to 250°C in life science laboratories.

Uses: Standard disinfection of instruments and applications is not always thorough enough in medicine and biological research. Often high temperature dry sterilization is the only acceptable method of biological cleansing.

Temperature range: 30 ° C to 250 ° C

Interior: Stainless steel with fan circulation

Timer: 120 minute mechanical run-back timer

Controls: PID digital and readout (DIG)

Safety: thermostat with warning indicator

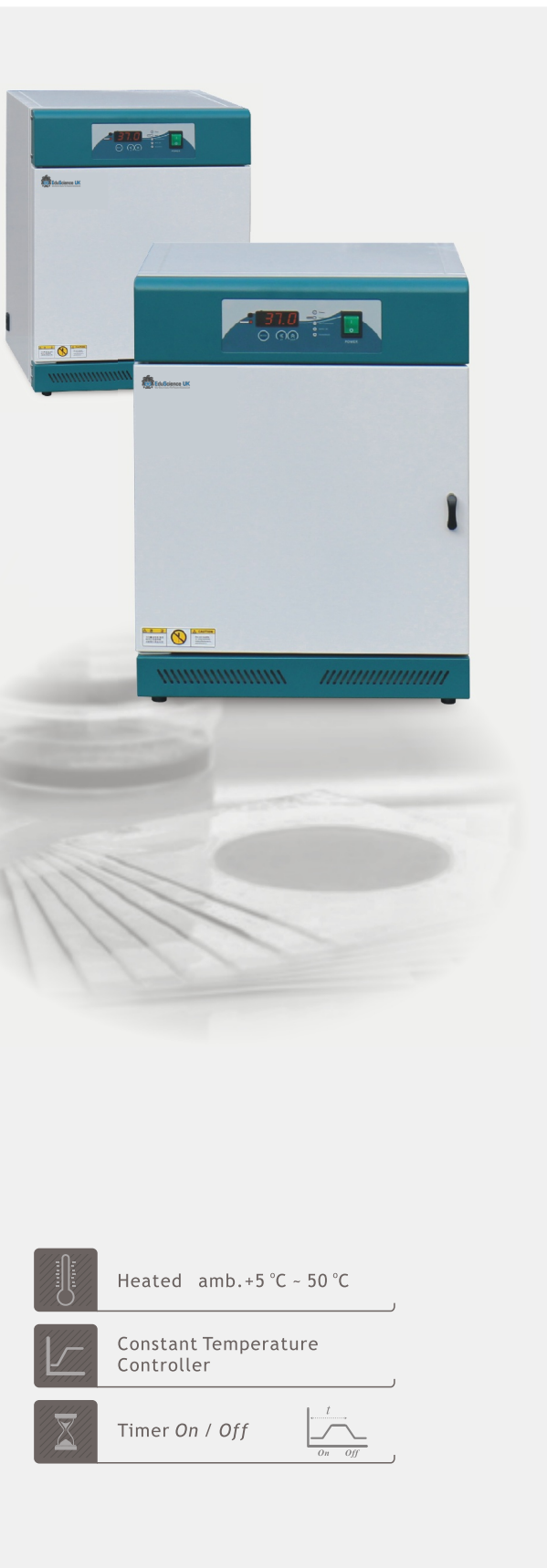
500 C version is available for protein denaturation.

CE compliant.



<b>ESL58324</b>	Capacity : 50 LTR	No of shelves: 2, Shelf positions: 3, External Dimension (HxWxD): 625x590x422mm, Internal Dimension (HxWxD): 325x490x315mm, Max load height: 240mm, Power: 1000 watts.
<b>ESL58325</b>	Capacity : 75 LTR	No of shelves: 2, Shelf positions: 3, External Dimension (HxWxD): 625x590x567mm, Internal Dimension (HxWxD): 333x490x460mm, Max load height: 248mm, Power: 1000 watts.
<b>ESL58326</b>	Capacity : 100 LTR	No of shelves: 3, Shelf positions: 4, External Dimension (HxWxD): 735x590x567mm, Internal Dimension (HxWxD): 445x490x460mm, Max load height: 360mm, Power: 1000 watts
<b>ESL58327</b>	Capacity : 120 LTR	No of shelves: 3, Shelf positions: 4, External Dimension (HxWxD): 735x590x659mm, Internal Dimension (HxWxD): 445x490x552mm, Max load height: 360mm, Power: 1500 watts
<b>ESL58328</b>	Capacity : 150 LTR	No of shelves: 3, Shelf positions: 4, Power: 1500 watts







## Compact Incubator

I-Series Compact Economic Incubator is suitable for personal, small food laboratory or HACCP Industry doing daily incubation of bacterial screening with Petri-Dish or Petri-Film.

### Specifications

<b>Heating</b>	Gravity Convection (ESL-10T) Forced Convection (ESL-30T)
<b>Temp. Range</b>	ambient + 5 °C ~ 50 °C
<b>Accuracy</b>	± 0.2 °C at 37.0°C (JSGL-10T)
<b>Uniformity</b>	± 0.5 °C at 37.0°C (JSGL-10T)
<b>Control</b>	Microprocessor PID Control Auto START / STOP Timer
<b>Sensor</b>	Class A Pt-100 Ω Sensor
<b>Safety</b>	Over-Temperature Cut-Off Over Current Cut-Off
<b>Material</b>	Body : Epoxy Powder Coated Steel Chamber : Stainless Steel 304 Inner Glass Door (JSGL-30T only) Including PVC Coated Wire Shelf
<b>Electric</b>	220 ± 10% VAC 50/60Hz 1-Phase
<b>Plug config.</b>	 or 

CEE 7/7 Schuko

BS 1363

### Control Accuracy

- ± 0.1 °C Digital PID Controller with automatic START/STOP timer max. 99min 59sec / 99hr 59min / 99 day 23hr
- Temperature calibration, auto-tuning function
- Class A Pt-100 Ω sensor



Heated amb.+5 °C ~ 50 °C



Constant Temperature Controller



Timer On / Off



# General Incubator

Models : ESL-701GI , ESL-702GI , ESL-703GI ,  
ESL-705GI , ESL-706GI , ESL-707GI

## Features

- Digital PID Controller
- Auto tuning function
- Safety devices
- Inner glass door to reduce Temp. change.
- Easy Temp. setting methods.



MODEL	ESL-701-GI	ESL-702-GI	ESL-703GI	ESL-705GI	ESL-706GI	ESL-707GI	
Capacity	49 Liter	91 Liter	150 Liter	250 Liter	91 Liter x 2	91 Liter x 4	
Dimension (W x D x H) (mm)	(In)	350 x 400 x 350	450 x 450 x 450	500 x 500 x 600	500 x 500 x 1000	(450 x 450 x 450) x 2	(450 x 450 x 450) x 4
	(Out)	500 x 590 x 720	600 x 640 x 820	650 x 690 x 970	655 x 690 x 1350	610 x 740 x 1480	1220 x 740 x 1480
Heater Capacity	300W	300W	500W	500W	300W x 2	300W x 4	
Shelves	2EA	2EA	3EA	3EA	4EA	8EA	
Temperature Range	Ambient +5°C to 60°C						
Accuracy	+/- 0.1°C						
Temperature control	Digital PID Controller						
Timer	99hr 59Min						
Thermocouple	PT 100Ω						
Material	(In)	Stainless steel					
	(Out)	Steel plate with powder coating					
Inner door	Safety glass of thickness 5mm						
Shelves	Adjustable Type ABS Coating						
Safety Device	Over temperature, Current protection, Sensor error detection.						
Power	220V, 50/60Hz						



# Shaking Incubator

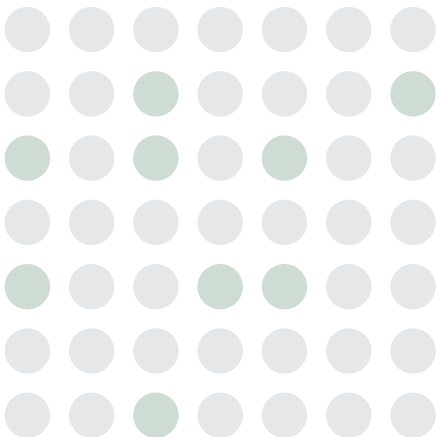
## Model ESL-8480SF ESL-8480S

Labware



### Main Feature

- Noiseless & Brushless DC Motor
- Durable & Beltless Drum type
- Stable operation in low speed of 10RPM
- Digital PID Controller
- Reliable safety device
- Simple-to-use
- Compatible for various capacity of flask & tube
- Light Bank ("-L" Model)



### Shaking Incubator

Model	ESL-8480SF	ESL-8480S
Temp. Range	15°C to 60°C	Ambient +5°C to 60°C
Weight	81Kg	66Kg
Power	220V, 4.5A , 60Hz	220V, 1.8A, 60Hz
Temp. Controller	Digital P.I.D. controller	
Speed Range	10 - 350 RPM	
Display	LED Display	
Drive system	Beltless direct drive	
Motor	Brushless D.C.Motor K-type	
Circulation Fan	3.5" convection fan x 2EA	
Dimension ( IN )	510 x 530 x 400(H)mm	
( OUT )	515 x 730 x 720(H)mm	
Lid	Acrylic Blue	
Safety Device	Over temp.Protector, Door detector	
Standard plate	250ml x 25EA	

### Light Bank Model

Model	ESL-8480SFL
Light Bank	40W CL x 1 Unit
Light Control	24Hr. Photoperiod program

### Plate of Flask

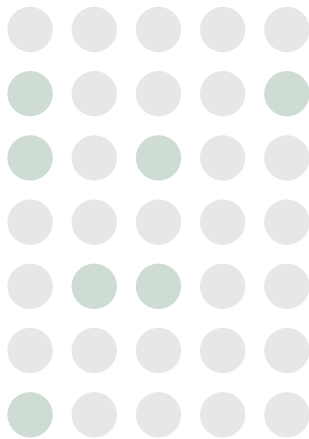
100ml Flask	.....	36 EA
250ml Flask	.....	25 EA
500ml Flask	.....	16 EA
1000ml Flask	.....	9 EA
2000ml Flask	.....	4 EA
Spring Rack	.....	450 x 450mm





# Shaking Incubator Model ESL-8480SR

Less Gas-Consuming & Space-saving compact INCUBATOR



## Main Feature

- Noiseless & Brushless DC Motor
- Durable & Beltless Drum type
- Stable operation in low speed of 10RPM
- Reliable safety device
- Simple-to-use
- Compatible for various capacity of flask & tube
- Light Bank ("L" Model)

## Light Bank Model

Model	VS - 8480 SR-L
Light Bank	Compact FL 36W x 3 Unit
Light Control	24Hr. Photoperiod program

## Shaking Incubator ESL-8480SR

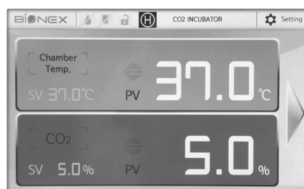
Temp. Range	10°C to 60°C
Temp. Controller	Digital P.I.D. controller
Speed Range	10 - 350 RPM
Display	LED Display
Drive system	Beltless direct drive
Motor	Brushless D.C.Motor K-type
Circulation Fan	5" convection fan x 2EA
Dimension ( IN )	830 x 540 x 500(H)mm
( OUT )	1060 x 725 x 895(H)mm
Lid	Silicone Packing & Shock-absorber
Safety Device	Over temp. Protector, Door detector
Weight	137.5 Kg
Power	220V, 6A, 1.2 Kw , 60Hz
Standard plate	250ml x 40EA
Certification	ISO 9001

## Plate of Flask

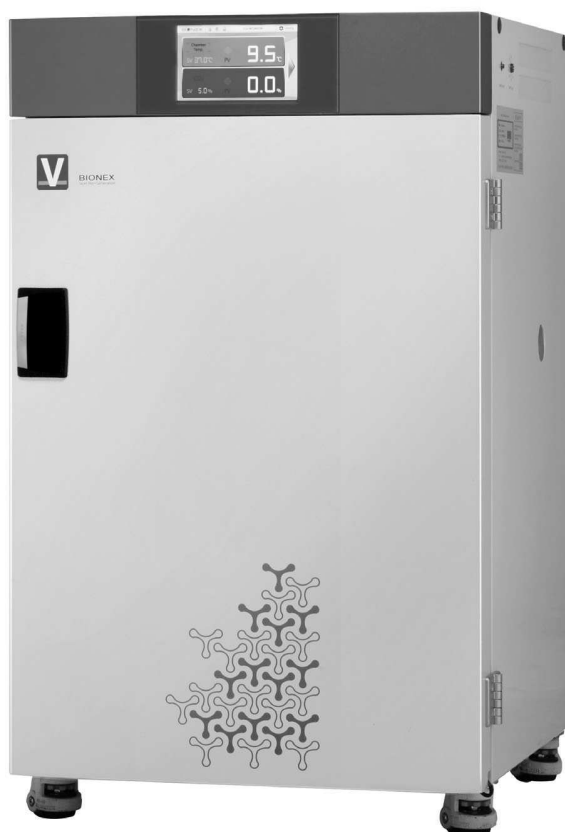
100ml Flask	.....	60 EA
250ml Flask	.....	40 EA
500ml Flask	.....	24 EA
1000ml Flask	.....	15 EA
2000ml Flask	.....	8 EA
Spring Rack	.....	760 x 470mm



## ESL-9170CT / 9170GCT

CO<sub>2</sub> Incubator / CO<sub>2</sub>, O<sub>2</sub> Incubator

▲ 7" Touch Screen

**CO<sub>2</sub> Incubator** ESL-9170CT

Main Control	Touch Screen Controller
Display	7" Color LCD
Temperature Range	RT +5°C to 50°C, ±0.1°C at 37°C
CO <sub>2</sub> Range	0 to 20%, ±0.1% at 5%
CO <sub>2</sub> Sensor	Dual-Beam Non Dispersive Infra-red Sensor
Humidification	Up to 96% RH at 37°C
Dimension (in)	510(W) × 480(D) × 705(H)mm
(out)	605(W) × 610(D) × 995(H)mm
Capacity	173 Liter
Water Jacket Volume	34 Liter
Materials (in)	Copper-blended Stainless Steel (SUS 304)
(out)	Steel Plate with Powder Coating
Door	Double, Silicone Magnetic Packing Door
Inner Door	Safety Glass Door with U-groove Packing
Door Heater	Silicone Heater, Independent Control
Shelves	3EA, Copper-blended Stainless Steel
Safety Device	Over Temp. Protector, Gas Monitor Alarm, Water Level Monitor, Power Breaker
Utility	Sample Port, Access Hole, Drain Port, HEFA Filter Unit, Flow Meter
Net Weight	98kg
Power	220V, 5A

**CO<sub>2</sub> / O<sub>2</sub> Incubator** ESL-9170GCT

O <sub>2</sub> Range	0.1 to 20.9%, ±0.1% at 5%
O <sub>2</sub> Sensor	Industrial Oxygen Sensor

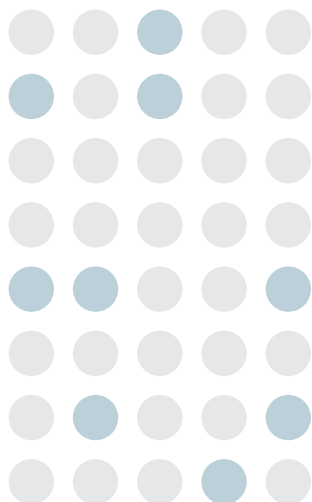
**Cooling System** ESL-9170CT-R (Option)

Dimension (out)	605(W) × 610(D) × 1240(H)mm
Temperature Range	20°C to 50°C, ±0.1°C



# Vacuum Oven

## Model ES-1202V5



### Main Feature

- Uses for drying moisture, condensing , deairing, solvent removal.
- Glass door in front, showing indoor.
- Digital PID Controller.
- Auto Tuning.
- Reliable safety device.
- Simple-to-use.
- Connects nitrogen gas with Purge Valve (Option).
- 10step Programmable Controller (Option).

### Vacuum Oven

Model	ES-1202V5	ES-1202V6
Dimension ( IN )	300 x 300 x 300(H) mm	400 x 400 x 400(H) mm
(OUT)	500 x 450 x 450(H) mm	600 x 550 x 550(H) mm
Capacity	27 Liter	64 Liter
Power	220V, 3.2A, 60Hz	220V, 4A, 60Hz

### Specification

Temp. Range	Ambient + 5°C to 200°C
Temp. Controller	Digital PI.D. controller
PID Setting	Auto-tuning
Display	LED display
Material ( IN )	Stainless steel
( OUT )	Steel plate with powder coating
Valve	Vacuum valve, Purge valve
Vacuum gauge	Mechanical type
Door	Silicone packing door with Large window
Shelves	AL material, 2EA
Safety device	Exclusive over temp. protector, Power Breaker

### Option



# Anaerobic Incubator

## ESI- A1 Series



## Anaerobic Incubator

### Anaerobic Incubator ESI-A10

Anaerobic Incubator ESI-A10 is a workstation especially designed to culture anaerobic micro-organisms for various studies. Features micro-computer control system, UV sterilizer, stainless steel chamber, latex gloves, tough front glass window, de-oxidization catalyst, leakage protection etc. to ensure anaerobic environment while working along with operator's safety. Within 5 min anaerobic environment is created in the cultivation chamber while it takes less than 1 hr for the operation chamber. It is used in microbiology labs, oil industry, soil research etc.

### Anaerobic Incubator ESI-A11

Anaerobic Incubator ESI-A11 is a workstation especially designed to culture anaerobic micro-organisms for various studies. Features Siemens Programmable Logic Controller, UV sterilizer, stainless steel chamber, latex gloves, tough front glass window, de-oxidization catalyst, leakage protection, USB interface etc. to ensure anaerobic environment while working along with operator's safety. Within 5 min anaerobic environment is created in the cultivation chamber while it takes less than 1 hr for the operation chamber. It is used in microbiology labs, oil industry, soil research etc.

