

PRODUCT CATALOGUE



Manufacturer of
Life Science Research
Equipments



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EPS Biosolutions was established in the year 2008 as a manufacturer to serve the needs of Life Science industry. EPS provide a complete line of laboratory equipments targeted exclusively for areas of application and research involving Life science. Our brand "EPS" is well known for the Electrophoresis apparatus, Electrophoresis Power Supply, UV Trans-illuminators, Gel Documentation Systems, Gel Rockers, Biosafety Cabinets, Fume Hoods, Laminar Air Flows, Orbital Shakers, BOD Incubators, Ovens, Furnace, Autoclave and Water Bath etc...

Our products are of highest quality and we promise timely delivery and user friendly services. Product features are regularly updated and are in pace with the rapidly changing technology.

Our vast and reliable network of dealers lends a very supportive hand in spreading our mission of "Excellence in Equipments" throughout the country. Our major dealers network available in all the four regions of the nations. We have been growing at two times the industry over each financial year.



Information Needed

When placing orders, please provide the following information:

- Your billing and shipping address
- Your purchase order number
- Product catalog number, description and quantity

Special Orders, Custom services and OEM

EPS provides custom orders and services. Many product can also be supplied in bulk and request a quotation for price and delivery information for bulk orders. Contact our corporate office for more information.

Warranty Information

All EPS products are guaranteed to meet the specifications listed in our catalog. Should a EPS product fail to meet specifications during its warranty period, it shall be repaired or replaced at EPS discretion. Generally equipments receive one year warranty coverage from the date of installation and shipment. Non EPS branded products are covered by the original equipment manufacturers warranty.



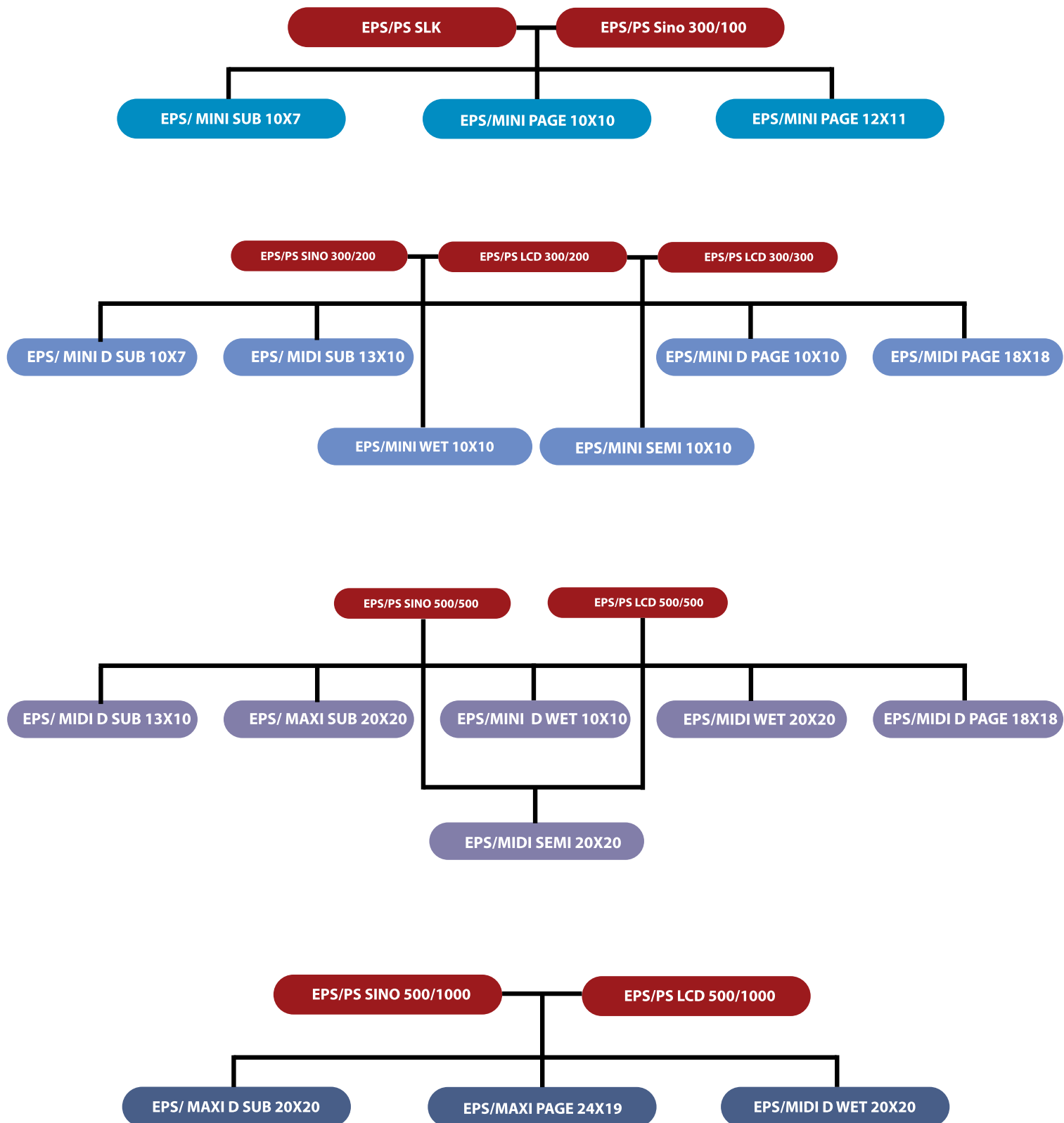
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ELECTROPHORESIS POWER SUPPLIES