### Features

- High-precision microcomputer control system to display accurate temperature inside the incubator ESI-A10
- Siemens PLC for High-performance ESI-A11
- High-precision temperature sensor and oxygen sensor to ensure accuracy ESI-A11
- High-precision temperature control module and analog module to ensure stability ESI-A11
- UV sterilizer for effective de-contamination
- Solenoid valve switch control to adjust and input essential gas
- Cultivation and operation chamber made of stainless steel
- Impact-resistant front glass window for easier observation
- Deoxidization catalyst in operation room
- Double door for cultivation chamber to add more petri plates
- Latex gloves, Leakage protection, Over-heating alarm for user safety
- Caster wheels for easier transport



## Anaerobic Incubator ESI-A1 Series

- LCD screen to view parameter and button press keypad pre-set values ESI-A10
- LCD screen to view parameter and touch screen control panel ESI-A11
- 2 shelves and wheels for cultivation chamber
- Tube-light inside the operation chamber for better illumination
- Door handle provided for easier opening and closing
- Wires and pipes inside chamber are properly concealed for user safety
- Equipped with wax-melting disinfection device and inoculating rod sterilize ESI-A11
- USB interface provided to transfer data ESI-A11
- Stores 6 months data ESI-A11

### Applications

It is widely used to culture anaerobic micro-organism to perform various studies in soil research, pathology labs, oil industry etc.

### Specifications

Model No.	ESI-A10	ESI-A11
Control System	Microcomputer control system	Microprocessor control system + Siemens PLC
Display	LCD display with button-press keypad	LCD display with touch screen control panel
Time for creating anaerobic state in sample chamber	< 5 minutes	< 5 minutes
Time for creating anaerobic state in operation chamber	< 1hr	< 1hr
Anaerobic environment maintenance time	> 12hrs (when no supply of mixed gas)	> 12hrs (when no supply of mixed gas)



## Anaerobic Incubator

### Specifications

Temperature Range	RT+3 to 60°C	RT+3 to 60°C
Temperature Stability	< ±0.3°C	< ±0.3°C
Temperature Uniformity	< ±1°C	< ±1 °C
Display Resolution	0.1°C	0.1°C
Timing Range	1 to 9999 min	1 to 9999 min
Power Rating	600 W	600 W
Power Supply	AC 220V, 50 Hz	AC 220 V, 50 Hz
Data Storage	No	Yes
Interface	----	USB
Interior Chamber Dimension (W×D×H)	300×190×290 mm	300×190×290 mm
Operation Chamber Dimension (W×D×H)	820×660×670 mm	820×660×670 mm
Exterior Dimension (W×D×H)	1260×730×1380 mm	1260×730×1380 mm
Package Dimension (W×D×H)	1390×920×1560 mm	1390×920×1560 mm
Net Weight	240 kg	240 kg
Gross Weight	320 kg	320 kg





**Water Still 4 Ltr /Hour Borosil Basic Plus**

Cap: 4 ltrs / hr, Single Safety, Pressure Temperature Switch with manual reset button- with UK PLUG and ON/OFF switch on the heater. CE Certified.

ESL58355



**Water Still 4 Ltr /Hour Borosil Basic**

Water still borosil basic designed for reliable continuous operation incorporating a host of features unmatched by comparable stills. It is easy to use, safe to operate, thoroughly reliable and above all Low Cost. Features :

- Abundant Output. The still provides, 4 litres/hr of distilled water produced through a power input of 3KW by a chromium plated heater housed in a horizontal Glass Boiler
- Distilled output is cool ensured by a high efficiency condenser. Temperature of distillate 25°C – 40°C tested for ambient room temperature of 30° C. CE MARKED
- Dimensions ( W x D x H) 50 cm x 15 cm x 45cm, 50 cm x 20 cm x 55cm
- Weight 6 kg. Approx., Power 220/240V, 50/60 Hz.
- Single phase. 3KW Heater.
- Water Supply Min. Flow rate 1 litre/min.
- Min. Pressure 3 p.s.i. (0.2 x 105 NM-2) Ideal for general Laboratory use- capable of producing pyrogen free water.
- Output 4 lit/hr
- Conductivity (using raw water) 3.0 – 4.0 µS/cm
- Conductivity (using treated water) 1.5 – 2.0 µS/cm
- PH 5.5 – 6.0



**Water Still 4 Ltr /Hour Metal Element**

For a continuous supply of distilled water. The evaporation unit is Simply connected to an existing water supply system. Easy to operate and clean.

Versions are available for 110 V/60 Hz and 230 V/50 Hz. All connections included. Without tubing.

Technical data :

Distilled water per hour : 4 litres

Conductivity : 1,5 – 2,5 µS

Connected load : 3 kW

Tubing : 10 mm

**Weight :** 9 kg

Dimensions (H x L x W) : 600 x 190 x 190 mm

ESL58353

- Distillate quality Pyrogen free Construction
- The stand is powder coated for long rust free Operation.
- Heater is a 3KW Chromium plated heater fitted with a thermostat, which shuts off automatically in case of water supply failure.
- The Boiler & Condenser are designed for high efficiency and provided with threading for easy plumbing of condenser.
- Boiler is provided with Teflon screw cork for insitu cleaning of the boiler.
- All plumbing connections to the equipment are made via Screw thread connectors
- Our water still has following additional safety features:
- Gate Valve : Prevents water wastage.
- Flow Switch : For Boiler Safety
- On/Off switch with water failure indicator lamp.
- Packing Info: packing
- Dimensions :** 50 cm x 47 cm x 46 cm. Gross
- Weight :** 12.00 kgs. Approx.

ESL58354



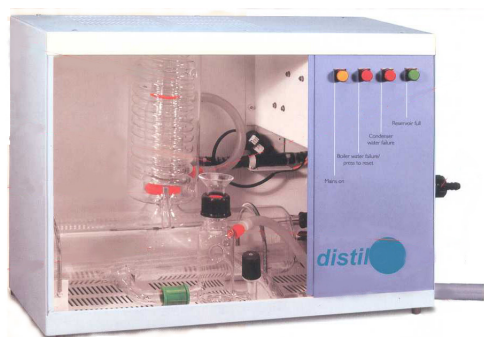
**Water Still 4 Ltr /Hour Borosil Basic Pro**

Cap: 4 ltrs / hr, Dual Safety, with two Pressure Temperature Switch with manual reset button- with UK PLUG and ON/OFF switch on the heater. CE Certified.

ESL58356







### Water Still 4 Ltr /Hour Borosil Silica Heater

Single Water Distillation Unit with 3 KW Silica Heater, Cap: 4 ltrs / hr.

Features :

Gate Valve to prevent water wastage.

Flow switch for boiler safety.

Teflon drain cock for easy maintenance.

High quality distillate.

Power coated stand.

Safety Built - in.

Silica Heater

Provided with a threaded Connection for easy, safe and quick assembly of Silica Heater.

Easy Cleaning

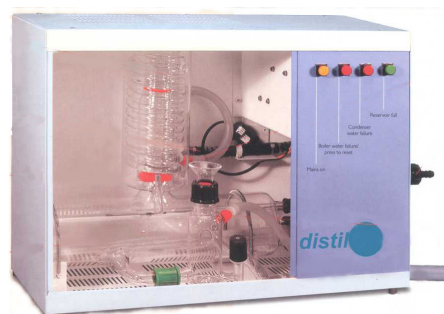
The Boiler is provided with a Teflon screw cock for easy cleaning of the boiler

Screw Thread Connectors

All plumbing connections are via screw thread connectors with silicon rubber 'o' rings. This facilitates easy fitting and removal of hose, without using excessive force, avoiding the danger of glassware breakage during assembly.

With over Heat protection : Pressure Temperature Switch (PTS): Shuts off the unit when water level in the boiler falls below the heater.

ESL58357



### Water Still 4 Ltr /Hour Borosil Automatic Single Distillation

Water still borosilicate Glass, Cap: 4 ltr/hr, single distillation with automatic cabinet . it is ideal for procuring ultra high purity water for demanding applications in the laboratory / tissue culture work.

it incorporates several safety devices for optimum use in hospitals and labs and has been designed to meet the International Safety Standards IEC 61010-01. Special features include Flow Control Safety, Gate Valve, Level Sensor as well as a Reservoir Level Sensor for automatic operation of the unit.

ESL58358



### Ducted Fume Extractor Cabinet

Large ducted hood mounted local extraction cabinet designed specifically for laboratories. It is commonly used in dental & medical labs, pharmaceutical laboratories, research & development and school science laboratories.

This unit exhaust air through a flexi-duct externally to the atmosphere. Although, it's a ducted fume extractor, you don't need to have a special vent to use the BV930H-D. Its flexi-ducts can be fitted to a normal domestic vent or placed on a partially opened window.

it also provides operators with a safe workstation, as handling of all the potential harmful chemicals is done within the hood enclosure in front of the intake filter area. For artwork applications, the enclosure can accommodate a standard A1 drawing boards, which will git at an angle so the unit captures the overstay efficiently, keeping the surrounding working area clean.

it is designed for immediate operator protection . If outside venting isn't possible, ES also offers re-circulatory fume cabinets such as the and BV930H-C. Both units have higher filtration specifications.

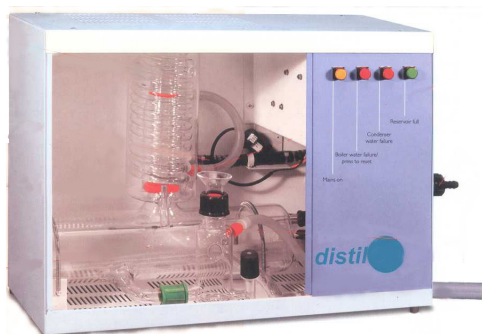
Applications

The ducted fume extractor cabinet is suitable to filter fumes, vapours and particulates from:

Spray Adhesives

Conformal coatings (thin polymer film usually used to coat circuit boards), Paints, Monomers, Resin, Sealants, Solders, Light Grinding , Organic Solvents, Cleaners, Hazardous powders & particulates.

ESL58382



### Water Still 4 Ltr /Hour Borosil Automatic Double Distillation

Water still borosilicate Glass, Cap: 4 ltr/hr, 4 ltr/hr, Double Distillation with automatic cabinet . it is ideal for procuring ultra high purity water for demanding applications in the laboratory / tissue culture work.

it incorporates several safety devices for optimum use in hospitals and labs and has been designed to meet the International Safety Standards IEC 61010-01. Special features include Flow Control Safety, Gate Valve, Level Sensor as well as a Reservoir Level Sensor for automatic operation of the unit.

ESL58359





**Bench Top Environment Cabinet Enclosure**

Sealed environment enclosure for sensitive sample handling -NO Transfer Hatch, Supplied with Nitrite glove ports, 2 x 8mm push-fit gas connections and internal power socket. Green Base

ESL58371



**Ducted Spray Booth**

It is ideal for applications that include filtration of aerosol adhesives (glue booth for spray mounts), aerosol lacquers and fixatives and airbrush sprays applied to artwork up to A1 size. A1 drawing boards can be placed into the hoods at an angle for efficient over-spray capture. The workstation hood also accommodates prototypes, models, ceramic parts, PCB's etc., placed onto the hood base to be sprayed, soldered, cleaned, glued, moulded, sanded etc.

These cabinets are designed for studio / classroom / workshop cleanliness and for immediate operator protection whereby 'large' particulates (> 5 microns) are filtered out and 'fine' particulates (<5 microns) together with odours, gases, vapours and fumes within the hood enclosure are exhausted to atmosphere via the flexi-duct(s).

**Key Features**

For artwork applications, standard A1 drawing boards can be placed within the hood enclosure. The boards fit at an angle for efficient over-spray capture.

3D items, models, printed circuit boards etc. may be placed onto the hood base for spraying, cleaning, sanding, gluing etc. The Flexi-ducts can be fixed to a standard domestic vent(s) or simply placed through a partially open window to facilitate portability or convenience.

With the aid of a "Y" piece the 2 ducts can be placed through one hole in the wall.

Why choose the glue booth extraction unit?

The BV100H-D hood mounted extraction unit, like all ES filtration and extraction systems carries a lifetime guarantee. The unit has been designed to make sure it's quiet in operation and can be assembled in seconds. Simply place onto a desk, bench or trolley and then plug in and switch on to start extracting particulates from applications like glue over-spray and aerosol adhesives.

How does it filter harmful substances and solvent?

ESL58390



**Ducted Fume Extractor Cabinet 2**

it is ideal for use with spray adhesives, conformal coatings and paints, monomers, hazardous powders and particulates, resins, sealants, solders, light grinding particles, organic solvents and cleaners etc.

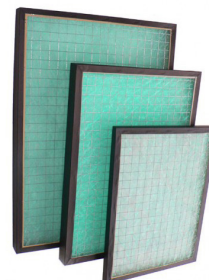
All handling and/or use of potentially harmful substances is carried out within the hood enclosure in front of the intake filter area. For artwork applications, standard A2 drawing board can be placed within the hood enclosure. The board fits at an angle for efficient overspray capture.

These fume cabinets are designed for immediate operator protection whereby 'large' particulates (> 5 microns) are filtered out and 'fine' particulates (<5 microns) together with odours, gases, vapours and fumes within the hood enclosure are exhausted to atmosphere via the flexi-duct(s).

The Flexi-duct can be fixed to a standard domestic vent or simply placed through a partially open window to facilitate portability and/or convenience. Key Features, Can accommodate standard drawing boards, Clear polycarbonate panel for protection

Hood lighting

ESL58386



**Particle Filter IFA2p (Pack Of 6)**

ack of 6 particle filters IFA2. For general spray and dust particle capture

ESL58402





**Hood Mounted Filtration Cabinet**

Hood mounted filtration cabinet with a high-efficiency carbon filter specifically designed to provide local exhaust ventilation in areas where it's not possible to use ducted level unit or fume filtration cabinet.

Applications:

The is for use in areas where external venting is impractical and hydrocarbon vapour and gas filtration is necessary. This unit is capable of filtering fumes, vapours and particles from:

Electrochemical (cleaning solvents, conformal coatings, etc.), Resins, Sealant and adhesives both in aerosol and static form Solder pots and soled irons.

The is also used in orthopaedics and dental laboratories to control staff exposure to methyl methacrylate and cyanoacrylate adhesives. It's also used to for safe weighing of hazardous powders.

Key Features of :

Clear polycarbonate panel for protection Hood lighting, Large capacity making it ideal for a wide range of uses, What's included with the ? Filter unit with fan(s), Hood Enclosure, Hood Light, Polycarbonate hinged front panel , 1 x Particulate filter, 1 x Activated Carbon Filter, Power Lead, Data/Warranty Booklet

ESL58394



**Spray Booth**

it is a general purpose hood mounted filtration cabinet and workstation for light aerosol spray and airbrush use and fume/vapour absorption and dilution. It designed for use within art, graphics, design technology areas, crafts and modelling. It has a big working space, and can accommodate up to an A1 size artwork, as well as prototypes, scale models, ceramics, PCBs and more.

its Applications:

Suitable for art and graphics, hobbies, modelling and craft application. It will extract fumes and filter particles created by:

it includes, Aerosol Adhesives, Lacquers, Fixatives, Airbrush Sprays, Solders, Light Grinding, Key Features

A2 or A1 drawing boards can be placed into the hoods at an angle for efficient over-spray capture.

The workstation hood also accommodates prototypes, models, ceramic parts, PCB's etc, placed onto the hood base to be sprayed, soldered, cleaned, glued, moulded, sanded etc.

ESL58409



**Water Swan Neck Tap Cold With Lever**

Swan Neck Tap - Cold with Lever

ESL58550



**Water Swan Neck Tap Hot**

Swan Neck Tap - Hot

ESL58551



**Gas Tap 2 Way 90 Degree**

Gas tap double for bench mounting

ESL58558

**Water Mixer Swan Neck Tap With Lever**

Swan Neck Mixer Tap with Lever

ESL58549

**Gas Tap 2 Way 180 Degree**

Gas tap double for bench mounting

ESL58559



**High Efficiency Filter Cabinet**

High-efficiency filter cabinet with acrylic capture shield to contain and filter within dental labs, electronic design, pharmaceutical labs, and classroom environments.

It includes :

- Filter unit with fan(s)
- Acrylic Spray Shield
- 1 x Particulate filter
- 1 x Activated Carbon filter
- Power Lead
- Data/Warranty Booklet

Application :

it is suitable for use in numerous situations where external venting is impractical but where contaminant capture and filtration is necessary. This includes the filtration of fumes, vapour and particulates emanating from: Monomers, adhesives, hazardous powders/particulates, conformal coatings, resins, sealants, solders, light grinding particles and dusts, organic solvents etc.

The folding PETG shield can be stored if not required thus reducing the unit footprint considerably. Handling and / or use of potentially harmful substances is carried out in front of the intake filter area. Cleaned air is vented to the top rear of the units .

Key Features, Folding clear petg plastic fume shield, Carry handle, ,Sturdy steel construction

ESL58398



**Hot Plat Pro**

Max. Heating temperature is 380°C, High resolution LCD displays actual temperature, Aluminium cover with ceramic work plate, allows for immediate heat transfer, External temperature control is possible with temperature sensor PT1000, Digital temperature control with Max. Temperature at 380°C

**Specifications**

Work plate Dimension 140x140mm, Power 510W, Heating output 500W, Voltage 100-120/200-240V 50/60Hz, Temperature display LCD, Heating temperature range Room temp.+5°C - 380°C, Over heat Protection 420°C, Temperature display accuracy ±1°C, External temperature sensor PT1000 (accuracy ±0.5°C), Protection class IP21

**Dimension :** [W x D x H] 320x180x108mm,

**Weight** 2.2kg, permissible ambient temperature and humidity 5-40°C 80%RH

ESL58418

**Magnetic Stirrer Basic**

Maintenance free brush-less DC motor, Speed range of 0-1500 rpm, Max. Stirring quantity of H<sub>2</sub>O at 20L, Stainless steel work plate cover with ceramic material provides good chemical resistance performance,

**Specifications :**

Work plate dimension φ135mm(5 inch), Work plate material Stainless steel cover with ceramic, Motor type Brush-less DC motor, Motor input power 18W, Motor output power 10W, Power 30W, Voltage 100-240V,50/60Hz, Stirring positions 1, Max. Stirring quantity[H<sub>2</sub>O] 20L, Max. Magnetic bar[length] 80mm, Speed range 0-1500rpm, Speed display Scale Protection class IP42,

**Dimension :** [WxDxH] 160x280x85mm,

**Weight :** 2.8kg

Permissible ambient temperature and humidity 5-40°C, 80%RH

ESL58430

**Hot Plat ADV**

LED screen shows temperature

Max. Temperature up to 550°C

Separate safety circuits with fixed safety temperature of 580°C

External temperature control is possible by connecting the temperature sensor(PT 1000) with an accuracy at ±0.5°C

Glass ceramic work plate provides excellent chemical-resistant performance and most efficient heat transfer.

The "HOT" warning will flash if the work plate temperature is above 50°C even when the hotplate is turned off Work plate Dimension 184x184mm(7 inch), Work plate material Glass ceramic, Power 1010W, Heating Power 1000W, Voltage 100-120/200-240V,50/60Hz, Heating position 1, Heating temperature range Room temp.-550°C,increment 5°C, Control accuracy of work plate ±10°C, Safety temperature 580°C, Temperature display LED, Temperature display accuracy ±1°C, External temperature sensor PT1000(±0.5°C), Heating warning 50°C, Protection class IP21,

**Dimension :** [W x D x H] 215x360x112mm

**Weight :** 4.5kg, Permissible ambient temperature and humidity 5-40°C, 80%RH

ESL58419

**Magnetic Stirrer Mini**

Suitable for stirring small size items, necessary for all kinds of labs, especially education and R&D institution. ABS plastic case, beautiful appearance, step-less speed regulation.

Range 0~2300 R/M(No Load)Max Stirring Capacity 1000ml, stirrer Timing range 0-2300 rpm (empty load),

Max. Stirring content 1000ml

Face diameter φ120mm

Other technical parameters Power adapter DC6V

**Exterior Dimension :** and weight φ120x49mm/500g

ESL58429





**Magnetic Stirrer Pro**

High resolution LCD displays actual speed. Brush-less DC motor is maintenance free Aluminium cover with ceramic work plate, Digital speed control with Max. speed up to 1500rpm, Max. Stirring quantity of H2O at 5L

**Specifications :**

Work plate Dimension 140x140mm, Work plate material Aluminium cover with ceramic coating, Motor type Brush-less DC motor, Motor rating input 2.4W, Motor rating output 1.8W, Power 10W, Voltage 100-120/200-240V 50/60Hz, Stirring positions 1, Max. Stirring quantity[H2O] 5L, Max. Magnetic bar[length] 50mm, Speed range 200-1500rpm, Speed display LCD, Control accuracy of sensor ±20rpm, Protection class IP21,

**Dimension :** [W x D x H] 320x180x108mm

**Weight :** 2.2kg, Permissible ambient temperature and humidity 5-40°C 80%RH

ESL58431



**Hot Plat Magnetic Stirrer Basic**

Maintenance free brush-less DC motor

Max. Temperature to 340°C

Stirring speed up to 1500 rpm

Stainless steel work plate with ceramic coating provides good chemical-resistant performance

Safety circuits provide overheating protection

A wide variety of accessories are available

**Specifications :**

Work plate dimension φ135mm(5 inch), Work plate material stainless steel cover with ceramic, Motor type Brush-less DC motor, Motor rating input 18W, Motor rating output 10W, Power 550W, Heating output 500W, Voltage 100-120/200-240V 50/60Hz, Stirring positions 1, Max. Stirring quantity[H2O] 20L, Max. Magnetic bar[length] 80mm, Speed range 100-1500rpm, resolution±1rpm, Speed display Scale, Temperature display Scale, Heating temperature range Room temp.-340°C, Over temperature protection 350°C, Temperature display accuracy ±0.5°C, Protection class IP42

**Dimension :**[WxDxH] 160x280x85mm

**Weight** 2.8kg, Permissible ambient temperature and humidity 5-40°C, 80%RH

ESL58439



**Hot Plate Magnetic Stirrer Mini**

suitable for small size items, necessary for all kinds of labs, especially

Exterior dimension and weight Φ120x49mm/500g

Stepless speed regulation.

Constant power heating, no-load surface temperature 12 °C

A thermal protection device of 150 °C.

Range 0~2300 R/M(no load)

Max Stirring Capacity 1000mL.

ESL58438



**Hot Plat Magnetic Stirrer Pro**

Brush-less DC motor is maintenance free and explosion-proof

Digital temperature control with Max. Temperature at 340°C, Digital speed control with Max. Speed up to 1500rpm, Max. Stirring quantity of H2O at 20L, Safety circuits provide overheating protection, The "HOT" warning will flash if the plate temperature is above 50°C even when the hotplate is turned off High-resolution LCD display shows actual temperatures and speed (displays the time also), External temperature control is possible by connecting the temperature sensor(PT 1000) with accuracy at ±0.2°C, Stainless steel work plate with ceramic coating provides good chemical-resistant performance Remote function provides PC control and data transmission, A wide variety of accessories are available

Specifications :

Work plate dimension φ135mm(5 inch), Work plate material stainless steel cover with ceramic, Motor type Brush-less DC motor, Motor rating input 18W, Motor rating output 10W, Power 550W, Heating output 500W, Voltage 100-120/200-240V 50/60Hz, Stirring positions 1, Max. Stirring quantity[H2O] 20L, Max. Magnetic bar[length] 80mm, Speed range 100-1500rpm, resolution±1rpm, Speed display LCD, Temperature display LCD, Heating temperature range Room temp.-340°C, increment 1°C, Temperature control accuracy ±1°C(<100°C), ±1%(>100°C), Over temperature protection 360°C, Temperature display accuracy ±0.1°C, External temperature sensor PT1000 (accuracy ±0.2), "Hot" warning 50°C, Data connector RS232, Protection class IP42

**Specifications :**

Work plate dimension φ135mm(5 inch), Work plate material stainless steel cover with ceramic, Motor type Brush-less DC motor, Motor rating input 18W, Motor rating output 10W, Power 550W, Heating output 500W, Voltage 100-120/200-240V 50/60Hz, Stirring positions 1, Max. Stirring quantity[H2O] 20L, Max. Magnetic bar[length] 80mm, Speed range 100-1500rpm, resolution±1rpm, Speed display LCD, Temperature display LCD, Heating temperature range Room temp.-340°C, increment 1°C, Temperature control accuracy ±1°C(<100°C), ±1%(>100°C), Over temperature protection 360°C, Temperature display accuracy ±0.1°C, External temperature sensor PT1000 (accuracy ±0.2), "Hot" warning 50°C, Data connector RS232, Protection class IP42

**Dimension :**[WxDxH] 160x280x85mm,

**Weight :** 2.8kg, Permissible ambient temperature and humidity 5-40°C, 80%RH

ESL58440



The ESL-H280-Pro is a perfect device for handling small volume task on daily application, as a low temperature magnetic stirrer with max. temperature at 280°C.

## ESL-H280-Pro LED Digital Magnetic Hotplate Stirrer

### Features

- Digital temperature control with max. temperature up to 280°C
- Digital speed control with max. speed up to 1500rpm
- Stainless steel work plate with ceramic coating provides good chemical resistant performance
- External temperature control is possible by connecting the temperature sensor(PT1000) with an accuracy at  $\pm 0.5^{\circ}\text{C}$
- LED display shows temperature and speed
- The "HOT" warning will flash when the work plate temperature is above 50°C even if the hotplate is turned off



External sensor



Wide range of accessories



Chemical resistance



LED display



### Specifications

Work plate Dimension	Work plate material	Motor type	Stirring positions	Max. stirring quantity	Max. magnetic bar[length]	Speed range	Speed display	Temperature display	Speed display resolution	Heating temperature range	Control accuracy of work plate	Overheating protection	Temperature display accuracy	External temperature sensor	"Hot" warning	Protection class	Motor rating input	Motor rating output	Power	Heating output	Voltage	Dimension[WxDxH]	Weight	Permissible ambient temperature and humidity

### ESL-H280-Pro

$\phi 135\text{mm}(5\text{ inch})$	stainless steel cover with ceramic	Brushless DC motor	1	3L	50mm	200-1500rpm	LED	LED	$\pm 1\text{rpm}$	Room temp.-280, increment 1°C	$\pm 1^{\circ}\text{C}(<100^{\circ}\text{C}) \pm 1\%(>100^{\circ}\text{C})$	320°C	$\pm 1^{\circ}\text{C}$	PT1000 (accuracy $\pm 0.5^{\circ}\text{C}$ )	50°C	IP21	5W	3W	515W	500W	100-120/200-240V 50/60Hz	150×260×100mm	1.8kg	5-40°C, 80%RH
------------------------------------	------------------------------------	--------------------	---	----	------	-------------	-----	-----	-------------------	-------------------------------	---	-------	-------------------------	--	------	------	----	----	------	------	--------------------------	---------------	-------	---------------



**ESL58418****DIGITAL HOT PLATE PRO****ESL58431****DIGITAL MAGNETIC STIRRER PRO LCD****ESL58440****DIGITAL HOT PLATE MAGNETIC STIRRER PRO**

EduScience 380°C magnetic hotplate stirrers include all leading safety standards and is chemically-resistant with white ceramic work plate. They can be used in physical, chemical, analytical and biological laboratories.

**Features**

- Max. heating temperature is 380°C
- High resolution LCD displays actual temperature and speed.
- Brushless DC motor is maintenance free
- Aluminum cover with ceramic work plate, allows for immediate heat transfer
- External temperature control is possible with temperature sensor PT1000
- Digital temperature control with max. temperature at 380°C
- Digital speed control with max. speed up to 1500rpm
- Max. stirring quantity of H<sub>2</sub>O at 5L

**Specifications**

	<b>ESL58440</b>	<b>ESL58431</b>	<b>ESL58418</b>
Work plate Dimension	140x140mm	140x140mm	140x140mm
Work plate material	Aluminum cover with ceramic coating	Aluminum cover with ceramic coating	Aluminum cover with ceramic coating
Motor type	Brushless DC motor	Brushless DC motor	-
Motor rating input	2.4W	2.4W	-
Motor rating output	1.8W	1.8W	-
Power	510W	10W	510W
Heating output	500W	-	500W
Voltage	100-120/200-240V, 50/60Hz	100-240V, 50-60Hz	100-120/200-240V, 50/60Hz
Stirring positions	1	1	-
Max. stirring quantity[H <sub>2</sub> O]	5L	5L	-
Max. magnetic bar[length]	50mm	40mm	-
Speed range	200-1500rpm	200-1500rpm	-
Speed display	LCD	LCD	-
Temperature display	LCD	-	LCD
Heating temperature range	Room temp.+5°C - 380°C	-	Room temp.+5°C - 380°C
Over heat Protection	420°C	-	420°C
Temperature display accuracy	±0.1°C	-	±0.1°C
External temperature sensor	PT1000 (accuracy ±0.5°C)	-	PT1000 (accuracy ±0.5°C)
Control accuracy of sensor	±20rpm	±20rpm	-
Protection class	IP21	IP21	IP21
Dimension [W x D x H]	320x180x108mm	320x180x108mm	320x180x108mm
Weight	2.2kg	2.2kg	2.2kg
Permissible ambient temperature and humidity	5-40°C 80%RH	5-40°C 80%RH	5-40°C 80%RH





### Hot Plat Magnetic Stirrer LCD

LCD display for precise monitoring of speed and temperature, Built-in PID controller ensures safe heating of the medium with overheating protection, Max. Heating plate temperature 550°C, Glass ceramic work plate provides excellent chemical resistant performance and most efficient heat transfer, External temperature control is possible by connecting the temperature sensor (PT1000) with an accuracy at  $\pm 0.2^\circ\text{C}$ , Digital speed controlling, max. speed at 1500rpm, Outstanding brushless DC motor enables more stirring power, Two rotating knobs enable easy adjustment of speed and temperature, The "HOT" warning will flash when the work plate temperature is above 50°C even when the hotplate is turned off Remote function provides PC control and data transmission Specifications

Work plate Dimension [W x D] 184x184mm (7 inch), Work plate material Glass ceramic, Motor type Shaded pole motor, Motor rating input 15W, Motor rating output 1.5W, Power 1030W, Heating output 1000W, Voltage 100-120/200-240V 50/60Hz, Stirring positions 1, Max. stirring quantity, [H<sub>2</sub>O] 10L, Max. Magnetic bar [length] 80mm, Speed range 0-1500rpm, Speed display Scale, Temperature display LCD, Heating temperature range Room temp.-550°C, increment 5°C, Temperature control accuracy  $\pm 10^\circ\text{C}$ , Overheating protection 580°C, Temperature display accuracy  $\pm 1^\circ\text{C}$ , External temperature sensor PT1000 (accuracy  $\pm 0.2$ ), "Hot" warning 50°C, Protection class IP21

**Dimension :** [WxDxH] 215x360x112mm

**Weight :** 4.5kg, Permissible ambient temperature and humidity 5-40°C, 80%RH

ESL58441



### Hot Plat Magnetic Stirrer LED ADV

LED display for precise monitoring of temperature

A wide speed range of 0 to 1500rpm

Max. Heating plate temperature 550°C

External temperature control is possible by connecting the temperature sensor (PT1000) with accuracy at  $\pm 0.2^\circ\text{C}$

The "HOT" warning will flash if the work plate temperature is above 50°C, Work plate Dimension [W x D] 184x184mm (7 inch)

Work plate material Glass ceramic, Motor type Shaded pole motor, Motor rating input 15W, Motor rating output 1.5W, Power 1030W, Heating output 1000W, Voltage 100-120/200-240V 50/60Hz, Stirring positions 1, Max. stirring quantity, [H<sub>2</sub>O] 10L, Max. Magnetic bar [length] 80mm, Speed range 0-1500rpm, Speed display Scale, Temperature display LED, Heating temperature range Room temp.-550°C, increment 5°C, Temperature control accuracy  $\pm 10^\circ\text{C}$ , Overheating protection 580°C, Temperature display accuracy  $\pm 1^\circ\text{C}$ , External temperature sensor PT1000 (accuracy  $\pm 0.2$ ), "Hot" warning 50°C, Protection class IP21

**Dimension :** [WxDxH] 215x360x112mm,

**Weight :** 4.5kg, Permissible ambient temperature and humidity 5-40°C, 80%RH

ESL58442

### Heating Mantle Controlled

Heating mantle Control Method : Proportional Voltage Control.

Based on the user's need, before using, the temperature should be controlled by using a separate thermometer As the heated part (heated object) is hand-woven using fibre glass, Fire is prevented by a built-in Thermal protector, which automatically shuts down, the product in case the inside temperature exceeds an appropriate temperature.

The product resumes normal operation when the inside temperature returns to normal.

Thermal Insulation uses non-toxic asbestos-free ceramic wool (fibre glass).

There are two kinds of heated part shape like flask type and beaker type.

Products installed temperature voltage controller.

Case Construction Steel, with chemically resistant powder coating

Thermal Insulation Asbestos-free ceramic wool. (Fibre glass)

Heating Element Ni-chrome wire

Mantle Woven glass fibre mat

Heating Element Temperature Up to 450 °C, Maximum

Supply Voltage & Frequency AC 110~220V (or 220~230V), 50/60Hz

ESL58455

For flask capacity 100 ml

ESL58456

For flask capacity 250 ml

ESL58457

For flask capacity 500 ml





# Heating Mantle

Model : (Heating Mantle Series) & (Heating Mantle & Stirrer Series)



## Features

- Non-Asbestos
- Heater section was hand weaved in use of fiber glass.
- Body case was painted by resistant power coating
- Several kinds capacity
- There are two kinds of Flask & Beaker
- Heating Mantle & Stirrer Function(End ST Series)
- Speed control from 50 RPM to 1,200 RPM

## Technical description

- Heating material : Nichrome wire
- Heating Temperature : Up to 450°C(Max)
- Mantle material : Woven glass fiber mat

MODEL	Capacity	Flask Dia	Dimension	Wattage	Depth	Weight
ESL58455	100mL	63-66mm	Ø145 x 140(H)mm	80	40	1.4kg
ESL58456	250mL	83-86mm	Ø145 x 140(H)mm	150	50	1.4kg
ESL58457	500mL	102-105mm	Ø190 x 165(H)mm	230	65	1.6kg
ESL58458	1000mL	130-133mm	Ø190 x 140(H)mm	330	75	2.2kg
ESL58459	2000mL	165-169mm	Ø190 x 140(H)mm	470	100	3.5kg
ESL58460	3000mL	184-187mm	Ø190 x 140(H)mm	570	105	4.3kg
ESL58461	5000mL	221-237mm	Ø325 x 140(H)mm	850	131	6kg

MODEL	Capacity	Flask Dia	Dimension	Wattage	Depth	Weight
ESL58455ST	100mL	63-66mm	Ø145 x 140(H)mm	80	40	1.4kg
ESL58456ST	250mL	83-86mm	Ø145 x 140(H)mm	140	50	1.4kg
ESL58457ST	500mL	102-105mm	Ø190 x 165(H)mm	240	65	1.6kg
ESL58458ST	1000mL	130-133mm	Ø190 x 140(H)mm	350	75	2.2kg
ESL58459ST	2000mL	165-169mm	Ø190 x 140(H)mm	450	100	3.5kg
ESL58460ST	3000mL	184-187mm	Ø190 x 140(H)mm	550	105	4.3kg
ESL58461ST	5000mL	221-237mm	Ø325 x 140(H)mm	800	131	6kg





## ESL-HB105-S1/ESL-HB105-S2 ESL-HB150-S1/ESL-HB150-S2 Dry bath Digital LED

### Features

- A wide range of temperature control up to 105°C/150°C.
- Overheating protection.
- Sound reminder function.
- External temperature sensor PT1000
- Block equipped with a lid for heat preservation and prevent pollution.
- Knob adjustment is easy to operate.