PRODUCT SELECTION GUIDE



SUBMARINE GEL ELECTROPHORESIS

EPS horizontal gel electrophoresis offers many advantages for nucleic acid separation and remains today one of the mainstays of molecular biology. EPS range offers the most comprehensive and versatile range of horizontal gel electrophoresis units currently available for low- and high-throughput DNA and RNA applications.

Features

- Color-coded and height adjustable(optional) combs—easily identify comb thickness at a glance and control well depth
- Colour background—for easy well detection when loading
- Compact tank—reduces the buffer volume
- Electrodes can be detachable and replaced by many times if needed.
- UV-transparent running tray—allows the user to image the gel without risk of damage due to handling
- Side handles—for safe and easy transportation around the laboratory
- Silicon gasket for easy casting of gels

Complete Unit Includes

- Buffer tank with safety lid
- Electrodes (Positive and negative)
- Gel running tray, combs
- (Gel casting Assembly-Optional)
- Power cord
- User Guide



Technical Specifications & Ordering Information:

MODEL	EPS/MINI SUB 10X7	EPS/MIDI SUB 13X10	EPS/MAXI SUB 20X15	EPS/MINI D SUB 10X7	EPS/MIDI D SUB 13X10	EPS/MAXI D SUB 20X15
Buffer Capacity	300 ML	500ML	900 ML	1.2 L	2L	3.5L
Gel size(cm)	7X5 & 10X7	13X6 & 13X10	20X15 & 20X20	7X5 & 10X7	13X6 & 13X10	20X15 & 20X20
No. of wells	8	15 & 18	26 & 30	8	15 & 18	26 & 30
Max samples	16	36	60	32	72	120
Electrode Diameter (mm)	0.2	0.2	0.2	0.3	0.3	0.3

Note: We also manufacture customized electrophoresis as per needs. (Run up to maximum 416 samples at a time)

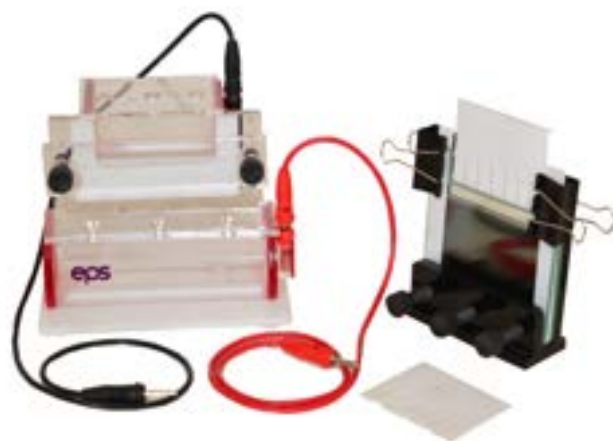
EPS Vertical electrophoresis utilises potent protein and nucleic acid analytical tools for applications within all aspects of life science research, ranging from purity determination to analysis of complex protein lysates.