Cat.No.	Block types	Capacity	Diameter Depth
18900459		0.2mLx30	6.4x15mm
18900410		0.5mLx20	8.2x26.4mm
18900461		1.5mLx20	11x34.7mm
18900462		2mLx20	11x34.7mm
18900412		5/15mLx12	17x48mm
18900413		50mLx4	29.8x48mm
18900522		Two-in-one block, bead bath/water bath Adapt to S1	
18900523		Two-in-one block, bead bath/water bath Adapt to S2	
18900520		Aluminum beads	

Dry Bath



### Specifications

	ESL-HB105-S1	ESL-HB105-S2	ESL-HB150-S1	ESL-HB150-S2
Temperature range[°C]	Room temp+5~105	Room temp+5~105	Room temp+5~150	Room temp+5~150
Temperature setting range [°C]	25~105	25~105	25~150	25~150
Temperature control accuracy[°C]	25-90: ±0.3 90-105: ±0.6	25-90: ±0.3 90-105: ±0.6	25-90: ±0.3 90-150: ±0.6	25-90: ±0.3 90-150: ±0.6
Temperature uniformity@37°C [°C]	±0.2	±0.2	±0.2	±0.2
Power [w]	100	200	100	200
Time setting range	0~99h59min	0~99h59min	0~99h59min	0~99h59min
External sensor	Yes	Yes	Yes	Yes
Display	LED	LED	LED	LED
Power supply	110/220V, 50/60Hz	110/220V, 50/60Hz	110/220V, 50/60Hz	110/220V, 50/60Hz
External dimension[mm]	290x210x120	290x210x120	290x210x120	290x210x120
Weight[kg]	3.2	3.2	3.2	3.2
Operating temperature[°C]	+10~40	+10~40	+10~40	+10~40
Operating humidity [% RH]	<80	<80	<80	<80



# Table Top Autoclave

Model : **ESL-25D , ESL-50D , ESL80D**



## Features

- Full automation
- LED Display
- Safety device
- Self-test function
- Exhaustive design's gasket



MODEL		ESL-25D	ESL-50D	ESL-80D
Dimension (W x D x H) (mm)	(In)	535 x 620 x 430	620 x 710 x 520	620 x 1000 x 1290
	(Out)	Ø260 x 460mm	Ø350 x 510mm	Ø1350 x 800mm
Capacity		25 Liter	50 Liter	80 Liter
Heater		2KW	2KW	2.5KW
Weight		48kg	65kg	100kg
Tray size		190 x 400 x 25mm	240 x 480 x 30mm	240 x 770 x 30mm
Tray material		Aluminum		
Reservoir capacity		4.5 Liter	4.5 Liter	8 Liter
Material	(In)	Stainless steel		
	(Out)	Steel plate with powder coating		
Safety device		Over temp. protector, Safety Valve		
Temp.range		121°C		
Pressure range		0-2.1kgf/cm <sup>2</sup>		
Sterilizer Time		60Min(Max)		
Control system		8 Bit Microprocessor		
Power		220V, 50/60Hz		



## Vortex Mixers

ES Vortex Mixers are ideal instruments for mixing liquid components in tubes, resuspension of cells, using an eccentric mechanism. They are widely used in biological and chemical analysis applications.

### ESL58495

**Vortex Mixer Adjustable Speed**

### ESL58494

**Vortex Mixer Fixed Speed**

#### Features:

- Touch operation or continuous mode
- Variable speed control from 0 to 2500rpm (ESL58495)
- Fixed Speed 2500rpm (ESL58494)
- Used for various mixing applications with optional adapters (ESL58495)
- Specially designed vacuum suction feet for body stability
- Robust aluminum-cast construction



Wide range of accessories

Specifications	ESL58495 (Adjustable speed)	ESL58494 (Fixed speed)
Voltage	100-120V/200-240V,50/60Hz	100-120V/200-240V,50/60Hz
Power	60W	60W
Mixing motion	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 display	Scale	-
Run type	Touch operation/ Continuous	Touch operation/ Continuous
Dimension[WxHxD]	127x130x160mm	127x130x160mm
Weight	3.5kg	3.5kg
Permissible ambient temperature	5-40°C	5-40°C
Permissible relative humidity	80%RH	80%RH
Protection class	IP21	IP21



#### Standard top (Default)

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

Cat. No.ES000034





**Vacuum Pump Hand Operated**

Hand Operated Vacuum Pump

ESL58470



**Vacuum Pump Electric Lab Use**

Oil-free pump. With innovative electronic, mechanical technology and human design concept make Rocker's family quiet and low vibration, compact and light weight, clean and maintenance free, safe and comfortable.

Max. Vacuum: -680mmHg \* Max. Flow: 23 l/Min \* Motor rotation: 1750 RPM \* Horse power: 1/8 HP \* Noise level: 50.0dB

ESL58472



**Autoclave Media**

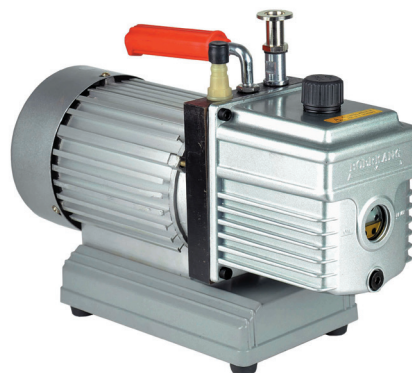
Electrically heated, 12 litre capacity bench top autoclave designed specifically for the safe and effective sterilization of media.

- Dual interlocking handles prevent the lid being removed until the vessel has reached a safe pressure and temperature.
- Fully CE marked to the Medical Devices Directive 93/42/EC
- Sterilizes at 121 °C.
- Full one year warranty
- Maximum capacity liquids 500ml
- Made in the UK

**Dimensions :** Height: 420mm

ESL58481 12 Litre

ESL58482 9 Litre



**Vacuum Pump Electric**

Vacuum pump, electric:

Single stage

Suction capacity 4,6 m<sup>3</sup>/h

Ultimate vacuum 10 Pa

Noise 46 - 50 dB(A)

Suction connector KS 6/4 mm

Motor power 120 W

Voltage source 220 - 240 V / 50 - 60 Hz

**Dimension :** s 28x12x21 cm

**Weight :** 7 kg

ESL58471



**Vortex Mixer**

Touch operation or continuous mode

Used for various mixing applications with optional adapters

Specially designed vacuum suction feet for body stability

Robust aluminium-cast construction

Specifications

Voltage 110-120V/220-230V,50/60Hz

Power 60W

Mixing motion Orbital

Orbital diameter 4mm

Motor type Shaded pole motor

Motor rating input 58W

Motor rating output 10W

Speed range 2500rpm

Run type Touch operation/Continuous

**Dimension :** [WxHxD] 127x130x160mm

**Weight :** 3.5kg

Permissible ambient temperature 5-40 °

Permissible relative humidity 80%RH

Protection class

IP21

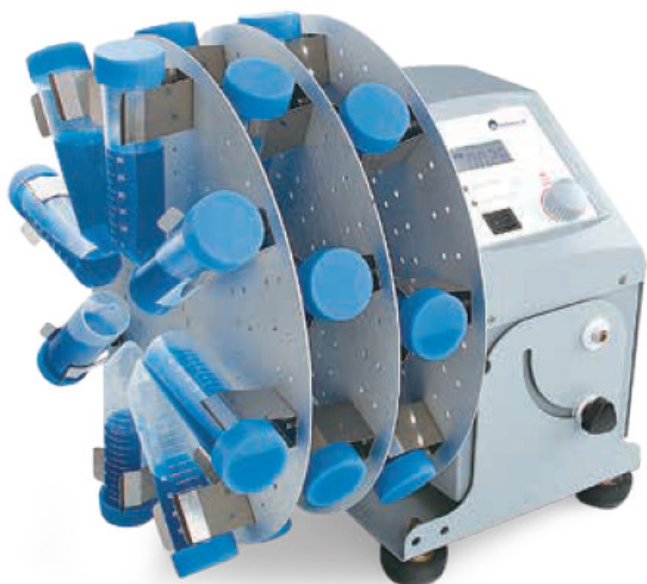
Fixed Speed

ESL58494

Variable Speed

ESL58495





ES rotators give gentle but effective mixing of biological samples held in 1.5mL to 50mL tubes, and are used in a variety of applications including immune precipitations, prevention of blood coagulation, latex diagnostics, etc.

**ESL58490**  
**Digital Rotator LCD**

**Features**

- Electronic adjustment of speed and time
- LCD display of speed and time
- Speed range from 10 to 70rpm
- Rolling action, gives gentle but effective mixing
- Adjustable mixing angle from 0 to 90°
- A wide variety of accessories are available

**ESL58489**  
**Economical Rotator**

**Features**

- Provides gentle and effective mixing of biological samples
- Adjustable speed range from 0 to 80rpm
- A wide variety of accessories are available



LCD display



Adjustable angle



Wide range of accessories



**Specifications**

	ESL58490	ESL58489
Motor type	DC motor	DC motor
Tilt angle	0-90°	-
Speed range	10-70rpm	0-80rpm
Speed display	LCD	Scale
Timer display	LCD	Scale
Timer	1-1199min	-
Operation mode	Continuous / timer	Continuous
Voltage	100-240V, 50/60Hz	100-240V, 50/60Hz
Power	40W	20W
Dimension [DxWxH ]	280x210x300mm	300x220x310mm
Permissible ambient temperature and humidity	5-40°C, 80%RH	5-40°C, 80%RH
Protection class	IP21	IP21



# Shakers

ES Rocking and 3D shakers provide perfect solution in electrophoresis gel dyeing/dicoloration, sample washing, molecular hybridization, immunoprecipitation, Western blot and cell culture.

## ESL58497 Digital Rocking Shaker LCD

### Features

- Rocking motion angle 9°
- Max. load capacity is 10kg with platform
- Speed range of 10-70rpm
- Double LCDs for independent display of time and speed
- Wide range of platforms for use with a variety of vessels



## ESL58498 Digital Rocking shaker LED

### Features

- Rocking motion 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

## ESL58499 Economical Rocking Shaker

### Features:

- Rocking motion angle 7°
- Max. load capacity is 3kg with platform
- Speed range of 0-80rpm
- Wide range of platforms for use with a variety of vessels





Timer



Wide range of accessories



## Specifications

	ESL58497	ESL58498	ESL58499
Tilt angle	9°	7°	7°
Max. load capacity (with platform)	10kg	3kg	3kg
Motor type	DC motor	DC motor	DC motor
Motor input power	40W	16W	16W
Motor output power	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





## Tube Rollers



### ESL58487

#### LCD Digital Tube Roller

##### Features

- LCD displays the speed and time
- Speed range of 10-70rpm
- Six roller design for gentle rolling and easy to clean
- Continuous or timer operation

ES tube rollers provide a gentle and highly efficient rolling motions, ideal for mixing blood samples, viscous substances and liquid-solid suspensions. Used in a variety of applications, such as the prevention of blood coagulation, immune precipitation, etc.



LCD display



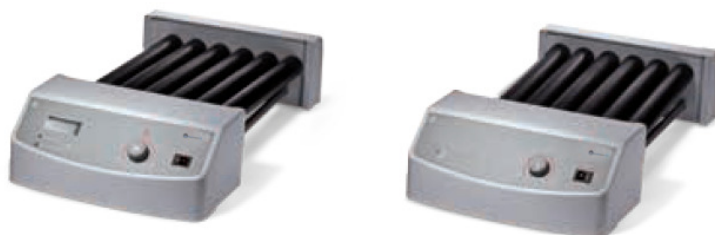
Timer

### ESL58486

#### Tube Roller

##### Features

- Speed range of 0-70rpm
- Six roller design for gentle rolling and easy to clean



#### Specifications

	ESL58487	ESL58486
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	Scale
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 [D×W×H]	450×260×120mm	450×260×120mm
Weight	5.1kg	4.5kg
Permissible ambient temperature and humidity	5-40°C,80%RH	5-40°C,80%RH
Protection class	IP21	IP21

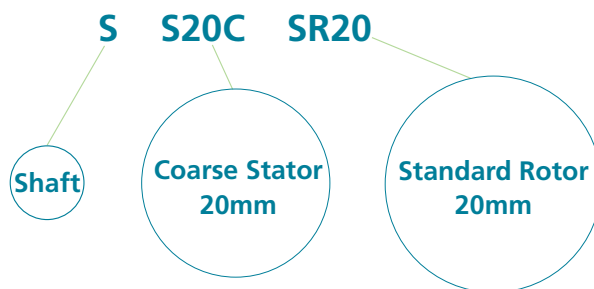


## ESL-D-160

### Handheld Homogenizer

#### Features

- Ideal for manual operation due to its light weight and ergonomic design
- Processing range: 0.1-50mL or 1-250mL
- 316L stainless steel shafts are fully autoclavable and inert for highly corrosive solutions
- All shafts are interchangeable for easy dismantling and cleaning.
- 6 modes of motor speed from 8,000 to 30,000 rpm



ESL-D-160  
110-120V/60Hz  
220-240V / 50-60 Hz

160 W  
AC carbon brush motor

8000-30000rpm

6.3-14m/sec

6 stage

0.1-50mL (Dispersing shaft DS-160/5)

1-250mL (Dispersing shaft DS-160/10)

5,000mPas

SS 316L stainless steel, PTFE

0.6 kg

46mm x 55mm x 230mm

72 dB(A)

0-40°C, 85% rel. humidity

IP20

ESL-D-500

110-120V/60Hz  
220-240V/50-60 Hz

500 W  
AC carbon brush motor

10000-30000rpm

22.7-36m/sec

6 stage

10-40000mL (Optional)

10,000 mPas

SS 316L stainless steel, PTFE

1.3 kg

70mm x 70mm x 255mm

79 dB(A)

0-40°C, 85% rel. humidity

IP20

#### Specifications

	ESL-D-160	ESL-D-500
Power Supply	110-120V/60Hz 220-240V / 50-60 Hz	110-120V/60Hz 220-240V/50-60 Hz
Motor Type	Universal motor AC carbon brush motor	500 W AC carbon brush motor
Speed Range	8000-30000rpm	10000-30000rpm
Max. Circum. Speed	6.3-14m/sec	22.7-36m/sec
Speed Control	Dial knob	6 stage
Working Volume [ H <sub>2</sub> O]	0.1-50mL (Dispersing shaft DS-160/5) 1-250mL (Dispersing shaft DS-160/10)	10-40000mL (Optional)
Max. Viscosity	5,000mPas	10,000 mPas
Material of Dispersing Shaft	SS 316L stainless steel, PTFE	SS 316L stainless steel, PTFE
Weight	0.6 kg	1.3 kg
Dimension [L x W x H]	46mm x 55mm x 230mm	70mm x 70mm x 255mm
Noise	72 dB(A)	79 dB(A)
Operating Environment	0-40°C, 85% rel. humidity	0-40°C, 85% rel. humidity
Protection Class	IP20	IP20



## ESL-D-500 Homogenizer

### ESL-DS-500/1

#### SS20CSR20

Volume 10-5000mL  
Max. Circum. Speed 22.7m/sec

**Material:** 316L

**Application:** for solid/liquid media

**Cat. No.**

18201331



### ESL--DS-500/2

#### SS20FER20

Volume 10-5000mL  
Max. Circum. Speed 22.7m/sec

**Material:** 316L

**Application:** for water and oil mixing

**Cat. No.**

18201332



### ESL--DS-500/5

#### SS5CSR5

Volume 10-5000mL  
Max. Circum. Speed 5,8m/sec

**Material:** 316L

**Application:** Ideal for all homogenizing applications such as tissue homogenization, cell disruption, suspensions and clinical and medical diagnostics

**Cat. No.**

18900117



## ESL-D-160 Handheld Homogenizer

### ESL-DS-160/5

Volume 0.1-50ml  
Max. Circum. Speed 6.3m/sec

**Material:** 316L

**Application:** small amounts of solid-liquid mixed

**Cat. No.**

18201329



### ESL-DS-160/10

Volume 1-250mL  
Max. Circum. Speed 14m/sec

**Material:** 316L

**Application:** small amounts of solid-liquid mixed

**Cat. No.**

18201330



### Stator



S20C



S20F



S30C



S30F



S40C

### Rotor



SR20



SR30



CR20



CR30



MR20



MR30



ER20



ER30



Cat. No.	Compatibility	Description of Shaft	Function	Applications	Treatable Volume (refer to water)
18900113	D-160		dispersing tool for solid/liquid media		0.1-50ml
18900114	D-160		dispersing tool for solid/liquid media		1-250ml
18900117	D-500	SS5CSR5	dispersing tool for solid/liquid media	Dispersing of tissue decomposition, clinical & medical diagnostics and suspensions	1-50ml
18900115	D-500	SS20CSR20	dispersing tools for solid/liquid media	Coarse crushing of hard solids in liquid	10-5000ml
18900116	D-500	SS20FER20	Dispersing tools for W/O or O/W emulsions	Emulsions, intensive mixing of w/o and o/w emulsions Dispersing of resins and pigments for paint and lacquer industry	10-5000ml
18900118/ 18900125	D-500	S20C CR20	dispersing tool with knives for fibrous/stringy materials	Fragmentation of vegetable, animal and human tissues	10-5000ml
18900118/ 18900127	D-500	S20C MR20	dispersing tool for solid/liquid media	Suspensions, intensive mixing	10-5000ml
18900119/ 18900125	D-500	S20F CR20	dispersing tool with knives for fibrous/stringy materials	Fragmentation of vegetable, animal and human tissues	10-5000ml
18900119/ 18900127	D-500	S20F MR20	dispersing tools for solid/liquid media	Emulsions, intensive mixing of w/o and o/w emulsions	10-5000ml
18900120/ 18900124	D-500	S30C SR30	dispersing tools for solid/liquid media	Coarse crushing of hard solids in liquid	100-8000ml
18900120/ 18900126	D-500	S30C CR30	dispersing tool with knives for fibrous/stringy materials	Fragmentation of vegetable, animal and human tissues	100-8000ml
18900120/ 18900128	D-500	S30C MR30	dispersing tools for solid/liquid media	Suspensions, intensive mixing	100-8000ml
18900121/ 18900124	D-500	S30F SR30	dispersing tools for solid/liquid media	Dispersing of resins and pigments for paint and lacquer industry	100-8000ml
18900121/ 18900130	D-500	S30F ER30	Dispersing tools for W/O or O/W emulsions	Emulsions, intensive mixing of w/o and o/w emulsions Dispersing of resins and pigments for paint and lacquer industry	100-8000ml
18900121/ 18900128	D-500	S30F MR30	dispersing tools for solid/liquid media	Emulsions, intensive mixing of w/o and o/w emulsions	100-8000ml
18900120/ 18900127	D-500	S30C MR20	Stirring Shaft	High speed mixing without crushing	250-20000ml
18900122/ 18900128	D-500	S40C MR30	Stirring Shaft	High speed mixing without crushing	1000-40000ml



# ESL20-S ESL40-S LED Overhead Stirrer

## Features

- High reliability and outstanding performance
- A wide range of speed from 50 to 2200rpm
- Brushless DC motor for long life, maintenance free and explosion proof
- LED screen for monitoring actual speed
- Safety circuits allow for safe stop function in anti-stall or overload conditions

Stirring paddle "top-cross" design, easy to replace the container

Spillage and overload protection safety circuit

LED display of set and actual speed

Brushless DC Motor

- Maintenance free
- Explosion-proof
- Precision speed control

Self-locking drill chuck, tools free



Explosion-proof



Wide range of accessories

## Specifications

	ESL20-S	ESL40-S
Max. stirring quantity[H <sub>2</sub> O]	20L	40L
Speed range	50~2200rpm	50~2200rpm
Max. torque	40N•cm	60N•cm
Viscosity max.	10000mPa•s	50000mPa•s
Weight	2.8kg	2.8kg
Motor type	Brushless DC motor	
Speed display	LED	
Overload protection display	LED	
Chuck range diameter	0.5~10mm	
Motor input power	60W	120W
Motor output power	50W	100W
Power	70W	130W
Voltage	100~240V, 50/60 Hz	
Dimension[WxHxD]	83 x 220 x 186mm	
Protection class	IP21	
Permissible ambient temperature and humidity	5~40°C, 80%RH	



## Plate Stands

### Universal Plate Stand (for OS20/40/70)

Dimension [W x D x H] :  
200x310x780mm  
Material: stainless steel  
**Cat. No.**  
18900258



### Grand Plate Stand (for OS70)

Dimension [W x D x H] :  
335 x 463 x 780mm  
Material: stainless steel  
**Cat. No.**  
18900497



## Stirrer

Stainless Steel Series

PTFE Coating Series

Grand Series (for OS70)

### Propeller stirrer

Shaft length 40cm  
Stirrer diameter 50mm  
Material: 304L stainless steel  
Standard stirring applications  
at medium and high speed

**Cat No.** 18900071



### Paddle stirrer

Shaft length 40cm  
Stirrer diameter 68mm  
Material: 304L stainless steel  
For gentle mixing at low and  
medium speeds

**Cat No.** 18900073



### Straight stirrer

Shaft length 40cm  
Stirrer diameter 60mm  
Material: 304L stainless steel  
For low viscosity media at  
medium and high speeds

**Cat No.** 18900072



### Centrifugal stirrer

Shaft length 40cm  
Stirrer diameter 90mm  
Material: 304L stainless steel  
Blades open while speeding.  
For narrow neck vessels at  
medium to high speed.