Features

- Glass plate size 24 x 19 cm (maximum)
- Produce straight lanes and sharp, well-defined bands
- Run up to two gels (maximum 40 samples) at one time under identical conditions
- Run gels at uniform temperature from 1 to 45°C
- Glass Bond spacers (optional) gives leak proof casting
- Accommodates denaturing and native polyacrylamide gels
- A wide array of accessories allows you to tailor gel configurations to your needs
- Water re-circulation for all dual models

Complete Unit Includes

- Buffer tank with safety lid
- Electrodes (Positive and negative)
- Glass plates, Gel casting Stand
- Teflon Combs(Thickness 1 mm and 1.5 mm)
- Glass supporter, clamper and screws
- Power cord
- User Guide



Technical Specifications & Ordering Information:

MODEL	EPS/MINI PAGE 10X10	EPS/MINI PAGE 12X11	EPS/MIDI PAGE 18X18	EPS/MAXI PAGE 24x19	EPS/MINI D PAGE 10X10	EPS/MIDI D PAGE 18X18	EPS/MAXI D PAGE 24x19
Buffer Capacity	250 ML	280 ML	300 ML	1000ML	500ML	600ML	1200ML
Gel size(cm)	8X7	10X8	16X14	20X16	2(8X7)	2(16X14)	2(20X16)
No. of wells	7	10	13	20	7	13	20
Max samples	7	10	13	20	14	26	40
Electrode Diameter(mm)	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Note: We also manufacture customized electrophoresis as per needs. (Run up to maximum 60 samples at a time)

BLOTING (TRANSFER)

EPSTransfer apparatus entails immobilisation of proteins or nucleic acids on a solid membrane support, and then detection using a specific antibody or probe of complementary nucleic acid sequence, blotting significantly increases the potential for identification and characterisation of proteins and nucleic acids.

Features

- Transfer as many as two gels up to 16 x 14 cm in less than an hour
- Uniform and strong electric field—supports efficient and even transfers
- Color-coded, easy to assemble and load cassettes—ensures proper orientation during transfer
- Superior tank design allows the cassettes to apply equal pressure across the stack—prevents gel distortion
- High polished graphite are incorporated for quick transfer
- Platinum coated titanium anode plate electrode and Stainless steel cathode plate for semi dry blotting

Complete Unit Includes

- Buffer Chamber
- Safety Lid with High Voltage Leads
- Inbuilt Electrode Cassettes
- Foam Sponges
- Cassette Hook
- Power cord
- User Guide



Semi Dry Blotting

Technical Specifications & Ordering Information:

MODEL	EPS/MINI WET 10X10	EPS/MIDI WET 16X14	EPS/MINI D WET 10X10	EPS/MIDI D WET 16X14	EPS/MINI SEMI 10X10	EPS/MIDI SEMI 20X20
Buffer Volume	300 ML	900ML	700 ML	1200 ML	50 ML	150 ML
Gel size(cm)	8 x 7	16 x 14	2 (8 x 7)	2 (16 x 14)	8 x 7	16 x 14

Power Supply is designed for electrophoresis and blotting techniques including large format and high throughput applications. The small footprint, large handle, and simple operation make the Power supply easy to set up and use in your lab. With the large, easy to read LED & LCD, simply set the constant parameter, set the timer (if desired), and push start.

Sleek

Features

- Compact and Light weight
- Overload / short - circuit protection
- Suitable For Mini Agarose, SDS - PAGE, Paper, Immuno electrophoresis and blotting systems



Technical Specifications & Ordering Information:

MODEL	EPS/PS SLK 100	EPS/PS SLK 200	EPS/PS SLK D100	EPS/PS SLK D200
DC Voltage	50, 100, 150, 200 & 250		5 to 300V	
Current	100mA	200mA	100mA	200mA
Control	Soft membrane key			
No. of Output	Single, 4mm socket		Dual, 4mm socket	
Power	Single Phase, 230V, 50 Hz			

Sinusoidal

Features

- Compact and Light weight
- Auto Restart on power failure
- No Load/Over detect
- Seven segment display and Digital control
- Easy to use: Knob and membrane key
- Buzzer and real time process
- Overload / short - circuit protection
- Suitable For Agarose, SDS - PAGE, Paper, Immuno electrophoresis and blotting systems



Technical Specifications & Ordering Information:

MODEL	EPS/PS Sino 300/100	EPS/PS Sino 300/200	EPS/PS Sino 300/300	EPS/PS Sino 500/500	EPS/PS Sino 500/1000
DC Voltage	0 to 300V	0 TO 300V	0 to 300V	0 to 500V	0 to 500V
Current	0 to 100mA	0 to 200mA	0 to 300mA	0 to 500mA	0 to 1A
Timer	1 Min -9 hrs.59 Min				
Display	4 Digits-Seven segment				
Resolution	1 V,1 mA,1 Min				
Parameters	Voltage,Current & Time				
Output	4 Parallel,4mm socket				
Control	Knob Type				

LCD

Features

- Variable LCD model with a maximum upto 1000 mA with safety fuse.
- Constant voltage and constant current modes with auto balancing facility
- Programmable for 20 users depends on their applications
- Fine adjusting facility for setting the parameters
- Over load and short circuit protection
- Weight is around 2 kg made up of Injection molding ABS plastic enclosure.
- Buzzer and memory option.
- Auto restart set program in case of power failure.
- Four output terminals



Technical Specifications & Ordering Information:

MODEL	EPS/PS LCD 300/200	EPS/PS LCD 300/300	EPS/PS LCD 500/500	EPS/PS LCD 500/1000
DC Voltage	0 to 300V	0 to 300V	0 to 500V	0 to 500V
Current	0 to 200 mA	0 to 300 mA	0 to 500 mA	0 to 1A
Timer	1 Min -9 hrs.59 Min			
Display	LCD -16X 2 Line			
Resolution	1 V,1 mA,1 Min			
Parameter Control	Manual/Program Mode			
Power	Single Phase,230V,50Hz			
Output	3 Parallel, 4mm socket			
Weight	2 KG			

EPS offers advance technology Gel Rocker are known for their durability and Rockers are commonly used for staining and de-staining gels after electrophoresis, hybridization, washing, blotting, Cell Culture and gentle mixing other chemical mixing procedures. (See – Saw Movement)

Features

- Variable oscillation model with maximum 60 oscillations per minute.
- Fine adjusting facility for setting the parameters
- MOC: GI Steel treated and powder coated to prevent corrosion.
- Maximum capacity can withstand upto 10 kgs.
- Auto restart set program in case of power failure.
- Timer - 1 Min to 99 hr. 59 Min & Continues Mode
- User Guide



Technical Specifications & Ordering Information:

Single Type

MODEL	GR MONO	GR MONO LCD
Top platform in mm	250 X 250	250 X 250
Speed	0 to 60 Oscillation	0 to 60 Oscillation
Timer	Nil	1 Min to 99 hr . 59 Min & Continues Mode
Control	Knob	Soft Membrane key
Display	-	LCD (Timer and RPM)

Dual Type

MODEL	GRTWIN	GRTWIN LCD
Top platform in mm	2 x (250 X 250)	2 x (250 X 250)
Speed	0 to 60 Oscillation	0 to 60 Oscillation
Timer	Nil	1 Min to 99 hr . 59 Min & Continues Mode
Control	Knob	Soft Membrane key
Display	-	LCD(Timer and RPM)

UV TRANSILLUMINATOR

LUMINA

LUMINA high quality UV Transilluminators are designed for viewing DNA/RNA in agarose gels stained with ethidium bromide(EB) or other dyes.

Salient Features/USP

- Available with different range of wave lengths 254 nm,312 nm and 360 nm
- The high intensity imported UV tubes are used for high illumination
- Imported UVG long-life filters are rated for 5000 hours of use
- The imported UV filter for high end models
- High/low intensity soft membrane key with LCD Display
- The cent percent UV resistant Polycarbonate shield for safety purpose
- The Nylon hinges provided with shield and open it as long as it can



UV Model

Technical Specifications & Ordering Information:

MODEL	UV15365	UV15312	UV20365	UV20312	UV365A	UVD15	UVD20
Wavelength	365nm	312nm	365nm	312nm	365nm	365/312/254nm	365/312/254nm
Illumination Area(cm)	15X15	15X15	20X20	20X20	20X15	15X15	20X20
Light source	4X4 Watts	4X8 Watts	6X8 Watts	6X8 Watts	4X8 Watts	6X8 Watts	6X8 Watts
LCD Display	-	-	Optional	Optional	-	-	Optional
Exhaust Fan	Yes						

UV-VIS Model

Technical Specifications & Ordering Information:

MODEL	UVIS1536	UVIS1531	UVIS20365	UVIS20312	UVIS365A	UVIS15D	UVIS20D
Wavelength	365nm	312nm	365nm	312nm	365nm	365/312/254nm	365/312/254nm
Illumi. Area (cm)	15X15	15X15	20X20	20X20	20X15	15X15	20X20
Light source	4X4 Watts	4X8 Watts	6X8 Watts	6X8 Watts	4X8 Watts	6X8 Watts	6X8 Watts
LCD Display	-	-	Optional	Optional	-	-	Optional
Exhaust Fan	Yes						

EPS Biosolutions offers a wide range of GEL Documentation Systems which are suitable for DNA and Protein quality images to suit for publication and research routine imaging or diagnostic needs.