**Cat No.** 18900074



### Propeller stirrer

Shaft length 40cm  
Stirrer diameter 50mm  
Material: PTFE coated  
Standard stirring applications  
at medium and high speed

**Cat No.** 18900075



### Paddle stirrer

Shaft length 40cm  
Stirrer diameter 68mm  
Material: PTFE coated  
For gentle mixing at low and  
medium speeds

**Cat No.** 18900077



### Straight stirrer

Shaft length 40cm  
Stirrer diameter 60mm  
Material: PTFE coated  
For low viscosity media at  
medium and high speeds

**Cat No.** 18900076



### Centrifugal stirrer

Shaft length 40cm  
Stirrer diameter 90mm  
Material: PTFE coated  
Blades open while speeding.  
For narrow neck vessels at  
medium to high speed.

**Cat No.** 18900078



### Grand propeller stirrer

Shaft length 60cm  
Stirrer diameter 100mm  
Material: 316L stainless steel  
Standard stirring

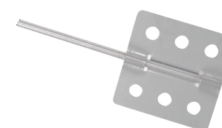
**Cat No.** 18900478



### Grand paddle stirrer

Shaft length 60cm  
Stirrer diameter 100mm  
Material: 316L stainless steel  
Gentle mixing for those stratify  
easily or sensitive to shear

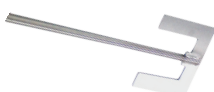
**Cat No.** 18900499



### Grand anchor stirrer

Shaft length 60cm  
Stirrer diameter 100mm  
Material: 316L stainless steel  
Standard stirring or for those  
easily precipitate

**Cat No.** 18900498



### Grand dissolving stirrer

Shaft length 60cm  
Stirrer diameter 100mm  
Material: 316L stainless steel  
Breaking down granules in the  
mixture with strong shear

**Cat No.** 18900500



## Centrifuges

**Centrifuge Basic**

Speed range of 300-4500rpm, Individual control of speed and time, Faster acceleration and deceleration, Perfectly suitable for 15mL cell culture tubes and a full line of collection tubes , Specifications , Speed Range 300-4500rpm,increment: 100rpm, Max. RCF 2490xg, Speed accuracy  $\pm 100$ rpm, Rotor Capacity 1 type, Run Time 1sec-99min HOLD(Continuous operation), Motor DC motor, Display LED, Safety Devices Door interlock,Over-speed detection, Acceleration, /Braking time [Sec] 23s 23s Power Single-phase,220V-240V,50Hz/60Hz, 3A;100V-120V,50Hz/60Hz, 3A 70W,

**Dimension :** [D×W×H] 301×354×217mm

**Weight :** 6kg, Advanced Features sound-alert function.

ESL58504

**Centrifuge Basic LCD**

Easy programming to achieve high accuracy of speed control, Easy operation with intuitive menu and easy-to-read display Rotor speed can be set and displayed by RPM or G-force, Maintenance-free brush-less DC motors, Quick spin function with press and hold pulse key, Lid with electric lock and automatic release function saves processing time and prevents samples overheating Automatic self-diagnosis on start up showing accumulative running time and last running parameters, Braking time 2 gears adjustable(for A6-50P rotor), A12-10P and A6-50P are not interchangeable, Specifications

Speed Range 300-4500rpm,increment: 100rpm, Max. RCF 2490xg, Speed accuracy  $\pm 20$ rpm, Rotor Capacity 1 type, Run Time 30sec-99min/Continuous, Motor Brush-less DC motor, Display LCD , Safety Devices Door interlock,Overspeed detector; Automatic internal diagnosis, Acceleration /Braking time [Sec] 20s 13s , Power Single-phase, 110V-240V,50Hz/60Hz, 3A, 70W

**Dimension :** [D×W×H] 301×354×217mm

**Weight :** 6kg, Certification CE, UL, IVD, Advanced Features Speed/RCF switch; Short-time run function; sound-alert function

ESL58505

**Centrifuge Mini**

Ideal for micro-filtration and quick spin-downs, Easy-to-use with dual start/stop function, 5000rpm fixed speed, Compatible with 2mLx8 and PCR8x2 rotors, Quiet running, noise level  $\leq 45$ dB, Rotor change without tools, Accelerates and brakes in seconds, Available in two colours i.e., green, blue

ESL58503

**Centrifuge Tube Sterile Bulk-Pp, 15ml**

SPINNING Centrifuge Tube Sterile Bulk-PP,

ESL58537 15ml, 25/pack

ESL58538 50ml, 25/pack

**Centrifuge Hand, 2 X 15ml**

A single speed hand driven machine consisting of die-cast parts and a steel pinion and worm drive. Screw clamps the machine to the bench. Stove enamelled finish, with removable crank handle. Suitable for 15ml glass tubes.

ESL58528

**Centrifuge Hand, 4 X 15ml**

A single speed hand driven machine consisting of die-cast parts and a steel pinion and worm drive. Screw clamps the machine to the bench. Stove enamelled finish, with removable crank handle. Suitable for 15ml glass tubes.

ESL58529



## ESL58503 Series Micro Centrifuge

### Features

- Ideal for microfiltration and quick spin-down application
- Easy to operate. Lid close, it begin to rotate
- Max up to 7000rpm
- Compatible with 2mLx8 and PCR8x4 rotors
- Quiet running, noise level  $\leq 45$ dB
- Quick-change rotor without any tool
- Accelerates and brakes in seconds
- Available in two colors i.e., green, blue
- Safe, durable and robust rotor with clamp locking design.



Quiet operation



Vibration free



### Specifications

	ESL58503
Max. Speed	7000rpm
Max. RCF	2680xg
Rotor Capacity	0.2/0.5/1.5/2.0mLx8; 0.2mLx32 PCR strips or 0.2mLx4 PCR 8 strips
Run Time	Continuous operation
Driving Motor	DC motor
Power	AC100-240V/50Hz/60Hz 20W
Noise Level	$\leq 45$ dB
Dimension [DxWxH]	160x170x122mm
Weight	1.19kg
Certification	CE cTUVus FCC MCA





## Available rotors

**ESA8-2P**

Max. speed:7000rpm

Max. RCF:2680×g

Rotor capacity:2mL/1.5mL×8,0.2mL×8,0.5mL×8

Rotor material:High strength plastic

Available rotor adapters:SA02P2, SA05P2

**ESA04-RCR8**

Max. speed:7000rpm

Max. RCF:2680×g

Rotor capacity: 0.2 ml×32 PCR strips, 0.2 ml×4 PCR 8 strips

Rotor material: High strength plastic

## Available adapters

**ESA02P2**

0.2mL rotor adapter

Used with A08-2 rotor

8pcs/pk

**ESA05P2**

0.5mL rotor adapter

Used with A08-2 rotor

8pcs/pk



EduScience UK ESL-506 low-speed centrifuge, supplied with built to 5mL/10mL/7mL/5mLx6

## ESL-506 Low-speed Centrifuge

### Features

- Speed range from 300-5000rpm;
- Rotor speed can be set and displayed by RPM or G-force;
- Defined program by knob will be stored and activated when power on;
- Two programs P1/P2, easy to start the procedure by one key;
- Two deceleration speeds setting to meet different requirements;
- Easy-to-read processing display and sound alert;
- Automatic lid-lock release after running;
- Maintenance-free brushless DC motor.

### Specifications

	ESL-506
Speed Range	300-5000rpm, increment:10rpm
Max. RCF	2350xg, increment: 10g
Speed accuracy	±20rpm
Rotor capacity	6x15mL/10mL/7mL/1.5-5ml
Run Time	30sec-99min, HD(continuous running)
Display	LCD
Programs Memory	2
Acceleration/Deceleration	1 ↑ 2 ↓
Safety Devices	Door interlock, Overspeed detector, Automatic internal diagnosis
Motor	Brushless DC motor
Power	Single-phase, 100V-240V,50Hz/60Hz, 70W
Dimension(WxDxH)	300X240X180mm
Weight	5.2kg

### Advanced features

Speed/RCF switch; sound-alert function

### Available adapters



#### ES5P17

5ml adapter, Adapted to 13×75mm blood collection tube



#### ES2P17

1.5/2ml Cryogenic Vials/ centrifuge tube adapter



Low-speed Centrifuges



## ESL-2012PRO

### High Speed Mini Centrifuge



#### Features

- Speed up to 15000rpm (15100×g)
- Brushless DC motor drive quickly to the target speed
- Quiet working, Low noise ≤54dB
- ESL-2012 Pro is proven by IEC/EN 61010-1
- ESL-2012 Pro passed the rigorous explosion-proof test according to IEC/EN 61010-2-20. It is certified with CE, cTUVus, FCC



Brushless DC motor



LCD display



#### Specifications

#### ESL-2012 Pro

Max. Speed	15000rpm(500-15000rpm), increment: 100rpm
Max. RCF	15100×g, increment: 100×g
Speed Accuracy	±20rpm
Rotor Capacity	0.2mL/0.5mL/1.5mL/2mL×12
Run Time	30sec-99min/Continuous
Acceleration /Braking time	11s ↑ /9s ↓
Driving Motor	Brushless DC motor
Safety Devices	Door interlock, Over-speed detection, Over-temperature detection, Automatic internal diagnosis
Power	Single-phase, AC100V-240V, 50Hz/60Hz, 3A 100W
Noise level	≤54dB
Dimension[D×W×H]	255×245×140mm
Weight	6kg
Certification	EMC, CE, FCC, ICES, cTUVus, CB
Other functions	Speed/RCF switch, Short-time run function, sound-alert function

#### Available rotors



#### A12-2P for ESL2012Pro only

Max. speed: 15000rpm  
 Max. RCF: 15100×g  
 Rotor capacity: 2mL/1.5mL×12, 0.2mL×12, 0.5mL×12  
 Rotor material: High strength plastic  
 Available rotor adapters: A02P2, A05P2

#### Available adapters



#### A02P2

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

#### A05P2

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



EduScience hematocrit centrifuge with AC24P hematocrit rotor is used for determination of volume fractions of erythrocytes in blood for diagnostic purposes and doping tests. Also it is used for the photometric determination of bilirubin content in neonate blood samples. Hematocrit centrifuge with A24-2P tube rotor, can be used for extraction of DNA and RNA.



CE RoHS



## ESL-1424

### Hematocrit Centrifuge

#### Features

- Speed range of 200-12000rpm, max. RCF 13680xg
- Precise control of speed and time separately
- Easy operation with intuitive menu and easy-to-read display
- Maintenance-free brushless DC motors
- Pulse operation for quick spins
- Rotor capacity: Hematocrit rotor
- Hematocrit rotor: 24 capillary max. speed: 12000rpm

## ESL-1224

### Economical Hematocrit Centrifuge

#### Features

- Max. speed is 12000rpm, max. RCF 13680xg
- Precise control of speed and time separately
- Rotor capacity: Hematocrit rotor: 24 capillary



## Specifications

	ESL-1424	ESL-1224
Speed Range	200-12000rpm, increment: 10rpm	500-12000rpm, increment: 100rpm
Max. RCF	13680xg	13680xg
Speed Accuracy	±20	±100
Run Time	30sec-99min/Continuous	10sec-99min/Continuous
Motor	Brushless DC motor	Brushless DC motor
Display	LCD	LCD
Safety Devices	Door interlock, Overspeed detector; Automatic internal diagnosis, Automatic rotor identification	Door interlock
Acceleration/Braking time	30s ↑ 30s ↓	40s ↑ 40s ↓
Power	Single-phase, 200V-240V, 50Hz/60Hz, 5A; 100V-120V, 50Hz/60Hz, 5A 160W	Single-phase, 200V-240V, 50Hz/60Hz, 5A; 380W
Dimension(WxHxDxH)	280x364x274mm	280x364x213mm
Weight	10kg	10kg
Certification	CE cTUVus FCC MCA IVD	-
Advanced features	Speed/RCF switch; Short-time run function; sound-alert function	Speed/RCF switch; Short-time run function; sound-alert function



## Available rotors



Cat. No. ES400047

## AC24

ESL-1424 &amp; ESL-1224

Max. speed: 12000rpm

Max. RCF: 13680xg

Rotor capacity: capillary tubes x24

Rotor material: High strength aluminum



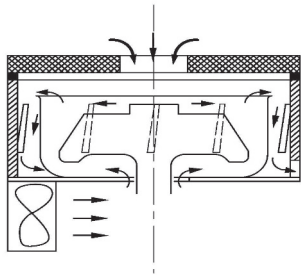
## ESL-3024D

### High Speed Micro Centrifuge

#### Unique Features

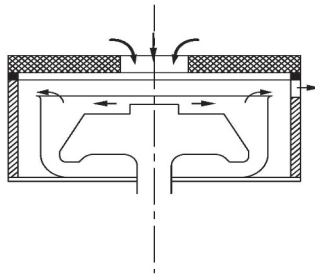
- Patent multi-flow air cooling design to provide air exchange to prevent chamber warming
- Three-layer seal ensure airtightness and biosafety
- High strength aluminum alloy rotor can be fully autoclaved for unlimited service life
- Four rotors are optional complete with 24 places 1.5/2.0mL tubes, bigger 5.0mL, smaller 0.2mL and 0.5mL tubes with adapters

#### Effective Ventilation System



Proprietary design of dual path ventilation enforcing air cooling from both the upper and lower side for the rotor.

#### Conventional design



Limiting ventilation on the upper side of the rotor



Brushless DC motor



Wide range of rotors





CE

### Specifications

### ESL-3024D

Max. Speed

15000rpm(200-15000rpm),  
increment:10rpm

Max. RCF

21380xg, increment:10xg

Speed Accuracy

±20 rpm

Rotor Capacity

5mL×18, 5mL culture tubex12  
0.2mL/0.5mL/1.5mL/ 2mL×24,  
0.5mL×36,  
PCR8×4

Run Time

30sec-99min/Continuous

Acceleration  
/Braking time [Sec]

25s ↑ 25s ↓

Motor

Brushless DC motor

Safety Devices

Dual door interlock,  
Over-speed detection,  
Automatic internal diagnosis

Power

Single-phase,  
AC200V-400V, 50Hz/60Hz, 5A,  
AC100V-120V, 50Hz/60Hz, 8A  
200W

Noise Level

≤64dB

Dimension[W×D×H]

280×364×266mm

Weight

12kg

Certification

CE cTÜVus FCC MCA

Other functions

Speed/RCF switch; Short-time run function; sound-alert function



# Micro Centrifuge



ES rotors are manufactured from military-industrial grade aluminum alloy with high mechanical strength for precise running and safety (excludes ES2012 plus rotor)

- Every rotor 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
- ES3024&ES3024R with bio-safety rotors/anti- sample overflow prevents accidental leakage and risk free centrifugal process
- microbial contamination. ES3024&ES3024R rotors have passed MCA test according to IEC/EN61010-2-20, including mechanical safety and bio-safety tests
- High strength aluminum alloy rotors are fully autoclavable and provide unlimited service life (ES2012 plus rotor not included)
- Powerful cooling system minimizes rotor heating. ES3024 rotors heat up to > 10°C and D2012 rotors less than 8°C after running an hour

## Rotor Features

### Fully autoclavable

High strength aluminum alloy rotors are fully autoclavable, withstanding steam sterilizing at 121°C for 20 minutes, with unlimited service life.

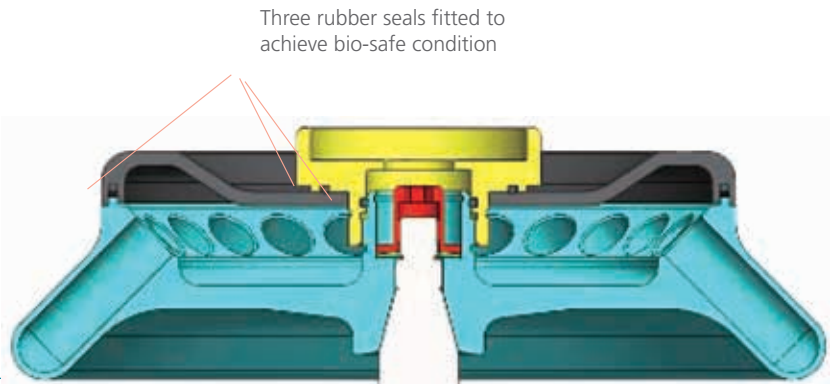
### Bio-safety

Aspired to be the top-of-the-line model, ES3024 & ES3024R rotors are designed to prevent sample leakage. Each and every rotor is hermetically sealed by three rubber seals.

### Mechanical safety

ES centrifuges are constructed under MCA conditions according to IEC/EN61010-2-20, causing disruption by partially cutting and overloading rotor assembly, and guarantee that no part shall be detached to cause danger to person or the environment.