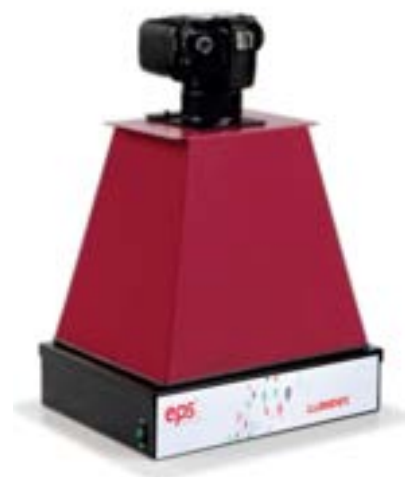
LUMI SERIES

Features

- Budget Friendly Gel Documentation system
- Digital Camera with high sensitivity CMOS Sensor
- High quality of excellent images
- Light weight Compact Hood
- Research grade single wavelength transilluminator
- Professional scientific Digital CMOS sensor to suit DNA and protein imaging.
- Fully computer controlled darkroom

Applications

EPS offers a comprehensive range of imaging systems- ideal for image acquisition, visualization and documentation.



Technical Specifications & Ordering Information:

MODEL	EPS/GDS/LUMI	EPS/GDS/LUMI-PRO
UV Wavelength	312 nm	312 nm
Epi White Light	None	Slim LED
Camera Type	Digital CMOS	Digital CMOS
Camera Resolutions	24.1 MP	24.1 MP
Imaging Area (CM)	20 X20	20 X 20
Dark Room Hood	Compact Acrylic Mountable	Rust Proof Compact Powder Coated
Lens	Fixed Focus	Fixed Focus
Analysis Software	None	None
Input Voltage	230V 50HZ	230V 50Hz

ELITE SERIES

Features

- Professional quality images to suit for publications, research and routine imaging
- All models feature Epi White illumination using LED lights for uniform illumination.
- Special White trays are also available
- Professional scientific CCD/CMOS sensor to suit DNA and protein imaging.
- UV safety switch. Auto UV cut on opening the dark hood.
- All Models feature Emission filter in the wavelength range 560-610 nm, which is ideal for EtBr, SYBR Green Etc.



Applications

Applications include Colorimetric, UV fluorescence, fluorescence, TLC imaging, Colonies, etc

CHEMI SERIES

Features

- Two stage peltier to cool CCD to -45 from ambient.
- Exposure time settings Binning, Time-lapse capture mode, Dark frame subtraction, Background corrections, etc.,
- The model features interline CCD camera which increases the collection efficiency even for weak signals.
- Most suitable for higher exposure times.
- Ultra low cooling for ultra read noise levels.

Applications

- Fluorescence DNA/RNA, Bioluminescence, Chemiluminescence Western Blot
- Bio fluorescence, Colorimetry, GFP, Multiplexing etc



Technical Specifications & Ordering Information:

MODEL	EPS/GDS-ELITE	EPS/GDS-ELITE PRO	EPS/CHEMI	EPS/CHEMI - PRO
UV Wavelength	302 nm	302 nm	302 nm	302 nm
Epi White Light	Slim LED	Slim LED	Slim LED	Slim LED
Camera Type - CCD	Non Cooled	Non Cooled	Peltier Cooled	2 Stage Peltier Cooled
Camera Resolutions	4.0 MP	5.0 MP	4.2 MP	8.4 MP
Imaging Area (CM)	17 x 13	20 X 20	17 x 13	20 X 20
Lens	Fixed Focus	Manual	Fixed Focus	Manual
Analysis Software	1D Analysis	1D Analysis	1D Analysis	1D Analysis
Input Voltage	230V 50Hz	230V 50Hz	230V 50Hz	230V 50Hz

ORBITAL SHAKER

EPS offers advance technology Orbital Lab Shakers are known for their durability and rotary swirling action used extensively in tissue culture work, Aeration of fermentations and various other chemical mixing procedures. EPS Series Orbital Shakers are built for continuous duty. If you need a specific solution (Heavy Duty Large Volume Mixing) and OEM builds, EPS has the ability to manufacture the solution, Step by Step RPM acceleration on Start & Stop.