Seals within the aluminum alloy rotor





## Micro Centrifuge | Rotors and Adapters

### Available rotors



#### ES24-2

for ES3024 & ES3024R

Max. speed: 15000rpm  
 Max. RCF: 21380xg  
 Rotor capacity: 2mL/1.5mLx24/0.2mLx24/0.5mLx24  
 Rotor material: Aluminum alloy  
 Bio-safe(Bio sealing): Yes  
 Available rotor adapters: A02P2,A05P2



#### ES12-V5

for ES3024 & ES3024R

Max. speed: 15000rpm  
 Max. RCF: 21380xg  
 Rotor capacity: 5mLx12(Eppendorf tube)  
 Rotor material: Aluminum alloy  
 Bio-safe(Bio sealing): Yes



#### ES36-05

for ES3024 & ES3024R

Max. speed: 15000rpm  
 Max. RCF: 21380xg  
 Rotor capacity: 0.5mLx36,0.2mLx36  
 Rotor material: Aluminum alloy  
 Bio-safe(Bio sealing): Yes  
 Available rotor adapters: A02P05



#### ESS4-PCR8

for ES3024 & ES3024R

Max. speed: 15000rpm  
 Max. RCF: 21380xg  
 Rotor capacity:0.2mL/PCR8x4  
 Rotor material: Aluminum alloy  
 Bio-safe(Bio sealing): Yes



## Micro Centrifuge | Rotors and Adapters



### ES18-5

for ES3024 & ES3024R

Max. speed :15000rpm

Max. RCF:21380xg

Rotor capacity:5mLx18 ( Round-Botton tube )

Rotor material:Aluminum alloy

Bio-safe(Bio sealing):Yes

### Available adapters



### ES02P2

0.2mL rotor adapter

Used with ES12-2, ES12-2P, ES24-2 and ES24-2P rotors 24pcs/pk



### ES05P2

0.5mL rotor adapter

Used with ES12-2, ES12-2P, ES24-2 and ES24-2P rotors 24pcs/pk



### ES02P05

0.2mL rotor adapter

Used with ES36-05 rotor 36pcs/pk



## Micro Centrifuge

### ESL58509

#### Micro Centrifuge

##### Unique Features

- Special multi-flow air cooling design with patent ensures fast cooling of the rotor and low energy consumption
- Temperature display appropriate for gentle handling of sensitive samples
- Three-layer sealed rotor prevents accidental leakage during centrifugal process allowing risk-free microbial contamination
- High strength aluminum alloy rotor can be fully autoclaved for unlimited service life
- Four rotors are optional complete with 24 places 1.5/2.0mL tubes, bigger 5.0mL, smaller 0.2mL and 0.5mL tubes with adapters



### ESL58510

#### Refrigerated Micro Centrifuge

##### Powerful cooling system for precise temperature control

- Pre-cooling program ensures optimal protection of the sample before warming
- Guaranteed 4°C cooling within only 7 minutes of both chamber and samples even at maximum speed and capacity utilization
- Sound-alert allows your undivided attention on other tasks warming
- Lid lock facility allows for internal temperature maintenance even after centrifugation
- Intermittent temperature control mode, CFC-free refrigerant and low carbon life rotor capacity
- Three-layer sealed rotor prevents accidental leakage during centrifugal process allowing risk-free microbial contamination
- High strength aluminum alloy rotor can be fully autoclaved for unlimited service life
- Four rotors are optional complete with 24 place 1.5/2.0mL tubes, bigger 5.0mL, smaller 0.2mL and 0.5mL tubes with the use of adapters
- Quiet running, noise level ≤ 54dB



# Micro Centrifuge



Brushless DC motor



Wide range of rotors



CE FC



CE FC

## Specifications

	ESL58509	ESL58510
Max. Speed	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
Run Time	30sec-99min/Continuous	30sec-99min/Continuous
Motor	Brushless DC motor	Brushless DC motor
Safety Devices	Dual door interlock, Over-speed detection, Automatic internal diagnosis	Dual door interlock, Over-speed detection, Over-temperature detection, Automatic internal diagnosis
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	CE cTUVus FCC MCA	CE cTUVus FCC MCA
Advanced Features	Speed/RCF switch; Short-time run function; sound-alert function	Speed/RCF switch; Short-time run function; sound-alert function
Noise Level	≤64dB	≤56dB

Labware





ES UK ESL-636 Multi-Purpose Low-speed Centrifuge is ideal for the centrifugation of samples in clinical chemistry, cytology, research laboratories, industrial laboratories, etc. This centrifuge is suitable for tubes with caps, blood collection or urine tubes. Swing-out bucket rotors and adapters can be compatible with standard tubes up to 100mL at low speed.

## Multi-Purpose Low-speed Centrifuge

### Features

- Speed can be set from 300- 6000rpm
- Maximum capacity of the centrifuge: 100 mLx4
- 9 Acceleration/10 Brake speed settings to ensure optimal separation
- A wide range of rotors optional(fixed angle and swing-out bucket rotors)
- Automatic rotor identification
- Timers can be set up to 99 min or HD for continuous running
- Pulse Key for quick spin function
- 9 procedures stored in memory makes the operation much simplified
- Maintenance-free brushless DC motors



### Specifications

Speed range
Max. RCF
Speed accuracy
Max. Capacity
Run Time
Motor
Display
Program Memory
Safety Devices
Acceleration/Deceleration
Power
Dimension[WxDxH]
Weight
Certification
Advanced features

### ESL-636

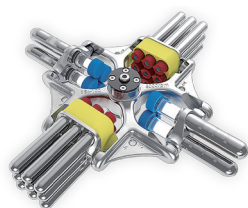
300-6000rpm increment: 10rpm
4020xg
±20rpm
100mLx4
30sec-99mins/continuous
Brushless DC
LCD
9
Door Imbalance protection Over speed & Over temperature detection
9 ↑ /10 ↓ steps
660W; Single-phase AC220V-240V, 50Hz/60Hz, 6.3A; AC110V-120V,50Hz/60Hz,10A
445x579x269mm
36kg
CE
speed/rcf switch; Rotor identification





### Uncapping block

for S4-100 rotor



### SE4-100(Standard accessory) for ESL-636

Cat. No. 1ES400041

Max. speed: 4000rpm  
Max. RCF: 2950xg  
Rotor material: stainless steel body and adapter



### A15V

Cat. No. ES500025

15ml conical tube adapter, MOQ 8 Pcs (optional)



19400045



19400044



19400043

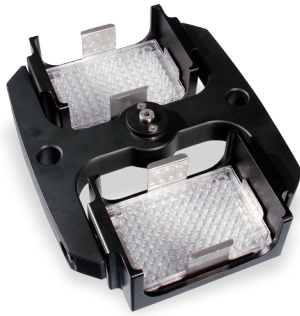


19400042

bucket	x 4										
tube	x 36		x 16			x 8	x 4	x 4	x 4	x 8	x 20
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					 A50V	 A100P80	 A100P50	 A50V	 A100P15	 A100P10
Package	36					8	4	4	4	8	4
Tubes per rotor	36	36	16	16	16	8	4	4	4	8	20
Radius(cm)	14	16.5	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.1	14.7
Max RCF (g-force)	2500	2950	2840	2840	2840	2840	2840	2840	2840	2700	2630



## Available rotors

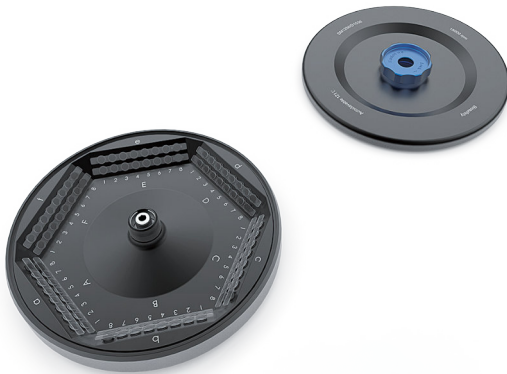


Cat. No. ES400062

**ES2-MP**

ESL-636

Max. speed: 4000rpm  
 Max. RCF: 2200×g  
 Rotor capacity: Micro-plates 384-PCR/96-PCR/Elisa plates×8pcs; Deep well plates×4pcs  
 Rotor material: stainless steel body and aluminum buckets



Cat. No. ES400036

**ES12-PCR8**

ESL-636

Max. speed: 6000rpm  
 Max. RCF: 4020×g  
 Rotor capacity: PCR 8 trips×12  
 Rotor material: aluminum  
 Biosealing: Yes



Cat. No. ES400034

**ES30-2**

ESL-636

Max. speed: 6000rpm  
 Max. RCF: 4020×g  
 Rotor capacity: 2mL×30  
 Rotor material: aluminum  
 Biosealing: Yes



Cat. No. ES400037

**ES60-2**

ESL-636

Max. speed: 6000rpm  
 Max. RCF: 4020×g  
 Rotor capacity: 2mL×60  
 Rotor material: aluminum  
 Biosealing: Yes



## Available rotors



Cat. No. ES400038

**ES6-50V** (cone bottom)  
ESL-636

Max. speed: 6000rpm  
 Max. RCF: 4020×g  
 Rotor capacity: 50mL×6 or 15mL×6  
 Rotor material: aluminum  
 Biosealing: Yes

**ES18-5V** (cone bottom) Cat. No. ES400035  
ESL-636

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

**E8-50** (round bottom) Cat. No. ES400039  
ESL-636

Max. speed: 5000rpm  
 Max. RCF: 3960×g  
 Rotor capacity: 50mL×8 or 15mL×16  
 Rotor material: aluminum body and stainless steel adapter  
 Default adapters: SE100P31x8, SE100P17x6

**E30-15** (round bottom) Cat. No.11ES400040  
ESL-636

Max. speed: 4500rpm  
 Max. RCF: 3210×g  
 Rotor capacity: 15mL×30  
 Rotor material: aluminum body and stainless steel adapter Bio-safe(Biosealing): Yes  
 Default adapters: SE100P17x30

Rotor	Capacity	Hole Diameter (mm)	Hole Depth (mm)	Max. Tube Height (mm)	Max. Speed (rpm)
AS30-2	2mlx30	11.2	39	43	6000
AS60-2	2mlx60	11.2	39	43	6000
AS6-50V	50mlx6	31	87.8	118	6000
AS18-5V	5mlx18	17.5	51	56	6000
A8-50	50mlx8	35	85.8	118	5000
A30-15	15mlx16	17.5	98	123	5000
	15mlx30	17.5	98	123	4500
S2-MP	Micro platex8/ Deep well platex4	-	-	-	4000





**ESL-1524R****High-speed Refrigerated Micro Centrifuge****Features**

- Ergonomic electronic lock design, the centrifuge lid can be closed with single finger touch
- Precooling, the compressor will automatically start cooling as long as the set temperature is lower than the ambient temperature.
- Sound indicator to prompt that the upper cover is closed to maintain the temperature inside the chamber, after centrifugation.
- Advanced R290 fluorine free refrigerant, low carbon and environmental protection.
- Temp range:-20°C- 40°C, fast and powerful cooling capacity, 7 minutes cooling from room temp to 4°C. Temp can kept at max speed.
- Up to 9 program storage capacity according to experimental needs.
- Three-layer sealed rotors ensure airtightness and biosafety.
- High-strength aluminum alloy withstand numerous high temperature and high pressure sterilizations.
- Five rotors with 0.2mL, 0.5mL, 1.5mL, 2mL and 5mL centrifuge tubes/ PCR tubes capacity.
- An external condensation tank prevents water accumulation within the centrifuge chamber.
- Rotor imbalance detection alarm.



Ergonomic electronic door lock design



Powerful cooling capacity compressor

Intuitive operation control panel

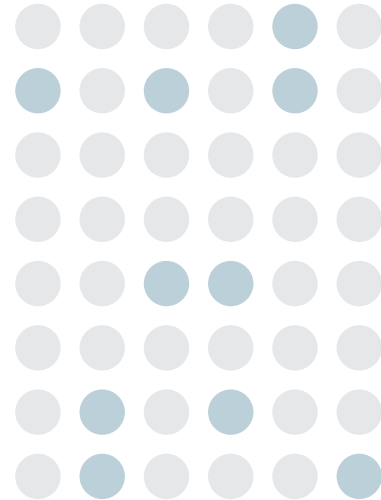
**Specifications****ESL-1524R**

Max. Speed	15,000rpm (200-15,000rpm) in 100rpm increments.
Max. RCF	21,380×g, step: 10×g
Capacity	1.5/2mL×24, 0.5mL×36, PCR8×4, 5mL×12, 5mL×18.
Temperature setting	-20°C- 40°C
Run Time	30s-99 min; HOLD (continuous running)
Acceleration and deceleration time	25s ↑ 25s ↓
Motor Type	DC brushless motor
Safety Performance	Dual door lock, over-speed detection, over-temperature detection with Internal diagnosis system.
Power Requirements	Single-phase, 200V-240V, 50Hz/60Hz, 500W 100V-120V, 50Hz/60Hz, 500W
Noise	≤56dB
Dimensions(mm)	332(Width) × 553(depth) × 283(height)
Weight	30kg
Other functions	Rotation speed/RCF switchover, inching operation, running process indicator, sound alert. Acceleration/ deceleration in 9 steps, program storage capacity.



# High Speed Refrigerated Centrifuge

## Model ESL-24SMTI



Labware

Centrifuge Body	.....	1
Fixed angle rotor, V508A	.....	1
Rotor Extractor	.....	1
Level	.....	1
Instruction Manual	.....	1

### High Speed Refrigerated Centrifuge ESL-24SMTI

Max. RPM	24,000 RPM
Max. RCF	55,193 x g
Max. Capacity	4Liter, 1000ml x 4 Tubes
Display	Dual Display, LCD & FND
Operating mode	RPM, RCF & $\int \omega^2 dt$
Step mode	5 step programmable
Program memory	10 memory
Drive system	Inverter motor drive
Acceleration	10 profiles
Deceleration	10 profiles
Timer	99Hr. 59min. & Hold for long run
Pre-Condition	pre-cooling
Temperature Range	-20°C to 40°C
Safety system	Over speed detector, imbalance detector Temperature Limit detector, Door detector
Dimension	645 x 960 x 1220(H)mm
Weight	Net. 230Kg
Power	220V, 3.2Kw, 60Hz
Certification	CE, KGMP, ISO9001, ISO14001



# Multi-Purpose Refrigerated Centrifuge

Model ESLS-550

Labware



## Main Feature

Centrifuge Body , Swing Rotor ESL-R55S , Bucket ESL-C55 , Rack R5015-4C  
Power Cable , Manual



# Rotor

## ESL-550

### Swing-out Rotor

**Swing Rotor**



**VR-55S**  
4500RPM, 3755G  
250ml x 4 tubes, R165mm

**Sealing Bucket**



**VC-55**  
250ml  
Sealing Cap available  
Alluminum alloy

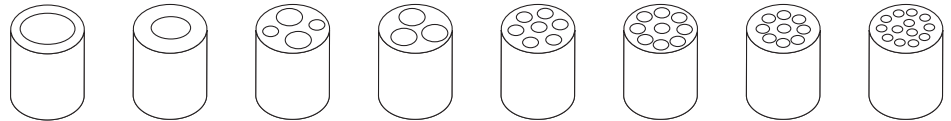
### Micro-plate Rotor

**Micro-plate Rotor**

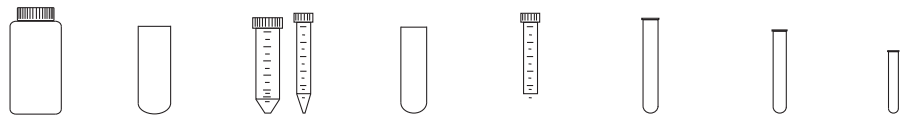


**VR-02MS**  
2500RPM  
2000G  
96well Micro-plate x 2EA

### Tube Rack



Model	R250-1S	R100-1S	R5015-4C	R50-3S	R15-7C	R15-9S	R10-9S	R5-13S
Tube	250ml	100ml	50 & 15 ml	50ml	15ml	15ml	10ml	5ml
Places	1	1	4	3	7	9	9	13
ø x L mm	62 x 128	39 x 106	30 x 115	29 x 104	17 x 120	16 x 114	14 x 100	10 x 75



### Fixed Angle Rotor for VS-550

**Micro & PCR Tube**



**VR-C1 combo**  
1.5ml x 28 tubes  
0.4ml x 32 tubes  
14000 RPM, 21475G

**Micro Tube**



**V1.524A-55**  
1.5ml x 24tubes  
15000 RPM, 20124G

**Round / Oak ridge**




**V1012A-55**  
10ml x 12tubes  
15000 RPM, 21,130G  
**V1512A-55**  
15ml x 12tubes  
14000 RPM, 20817G  
**V506A-55**  
50ml x 6tubes  
14000 RPM, 20817G

**Conical Tube-15ml**



**V1512AC-55**  
conical tube  
15ml x 12tubes  
12000 RPM, 16035G  
R99.6mm

**Conical Tube-50ml**



**V506AC-55**  
50ml x 6tubes  
12000 RPM, 16180G  
R 100.5mm





### Pipette Filler Electric ADV

Compatible with most of the plastic and glass pipettes from 0.1 -100mL  
 Eight speeds of selection for aspiration and dispensing different liquids  
 Large LCD display showing low battery warning and speed settings  
 Enables single-handed operation with minimum effort  
 Light and ergonomic design providing easy usability  
 High capacity Li-ion battery enable long runtime of operation  
 Powerful pump fills a 25mL pipette in <5 seconds  
 0.45µm replaceable hydrophobic filter  
 Rechargeable during use  
 Specifications  
 Aspiration Speed 25mL < 5s (8 shift)  
 Dispensing Speed Motor (8 shift)/Gravity  
 Battery Lithium-ion  
 Battery Service Life More than 8 Hours of Intermittent Use  
 Charging Time 2-3 Hours  
 Pipette Types Glass or Plastic Pipette (0.1-100mL), Pasture Pipettes  
 Filter 0.45µm Hydrophobic  
 Weight 200g

ESL58570

### Micro-pipette Variable Range Basic

Pipettes cover a volume range from 0.1µL to 10mL  
 Ergonomic design provides excellent operating experience  
 Large display window allows for easy volume identification  
 Easy calibration and maintenance  
 Each Micro Pipette supplied with an individual calibration certificate according to ISO8655 , please select your suitable volume range :