Features

- Android mobile app control (RPM & Timer)
- Bluetooth-app access distance 15 to 20 mtr
- Universal flask holder with SS springs
- Auto restart (on power failure)
- Square type tray
- Safety fuse and short circuit protection



Technical Specifications & Ordering Information:

MODEL	EPS/OS/ANLG	EPS/OS/LCD
Flask Holder	Spring loaded (SS)	Spring loaded (SS)
Platform Size	385X380	385X380
Capacity	16X250ml	16X250ml
Speed	50 TO 250 RPM	50 TO 250 RPM
Timer	Nil	1 Min to 99 hr. 59 Min & Continues Mode

INCUBATOR ORBITAL SHAKER

EPS offers advance technology Orbital Incubator Shakers are known for their durability and rotary swirling action used extensively in tissue culture work, Aeration of fermentations and various other chemical mixing procedures. EPS Series Orbital Shakers are built for continuous duty with Air Circulation Fan, Step by Step RPM acceleration on Start & Stop.

Construction:

The outer body is made of 1.2 mm thick GI steel which is pre-treated for corrosion and then powder coated to years of new look, to provide an exceptional uniformity (+/- 2° of the set value) inside the chamber, a powerful circulating fan is provided. This is mounted either at the back or the top depending on space constraints.



The heart of the system is a customized, microprocessor based electronic temperature controller. It has a digital display and soft touch keys for various functions. A special soft key on the front panel enables the user to easily calibrate the display value to any standard thermometer. Our controllers use a suitable capacity Thyristor pack with an electronic relay that obviates the use of mechanical or solid state relays thus providing an exceptional temperature control. The temperatures are controlled to within $\pm 2^\circ$ of the set value.

Technical Specifications:

PARAMETER	DESCRIPTION
Body	Inner : Stainless Steel (S.S) Outer: GI Steel treated and powder coated to prevent corrosion.
Heater Capacity	500 watts
Controller	Fully Microprocessor controlled temperature, RPM and time controller with soft touch keys.
Platform Flask Size	250 ml X 16
Temperature Sensor	PT 100 (platinum RTD Sensor) with SS sheathing
Temperature Display and setting	Seven Segment display
Timer	1 Min to 99hr . 59 Min & Continues Mode
RPM & Time Display	LCD display
RPM Resolution	+/- 2 RPM
Relay	SSR Relay with Electronic Control .
Motor Speed	50 - 250 RPM, continuously variable
Speed Control	Soft Touch - Digital PID Control.
Movement Range	25 mm Orbital motion
Motor	Solid-state brushless DC motor with maintenance free ball bearings
Memory	20 Read / Writable Program (RPM & Time)
Input Power	230V AC

Ordering Information for Incubator Orbital Shaker:

MODEL	EPS/IOS/300	EPS/IOS/400	EPS/IOS/500
Chamber Size(mm)	300x300x300	380X380X450	450X450x450
Temperature Range	Ambient +5°C to 60°C		
Temperature Resolution	$\pm 1^\circ\text{C}$ to $\pm 3^\circ\text{C}$		

Ordering Information for Cooling Incubator Orbital Shaker:

MODEL	EPS/CIOS/300	EPS/CIOS/400	EPS/CIOS/500
Chamber Size(mm)	300x300x300	380X380X450	450X450x450
Temperature Range	+10°C to 60°C		
Temperature Resolution	$\pm 1^\circ\text{C}$ to $\pm 3^\circ\text{C}$		

DRY BATH INCUBATOR

EPS Digital Dry Baths offer digital control over both temperature and time, eliminating the need for an external thermometer or timer. Available in three configurations, the digital dry baths offer capacity for up to four blocks.

The cavities within the high-grade aluminum blocks are precision-machined to match the conical size and shape of 0.5, 1.5, 2.0, 15 and 50ml tube sizes, providing unsurpassed temperature uniformity. All model includes a convenient block lifter for transferring blocks with high temperatures.



Features

- Compact and aesthetic appearance
- Exchangeable blocks, for tube sizes 0.2 to 50ml
- Digital Temperature - PID Control
- Block lifter for easy transferring
- Optional Blocks 15 & 50 ml



Technical Specifications & Ordering Information:

MODEL	EPS/DB/001	EPS/DB-T/002	EPS/DBD-T/003	EPS/DBD-T/004
Tube size	1.5 ml/2ml	1.5 ml/2ml	1.5 ml/2ml	1.5 ml/2ml
No of Blocks	1	1	2	4
No of Samples	24	24	48	96
Sensor (Width)	PT 100	PT 100	PT 100	PT 100
Timer	-	999 minutes	999 minutes	999 minutes
Temp.Controller	PID Temp Controller (up Controlled)	PID Temp Controller (up Controlled)	PID Temp Controller (up Controlled)	PID Temp Controller (up Controlled)
Temp Range	Ambient + 5°C to 100°C.	Ambient + 5°C to 100°C	Ambient + 5°C to 100°C	Ambient + 5°C to 100°C
Heater Control	SSR Relay	SSR Relay	SSR Relay	SSR Relay

EPS offers PCR work station which has self-contained work area that will help protect your PCR runs against contamination. UV bulbs irradiate the work area prior to use, reducing the possibility that contaminating DNA will be amplified. Containment features reduce the chance of airborne contamination. The non-ventilated hood has acrylic windows for a clear view, an acid-resistant SS work surface.

PCR amplification is extremely sensitive to contamination, prevention of contamination requires good laboratory practices to minimize external or cross-contamination during reagent and sample preparation.

Applications

- Medicine
- Environmental Study
- Crime Scene Investigation

Construction

- MS Power coated with Stainless Steel Working Top
- Door: PC Sheet for UV Resistance
- Power Socket Optional



Technical Specifications & Ordering Information:

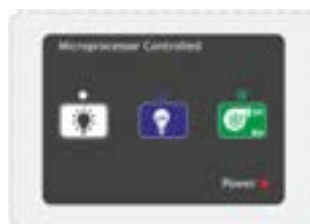
MODEL	EPS/PCR/600W	EPS/PCR/900W	EPS/PCR/1200W
Chamber size (feet) LxDxH	2'X2'X2.5'	3'X2'X2.5'	4'X2'X2.5'
Cabinet	1X15 watts	1X15 Watts	2X15 Watts
UV source	1X15 watts	1X15 Watts	2X15 Watts
Wavelength	254 nm	254 nm	254 nm
Florescent lamp	1X8 Watts	2X8 Watts	2X8 Watts
Pipet Holder	5 placings	5 placings	5 placings
Timer	Optional	Optional	Optional
Power	230V AC, 50Hz	230V AC, 50Hz	230V AC, 50Hz

EPS Laminar Air Flow are the premium selection for the discerning researcher, offering a combination of value, high quality construction, low operating noise levels, and a wide product range to suit all budgets from the Research and Industry leader

Features

- The blower system maintains airflow as the filter becomes loaded, ensuring optimum efficiency and product protection.
- EPS products are manufactured for the most demanding laboratory applications.
- All components are designed for maximum chemical resistance and enhanced durability for a long service life.
- Each Laminar Air Flow is individually factory tested for safety and performance in accordance with standards.

Controller (Optional)



Horizontal / Vertical Models

EPS Laminar Air Flow - available in both horizontal and vertical flow models. In both models, air is taken in from above the cabinet and passed through a HEPA filter.

Blower System: - Direct drive, continuous duty ¼ HP with sealed bearings motors selected for energy efficiency, compact design, and flat profile. Completely integrated assembly optimizes motor cooling. All rotating parts balanced for smooth, quiet and vibration-free operation.

Pre filter System: Washable type pleated pre-filter with 90% efficiency is provided.

HEPA Filtration System: - Aluminum framed High efficiency Particulate air (HEPA) filter operate a typical efficiency of 99.97% at 0.3 micron size, provides superior product protection.

User Interface: - An angled front, curved work surface front edge and glass sides promote ergonomics. The vertical air flow design minimizes direct airflow which may lead to dry eyes and fatigue on horizontal flow models.

Material of Construction: EPS Models available in laminated finish / 18 gauge Mild steel (MS) material with working area SS non corrosive material.

Control panel: - Switch controls for blower, light, outlet and UV are easy to clean and allow airflow to be monitored more accurately.

Product Protection: - Horizontal/Vertical laminar air flow with HEPA filtration, 99.97% at 0.3 micron size, provides superior product protection.