ESL58573	Volume range : 0.1-2.5µl
ESL58574	Volume range : 0.5-10µl
ESL58575	Volume range : 2-20µl
ESL58576	Volume range : 5-50µl
ESL58577	Volume range : 10-100µl
ESL58578	Volume range : 20-200µl
ESL58579	Volume range : 50-200µl
ESL58580	Volume range : 100-1000µl
ESL58581	Volume range : 200-1000µl
ESL58582	Volume range : 1000-5000µl
ESL58583	Volume range : 2-10ml



### Pipette Filler Electric Basic

Suitable for almost all commonly used glass or plastic pipettes.  
 Enables single-handed operation with minimum effort  
 Compatible with most of the plastic and glass pipettes from 0.1-100mL  
 Easily adjustable speed control• 0.45µm replaceable hydrophobic filter  
 Stable and reliable performance, elegant appearance  
 High capacity Li-ion battery enable long operation time.  
 Specifications  
 Aspiration Speed 25mL < 7s  
 Dispensing Speed Motor/Gravity  
 Battery Lithium-ion  
 Battery Service Life More than 8 Hours of Intermittent Use  
 Charging Time 2-3 Hours  
 Pipette Types Glass or Plastic Pipette (0.1-100mL), Pasture Pipettes  
 Filter 0.45µm Hydrophobic  
 Weight 200g

ESL58569

### Pipette Controller

Ease of use  
 Precise pipetting control  
 Robust and light weight  
 Compatible with most of the plastic and glass pipettes from 0.1 -100mL  
 3µm replaceable hydrophobic filter  
 Easy cleaning and maintenance



ESL58568

### BOTTLE TOP DISPENSER

Excellent chemical resistance, components are made of PTFE, FEP, BSG, PP  
 Fully autoclavable at 121 °C  
 Four ranges of bottle-top dispenser covering different volume range  
 Easy for cleaning and maintenance  
 The optional flexible discharge tube with safety handle permits fast and precise dispensing  
 Vapour pressure Max. 500mbar, viscosity Max. 500mm<sup>2</sup>/s,  
 Temperature Max. 40 °C, density Max. 2.2g/cm<sup>3</sup>

ESL58590

ESL58590	Volume range : 0.5-5 ml
eSL58591	Volume range : 1.0-10 ml
eSL58592	Volume range : 2.5-25 ml
eSL58593	Volume range : 5.0-50 ml



# Pipettes

## Pipette Controller

### Features

- Ease of use
- Precise pipetting control
- Robust and light weight
- Compatible with most of the plastic and glass pipettes from 0.1 -100mL
- 3µm replaceable hydrophobic filter
- Easy for cleaning and maintenance

ESL58568



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

## Pipette Pump

### Features

- Volume capacity 2mL, 10mL and 25mL
- Colour-coded by volume with green, blue and red
- Thumb wheel guarantees precise operation
- Resistant to acids and alkalis
- Easy for cleaning and maintenance

ESL56391 2 ML  
 ESL56392 10 ML  
 ESL56393 25 ML



3µm replaceable Hydrophobic filter

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

Designed for single-handed operation, Pipette Pump identifies itself with a thumbwheel, allowing precise aspiration or dispensing. The feature of side lever enables complete liquid dispensing, without a droplet remaining.

## Mini Pipette

### Features

- Ergonomic design provides excellent operation experience;
- Smart body, ideal to combine with IVD reagents;
- Compatible with universal 200µl tips;
- Various volumes from 25ul to 200ul, different color for different volumes, easy to choose;
- Entire body by one-time molding, robust to use.



Volumes	Color
200ul	Gray
100ul	Blue
75ul	Red
50ul	Orange
30ul	Yellow
25ul	Dark Green
OEM	Optional



## Pipettes

## ESL58570 Pipette Filler ADV

## Features

- Compatible with most of the plastic and glass pipettes from 0.1 -100mL
- Six different speed modes for aspiration and dispensing different liquids
- Large LCD display showing low battery warning and speed settings
- Enables single-handed operation with minimum effort
- Light and ergonomic design providing easy usability
- High capacity Li-ion battery enable long runtime of operation
- Powerful pump fills a 25mL pipette in <5 seconds
- 0.45µm replaceable hydrophobic filter
- Rechargeable during use

Large LCD display showing low battery warning and speed settings



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

Aspiration operation buttons

Operating button for motor and gravity dispensing

Hydrophobic filter 0.45µm

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



Pipette Filler

## Specifications

Aspiration Speed	25mL<5s (6 shift)
Dispensing Speed	Motor (6 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



# Pipettes



## Auto Pipettes Single Channel

121°C  
FULLY  
Autoclavable

### Features

- Fully autoclavable
- Ergonomic design provides excellent operating experience
- Easy-to-read volume display
- The pipettes cover the volume range from 0.1µL to 5mL
- Easy calibration and maintenance
- Manufactured from innovative materials
- Each MicroPette Plus supplied with an individual calibration certificate according to ISO8655
- Online calibration is available

Labware

## Auto Pipettes Multi-channel

121°C  
FULLY  
Autoclavable

### Features

- Dispensing head rotates for effortless pipetting convenience
- Individual piston and tip cone assembly allow for easy repair and maintenance
- Compound material-made tip cone secures high sealing performance
- Compatible with most universal tip brands
- Online calibration is available







Push button for volume adjustment

Comfortable Finger support

Low force tip ejector for easy operation

Spring loaded tip cones for easy cleaning and maintenance

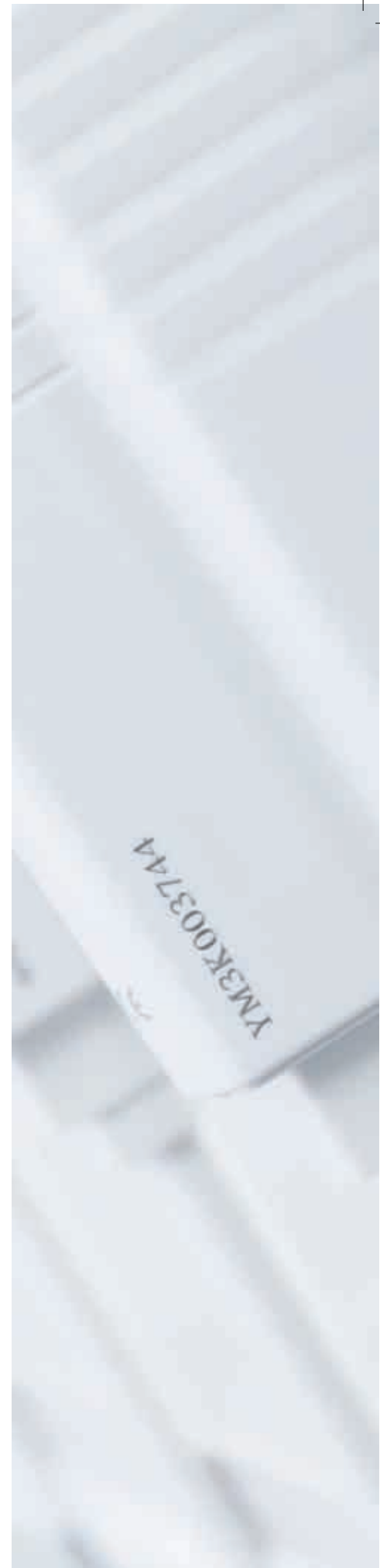
High chemical-resistant materials to secure long lifetime

8 channels

**Fully autoclavable**

The ES Automatic 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. 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 and sealing of the pipette piston after every 10th autoclaving will secure an enhanced function.



# Pipettes

## Pipette Volume Selection

### Specifications

This list is appropriate for ES Automatic pipettes  
(Adjustable and Fixed volume)

#### Single-channel Adjustable Volume Pipettes

Volume Range	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	$\mu\text{L}$	%	$\mu\text{L}$
0.1-2.5 $\mu\text{L}$	0.05 $\mu\text{L}$	2.5 $\mu\text{L}$	2.50%	0.0625	2.00%	0.05
		1.25 $\mu\text{L}$	3.00%	0.0375	3.00%	0.0375
		0.25 $\mu\text{L}$	12.00%	0.03	6.00%	0.015
0.5-10 $\mu\text{L}$	0.1 $\mu\text{L}$	10 $\mu\text{L}$	1.00%	0.1	0.80%	0.08
		5 $\mu\text{L}$	1.50%	0.075	1.50%	0.075
		1 $\mu\text{L}$	2.50%	0.025	1.50%	0.015
2-20 $\mu\text{L}$	0.5 $\mu\text{L}$	20 $\mu\text{L}$	0.90%	0.18	0.40%	0.08
		10 $\mu\text{L}$	1.20%	0.12	1.00%	0.1
		2 $\mu\text{L}$	3.00%	0.06	2.00%	0.04
5-50 $\mu\text{L}$	0.5 $\mu\text{L}$	50 $\mu\text{L}$	0.60%	0.3	0.30%	0.15
		25 $\mu\text{L}$	0.90%	0.225	0.60%	0.15
		5 $\mu\text{L}$	2.00%	0.1	2.00%	0.1
10-100 $\mu\text{L}$	1 $\mu\text{L}$	100 $\mu\text{L}$	0.80%	0.8	0.15%	0.15
		50 $\mu\text{L}$	1.00%	0.5	0.40%	0.2
		10 $\mu\text{L}$	3.00%	0.3	1.50%	0.15
20-200 $\mu\text{L}$	1 $\mu\text{L}$	200 $\mu\text{L}$	0.60%	1.2	0.15%	0.3
		100 $\mu\text{L}$	0.80%	0.8	0.30%	0.3
		20 $\mu\text{L}$	3.00%	0.6	1.00%	0.2
50-200 $\mu\text{L}$	1 $\mu\text{L}$	200 $\mu\text{L}$	0.60%	1.2	0.15%	0.3
		100 $\mu\text{L}$	0.80%	0.8	0.30%	0.3
		50 $\mu\text{L}$	1.00%	0.5	0.40%	0.2
100-1000 $\mu\text{L}$	5 $\mu\text{L}$	1000 $\mu\text{L}$	0.60%	6	0.20%	2
		500 $\mu\text{L}$	0.70%	3.5	0.25%	1.25
		100 $\mu\text{L}$	2.00%	2	0.70%	0.7
200-1000 $\mu\text{L}$	5 $\mu\text{L}$	1000 $\mu\text{L}$	0.60%	6	0.20%	2
		500 $\mu\text{L}$	0.70%	3.5	0.25%	1.25
		200 $\mu\text{L}$	0.90%	1.8	0.30%	0.6
1000-5000 $\mu\text{L}$	50 $\mu\text{L}$	5000 $\mu\text{L}$	0.50%	25	0.15%	7.5
		2500 $\mu\text{L}$	0.60%	15	0.30%	7.5
		1000 $\mu\text{L}$	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



## Pipette Volume Selection

## 8-channel Adjustable Volume Pipettes

Volume Range	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	$\mu\text{L}$	%	$\mu\text{L}$
0.5-10 $\mu\text{L}$	0.1 $\mu\text{L}$	10 $\mu\text{L}$	1.50%	0.15	1.50%	0.15
		5 $\mu\text{L}$	2.50%	0.125	2.50%	0.125
		1 $\mu\text{L}$	4.00%	0.04	4.00%	0.04
5-50 $\mu\text{L}$	0.5 $\mu\text{L}$	50 $\mu\text{L}$	1.00%	0.5	0.50%	0.25
		25 $\mu\text{L}$	1.50%	0.375	1.00%	0.25
		5 $\mu\text{L}$	3.00%	0.15	2.00%	0.1
50-300 $\mu\text{L}$	5 $\mu\text{L}$	300 $\mu\text{L}$	0.70%	2.1	0.25%	0.75
		150 $\mu\text{L}$	1.00%	1.5	0.50%	0.75
		50 $\mu\text{L}$	1.50%	0.75	0.80%	0.4

## 12-channel Adjustable Volume Pipettes

Volume Range	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	$\mu\text{L}$	%	$\mu\text{L}$
0.5-10 $\mu\text{L}$	0.1 $\mu\text{L}$	10 $\mu\text{L}$	1.50%	0.15	1.50%	0.15
		5 $\mu\text{L}$	2.50%	0.125	2.50%	0.125
		1 $\mu\text{L}$	4.00%	0.04	4.00%	0.04
5-50 $\mu\text{L}$	0.5 $\mu\text{L}$	50 $\mu\text{L}$	1.00%	0.5	0.50%	0.25
		25 $\mu\text{L}$	1.50%	0.375	1.00%	0.25
		5 $\mu\text{L}$	3.00%	0.15	2.00%	0.1
50-300 $\mu\text{L}$	5 $\mu\text{L}$	300 $\mu\text{L}$	0.70%	2.1	0.25%	0.75
		150 $\mu\text{L}$	1.00%	1.5	0.50%	0.75
		50 $\mu\text{L}$	1.50%	0.75	0.80%	0.4

## Fixed Volume Pipettes

Volume Range	Increment	Test Volume	Error limits in accordance with ISO8655-2			
			(Accuracy error)		(Precision error)	
			%	$\mu\text{L}$	%	$\mu\text{L}$
5 $\mu\text{L}$	-	5 $\mu\text{L}$	1.3%	0.065	1.2%	0.06
10 $\mu\text{L}$	-	10 $\mu\text{L}$	0.8%	0.08	0.8%	0.08
20 $\mu\text{L}$	-	20 $\mu\text{L}$	0.6%	0.12	0.5%	0.1
25 $\mu\text{L}$	-	25 $\mu\text{L}$	0.5%	0.125	0.3%	0.075
50 $\mu\text{L}$	-	50 $\mu\text{L}$	0.5%	0.25	0.3%	0.15
100 $\mu\text{L}$	-	100 $\mu\text{L}$	0.5%	0.5	0.3%	0.3
200 $\mu\text{L}$	-	200 $\mu\text{L}$	0.4%	0.8	0.2%	0.4
250 $\mu\text{L}$	-	250 $\mu\text{L}$	0.4%	1.0	0.2%	0.5
500 $\mu\text{L}$	-	500 $\mu\text{L}$	0.3%	1.5	0.2%	1.0
1000 $\mu\text{L}$	-	1000 $\mu\text{L}$	0.3%	3.0	0.2%	2.0
2000 $\mu\text{L}$	-	2000 $\mu\text{L}$	0.3%	6.0	0.15%	3.0
5000 $\mu\text{L}$	-	5000 $\mu\text{L}$	0.3%	15	0.15%	7.5



# Pipettes

# Electronic Pipette

Parameter Knob

Function Wheel

Display

Pipette Tip cone



## ELECTRONIC PIPETTE

It combines manual pipette features, as ergonomics and lightweight, with electronic pipette features, such as labor-saving and high accuracy, offering new pipetting experience to users.

Diluting Mode

Dispensing Mode

Pipetting Mode

Buzzer & Settings

Battery Indicator

Volume Range Parameter

Unit

Indicator

Power off



# Electronic Pipette

## Multi-functional 8-channel Electronic Pipette

multi-functional high performance 8-channel electronic pipette offers productive pipetting with its easy to understand operations. Its uniquely lightweight streamlined design ensures an effortless transfer of multiple samples with an increased throughput and data reproducibility.



### Function Wheel

Switch different functions pipetting, dispensing and mixing.

### Parameter Knob

Set and confirm all parameters.

### Motor Driven Digital Control

### 360° Rotation

Rotatable for convenient handling

### Ingenious Curved Ejector

The tips fit optimally without any extra force



### • Easy Operation

Intuitive interface for setting functions and parameters.

### • Ergonomic Design

Low operation forces for complete work, which is exceptionally fatigue-free.

### • Convenient and Versatile

360° pipetting. Double knobs for simple and versatile control. Easy loading tip cones offers smooth and leak free operation.

### • Dual charging modes

Use of USB charger or the charging stand to ensure uninterrupted use.

### Three easy steps to operate

1

Long press the Parameter Knob for 2 seconds to Start

2

Quickly turn the Function Wheel to Activate, Rotate to Switch Pipetting, Continuous Dispensing, and other Function Settings

3

After quickly turning the Parameter Knob to Unlock, Turn to Adjust the Volume, Press to Pipette, Long press to Mix



## Pipettes

# E Pipette plus

## Multi functional Electronic Pipette

# E Pipette

## Features

- Motor driven digitally control pipette with multifunctions
- Easy Operations and Handling
- Intuitive menu interface settings; functions and operations
- Minimal force for pipetting operation
- High performance ensuring accuracy & repeatability
- 2 buttons for all operational settings
- Adjustable speed for aspiration and dispensing
- Li-ion battery enable longer operation time
- Convenient and Versatile
- Self-calibration applicable



E Pipette plus  
For Pipetting,  
Mixing, Stepper  
and Dilution



E Pipette  
For Pipetting  
and Mixing

## Specifications

Channels	Volume Range		Increment	Test Volume	accuracy error		precision error	
	$\mu\text{L}$	$\mu\text{L}$	$\mu\text{L}$	$\mu\text{L}$	$\mu\text{L}$	%	$\mu\text{L}$	%
1	0.5-10		0.01	10	$\pm 0.10$	$\pm 1.00$	$\pm 0.05$	$\pm 0.50$
				1	$\pm 0.035$	$\pm 3.50$	$\pm 0.03$	$\pm 3.00$
1	0.5-5	1.0		50	$\pm 0.40$	$\pm 0.80$	$\pm 0.15$	$\pm 0.30$
				5	$\pm 0.15$	$\pm 3.00$	$\pm 0.125$	$\pm 2.50$
1	30-300		1	300	$\pm 1.80$	$\pm 0.60$	$\pm 0.60$	$\pm 0.20$
				30	$\pm 0.09$	$\pm 3.00$	$\pm 0.21$	$\pm 0.70$
1	100-1000		5	1000	$\pm 6.00$	$\pm 0.60$	$\pm 2.00$	$\pm 0.20$
				100	$\pm 3.00$	$\pm 3.00$	$\pm 0.60$	$\pm 0.60$

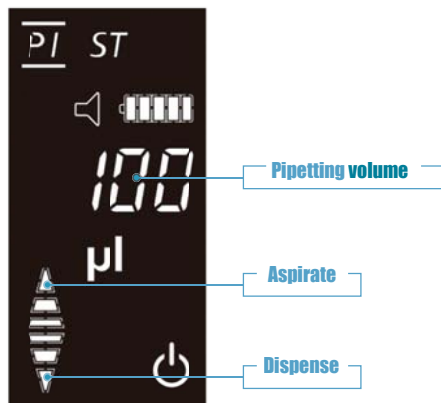
specifications are used as guidelines and the user calibration should refer to the industrial standard ISO 8655



# Electronic Pipette

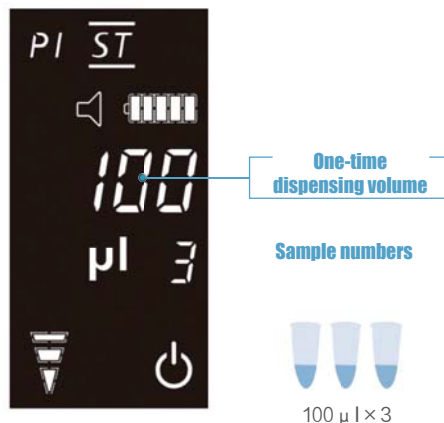
## Pipetting function

Parameter Knob press → Pipetting,  
Long press → Mixing



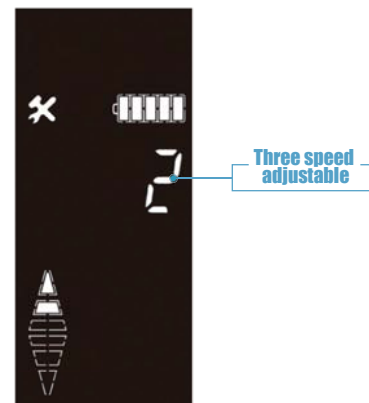
## Dispensing function

Dispensing times = Pipette max volume /  
Single sample volume



## Other function

Pipetting speed adjustment  
Key tone adjustment



## Complimentary Pipette Holder

Supports dual charging mode

Automatic Calibration Support  
Connect it to the computer,  
with the free software  
provided for calibration



## USB Charging



## Contact Charging



# Specifications

Channels	Volume Range	Increment	Test Volume	Accuracy error		Precision error	
	µL	µL	µL	µL	%	µL	%
8	0.5–10	0.01	10	± 2.00	± 0.20	± 1.0	± 0.1
			1	± 8.0	± 0.08	± 5.00	± 0.05
8	10–100	0.1	100	± 0.80	± 0.80	± 0.30	± 0.3
			10	± 3.00	± 0.3	± 2.00	± 0.2
8	30–300	1	300	± 0.60	± 1.80	± 0.3	± 0.9
			30	± 3.00	± 0.90	± 1.0	± 0.3

\* SD=Standard Deviation \* CV=Co-efficient of Variation

\* Specifications are used as guidelines and the user calibration should refer to the industrial standard ISO 8655.



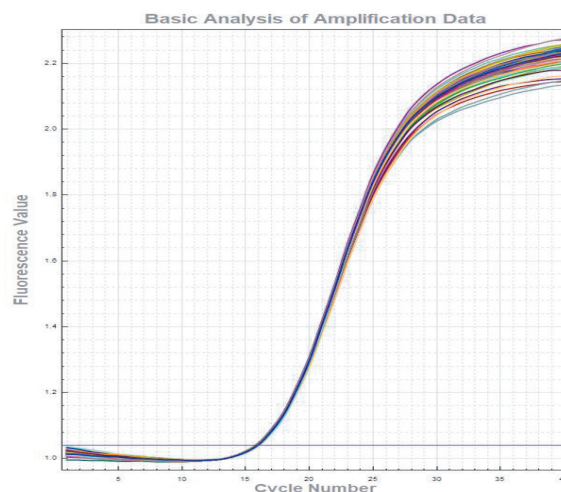
As a necessary choice for quantitative analysis of molecular biology, real-time PCR system has been widely used in various fields such as scientific research, clinical detection and diagnosis, quality and safety testing, and forensic applications.

## Thermal Cycler

### Real-Time PCR System

#### Features

- Up to 6 fluorescence detection channels allowing multiplex PCR.
- Effectively reduce multi-color crosstalk and edge effect, no ROX correction required to reduce sample and reagent use
- Innovative scanning method and time-resolved signal separation technology to improve detection sensitivity
- Unique edge temperature compensation technology to minimize "edge effect"
- User-friendly software
- Innovative technology with long-lasting LED light provides reliability results



Channel 6	Channel 5	Channel 4
NED/Cy3/TAMRA 543 ± 20 / 584 ± 20	ROX/Texas Red 571 ± 20 / 610 ± 20	FAM/SYBR 480 ± 10 / 518 ± 10
VIC/HEX/TET/JOE 532 ± 10 / 564 ± 20	CY5/Quasar 670 640 ± 20 / 692 ± 40	FAM/SYBR 480 ± 10 / 518 ± 10
Channel 3	Channel 2	Channel 1

#### Technical Parameters

Temperature control system		Detection system	
Sample capacity	0.1ml PCR tubes × 96, 8 × 12 PCR plate or 96 well plate × 1	Excitation light source	5/6 monochrome high efficiency LEDs
Reaction volume	10-50 μl	Detection device	PMT
Thermal cycle technology	Peltier	Detection mode	Time-resolved signal separating technology
Max. Heating/Cooling rate	6.0° C/s	Excitation/detection wavelength range	455-650nm/510-715nm
Heating temperature range	4 – 100 °C	Fluorescent channels	4/6 channels
Temperature accuracy	± 0.2°C	Supported dye	FAM/SYBR Green, VIC/HEX, ROX, Cy5, Cy3 (only for x6)
Temperature uniformity	± 0.2°C @ 60°C, ± 0.2°C @ 95°C	Sensitivity	Single copy gene
Temperature gradient setting range	30-100°C	Resolution	1.33 folds copy number difference can be distinguished in single-plex qPCR
Temperature gradient difference setting range	1 – 36°C	Dynamic range	10 orders of magnitude copies

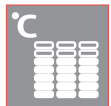
\* For research use only, not for use in diagnostic procedures.





**ESL-C1000-R****Thermal Cycler Regression****ESL-C1000-S****Thermal Cycler Standard**

Thermal cycler is essential laboratory instrument in the field of molecular biology research such as sequencing, gene cloning, gene expression, mutagenesis applications and applied market like drug discovery, agriculture, food industry, etc.



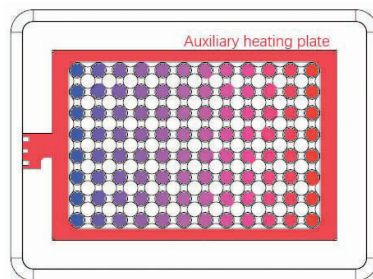
Excellent temperature uniformity



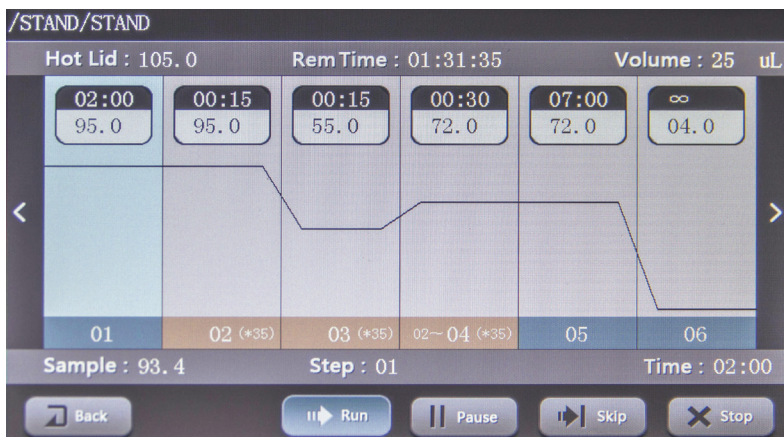
Gradient function



Thermal Cyclers

**Features**

- High performance long life Peltier and independent control circuits for different heating segments implement accurate temperature control
- Auxiliary heating mechanism diminishes the "edge effect" and enhance the temperature uniformity
- Wide touchdown PCR temperature range (-9.9°C~+9.9°C) and Long PCR time range (-9min59s~+9min59s)
- Gradient temperature setting supported, optimizing temperature easily in the single run
- User friendly interface on 7 inch color touch screen enable you edit the program very simple
- The PCR touch screen pen improves the operation experience and reduces the cross contamination risk



### More features

- Wide options of consumables common PCR tubes, 8-well PCR strips and 96-well PCR plates can be used
- File customization, multi-file storage
- Power-off protection function, automatic program recovery
- Hot lid auto-off function: If the module temperature is lower than 30°C, the hot lid function will automatically turn off



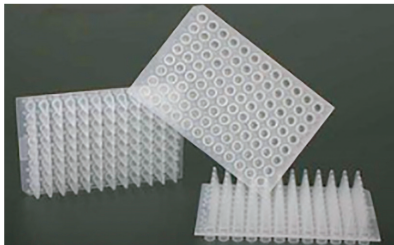
LCD touch panel



Excellent temperature accuracy



Thermal Cyclers



### Specifications

	ESL-C1000-R	ESL-C1000-S
Sample Capacity	96X0.2mL PCR tube, 8X12 PCR plate or 96 well plate	96X0.2mL PCR tube, 8X12 PCR plate or 96 well plate
Heating Temperature Range /°C	4~105	4~105
Lid Temperature Range /°C	30~110	30~110
Temperature Display Accuracy /°C	±0.1	±0.1
Temperature Display Accuracy@55°C	±0.3	±0.3
Temperature uniformity@55°C	<0.3	<0.3
Max. Heating/Cooling Rate	5°C/Sec	5°C/Sec
Gradient Temperature Setting Range /°C	30~99°C	-
Gradient Range /°C	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 max. 16 folder and 16 files each folder	Max. 30 segments 99 cycle max.16 folder and 16 files each folder
Power off protection	Yes	Yes
Power Supply	100~120V/200~240V,50/60Hz	100~120V/200~240V,50/60Hz
Dimension[WxDxH]	280x370x250 mm	280x370x250 mm
Weight	11kg	11kg



## ESL-R100-Pro

### Digital Rotary Evaporator



LCD Digital Rotary Evaporator is an essential instrument in chemical laboratories for the efficient and gentle removal of solvents from samples by evaporation. It offers an excellent distilling solution in a wide range of applications.

#### Features

- Digital display of both rotation speed and heating temperature allows for optimal control of all distillation processes
- Automatic motor lift releases the evaporating flask to a safe position in case of power failure
- 5L heating bath with wide temperature range from room temp. to 180°C, Water/oil heating mode can be changed only through a switch
- Overheating protection temperature at 220°C
- Boil-dry protection, automatically power off if heating without water/oil in the heating bath
- Speed range from 20 to 280rpm, and interval operation in clockwise and anticlockwise directions for drying process
- Patented condenser (cooling surface 1700cm<sup>2</sup>) with excellent cooling effect
- Ejection mechanism ensures easy removal of evaporating flask
- Patented double spring sealing ring made of PTFE provides an excellent sealing performance
- Remote function provides PC control and data transmission
- Optional glassware with explosion proof film available.



Large LCD display



USB connector



Chemical resistance



Overheating protection



Compatible with all range of glassware

#### Specifications

	ESL-R100-Pro
Motor Type	Brushless DC motor
Speed Range	20-280rpm
Display	LCD(speed, temperature, time)
Clockwise and Anti-clockwise	Yes
Heating Temperature Range	Room temp. to 180°C
Control Accuracy	water: $\pm 1^{\circ}\text{C}$ oil: $\pm 3^{\circ}\text{C}$
Heating Power	1300W
Stroke Displacement	automatic 150mm
Timer	Yes
Time Setting Range	1-999min
Dimension[D×W×H]	465×457×583mm
Weight	15kg
Permissible Ambient Temperature	5-40°C
Permissible Relative Humidity	80%RH
Protection Class	IP20
USB Interface	Yes
Voltage/Frequency	100-120/200-240V 50/60 Hz
Power	1400 W



# ES-2303CS / 2303CL

## Cold Lab Chamber

### Product Features

- Can be used for low temperature testing and refrigeration storage
- Special pair glass door that does not cause condensation
- Precision temperature controller that can be set in 0.1 degree increments
- Waterproof lamp for internal verification and key lock for security
- Forced circulation method to increase temperature uniformity
- Urethane insulation structure with excellent low temperature retention
- Wire shelf with adjustable height
- Independent overheating and overcooling prevention safety device
- Built-in temperature abnormality detection device (Alarm)
- RS-232C communication port built-in
- Convenience devices such as Access Hole and Outlet (Option)
- Recorder to monitor internal temperature (Option)



Cold Lab Chamber	ES-2303CS	ES-2303CL
Dimension (in)	610(W) x 680(D) x 1450(H)mm	1370(W) x 680(D) x 1450(H)mm
(out)	740(W) x 805(D) x 1910(H)mm	1500(W) x 805(D) x 1910(H)mm
Capacity	600ℓ	1,350ℓ
Shelves	4EA	8EA / 좌·우 각 4EA
Door	Tempered Safety Glass, 1 Door	Tempered Safety Glass, 2 Door
Refrigerator	1/4HP, R-134A	1/3HP, R-134A
Power	220V, 680W, 60Hz	220V, 720W, 60Hz
Temp. Range	0 ~ 10℃	
Temp. Controller	Digital P.I.D Controller	
Temp. Uniformity	±2℃ at 4℃	
Display	LED Digital Display	
Illumination	LED Lamp	
Recorder	Thermal Recorder (Option)	
Defrost Device	Automatic Type	
Material (in)	Stainless Steel	
(out)	Steel with Powder Coating	
Utility & Safety Device	Exclusive High & Low Temp. Protector, Key lock, RS-232C Port	



◀ ES-2303CS


▶ ES-2303CL




# Flake Ice Maker

## ELS-625FS / ESL-625F / ESL-625

- ✓ Flake Type Ice Maker
- ✓ Full Automation System
- ✓
- ✓ Screw Turbine
- ✓
- ✓ Level
- ✓




FLAKE ICE



WATER

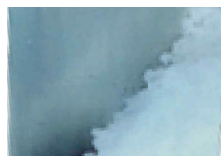
AUTO-MATIC



SCREW TURBIN

**Safety**  
(WATER, LEVEL)

Flake Ice Maker	ESL-625FS	ESL-625F	ESL-625
Production/ Day	80kg	120kg	180kg
Storage Capacity	58Liter	120Liter	120Liter
Compressor	1/3HP , R404A	1/3HP, R404A	1/2HP ,R404A
Dimension (in)	345 x 450 x 375(H)mm	450 x 425 x 630(H)mm	485 x 485 x 510(H)mm
(out)	600 x 560 x 740(H)mm	675 x 560 x 1,065(H)mm	990 x 635 x 1,190(H)mm
Material (in)	Stainless steel	Stainless Steel	Stainless Steel
(out)	Stainless	Stainless Steel	Steel with Powder coating
Weight	61Kg	83Kg	125Kg
Power	220V, 800W, 60Hz	220V, 800W, 60Hz	220V, 1.3KW, 60Hz
Ice Type	Flake Type Ice		
Door	Front PC Door		
Safety Device	Power Circuit Breaker, Ice Level Sensor, Water Level Sensor		
Accessory	Drain & Supply Hose, Scoop		



Flake Type Ice



Water Filter  
WF-001



Water Filter  
WF-004



Water Pump  
WP-001



ESL-625FS



ESL-625F



ESL-625



Labware

# Laminar Flow Clean Bench

Model : **ESL-700LV**

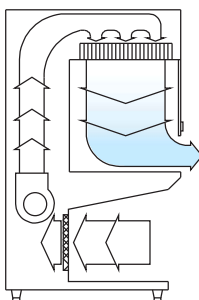
## Features

- Micro processor control
- Easily controlling verifying operation
- High efficiency filter, minor vibration, low noise design.
- Removable working table for easy cleaning
- Inflow pre filter installed fro extending life of Hepa filter  
Meet Bio safety level 1.2.3

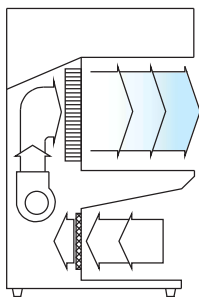


Suction Pump

**Option**



Vertical air flow



Horizontal air flow

<b>MODEL</b>		<b>ESL-700LVN</b>
Type		Vertical air flow Type
Main Control		Microprocessor Control with Touch pad
Purity		Lower than class 100
Main Filter		HEPA Filter(99.99% efficient at 0.3micron particles)
Pre filter		Nylon material
Dimension (W x D x H) (mm)	(In)	1200 x 620 x 710
	(Out)	1320 x 790 x 1920
Material	(In)	Stainless steel
	(Out)	Steel plate with powder coating
Illumination		30W F.L x 2EA
UV Lamp		30W.U.V.x 2EA
Door		Sliding Glass door
Power		220V, 3A, 60HZ



# Bio Hazard Safety Cabinet

**Model : ESL-801SC , ESL-802SC , ESL-803SC , ESL-804SC**

## Features

- Micro processor control
- Easily controlling verifying operation
- High efficiency filter, minor vibration, low noise design.
- Removable working table for easy cleaning
- Inflow pre filter installed fro extending life of Hepa filter Meet Bio safety level 1.2.3



Suction Pump

**Option**



MODEL		ESL-801SC	ESL-802SC	ESL-803SC	ESL-804SC
Dimension (W x D x H) (mm)	(In)	960 x 580 x 670	1160 x 580 x 670	1460 x 580 x 670	1660 x 580 x 670
	(Out)	1100 x 770 x 2130	1300 x 770 x 2130	1600 x 770 x 2130	1800 x 770 x 2130
Type	Bio hazard safety Type, Class II Type				
Main control	Micro processor control with Touch pad				
Winding Velocity	0.3~0.5m/sec				
Purity	Lower than class 100				
Main Filter	Hepa filter/0.3 micron 99.99% efficiency				
Pre filter	Nylon material/Internal mounted				
Working table	Easy removable plate				
Material	(In)	Working table : Stainless steel SUS 304			
	(Out)	Cabinet : Steel plate with powder coating			
Illumination	40W Fluorescent lamp x 2EA				
UVG Lamp	40W x 1EA				
UV Timer	15, 30, 60min or Hold				
Utility	Air Cock, Gas cock, Electric Outlets				
Door	Sliding glass door, Tempered safety glass				
Safety system	Door Limit Alarm				
Power	220V, 2.2A, 60Hz				





EduScience UK



## LAB WARE

Call Us Today

+447404985528

[www.eduscienceuk.com](http://www.eduscienceuk.com)