Air Flow: - 90 FPM (0.45 m/s) 10 FPM (0.05 m/s) average velocity measured 6 inches (152.4 mm) from the diffuser screen. Uniformity 20% of average or better 20 to 100 FPM. Compared with horizontal flow models, vertical flow clean benches generate less turbulence when large instruments or items are placed in the work zone.

Special features

- Provided with flexible / rigid clear side screens
- Can be designed to any size to suit site requirement

Applications

- Research laboratories
- Production machinery
- Micro Electronics
- Food Processing industries
- Filling line process
- Pharmaceutical sealing
- Packaging industries

Technical Specifications & Ordering Information:

MODEL	Inner working size (mm)	Overall Dimension in mm (LXDXH)	Material of Construction		
			Inner	Outer	Optional
EPS/LAF-H600	2' x 2' x 2'	660 x 840 x 1740	SS	MS	Fully SS
EPS/LAF-H900	3' x 2' x 2'	960 x 840 x 1740	SS	MS	Fully SS
EPS/LAF-H1200	4' x 2' x 2'	1260 x 840 x 1740	SS	MS	Fully SS
EPS/LAF-V600	2' x 2' x 2'	660 x 780 x 1980	SS	MS	Fully SS
EPS/LAF-V900	3' x 2' x 2'	960 x 780 x 1980	SS	MS	Fully SS
EPS/LAF-V1200	4' x 2' x 2'	1260 x 780 x 1980	SS	MS	Fully SS
Cleanliness Level	CLASS 100				
Air Velocity	90 FPM±20				
Particle Retention	0.3u & above				
Accessories	Acrylic Door UV lamp Manometer Gas inlet Base stand Power socket HEPA filter Pre-filter other standard features.				
Optional Accessories	Ulpa filter (optional) Pressure gauge (Optional)				
Power Supply	230 V AC, 50 Hz				

A Biological Safety Cabinet (BSC), also known as a Biosafety Cabinet is mainly used for handling pathogenic biological samples or for applications that require a sterile work zone. EPS Biological safety cabinets are enclosed cabinets designed to protect the product, Operator and the surrounding environment when working with contaminated materials and or pathogens. Its primary purpose is bio-containment; hence all exhaust air is HEPA filtered. Bio-safety cabinets have several different types according to the required degree of bio-containment.



LCD Controller (Optional)

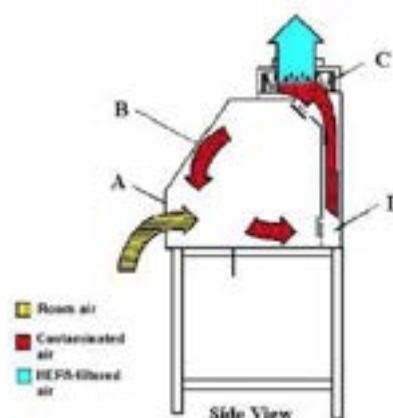


Types of Bio safety Cabinets:-

CLASS	Recirculation of Air (%)	Exhaust Air (%)	Exhaust Alternatives	Inflow Velocity (Ft/m)
Class I	0	100	Inside Room/ Hard Duct	75ft/m
Class II-A1	70	30	Inside Room/ Hard Duct	75ft/m
Class II-A2	70	30	Inside Room/ Hard Duct	100ft/m
Class II-B1	30	70	Hard Duct only	100ft/m
Class II-B2	0	100	Hard Duct only	100ft/m
CLASS-III	0	100	Inside Room/ Hard Duct	Closed

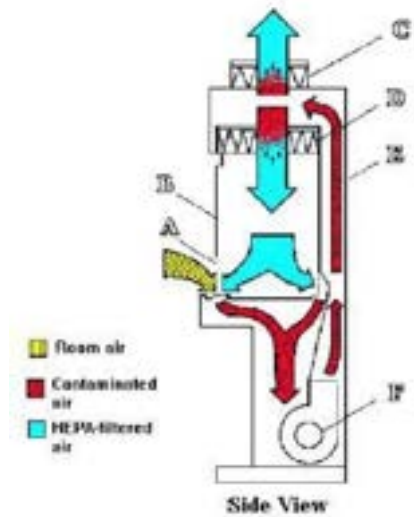
Biosafety Cabinet Class -I

The Class I biosafety cabinet provides personnel and environmental protection, but no product protection. It has similar turbulent air flow as a chemical fume hood, but has a HEPA filter in the exhaust system to provide containment and environmental protection. This older class of biosafety cabinet is rarely seen in biomedical and microbiological laboratories.



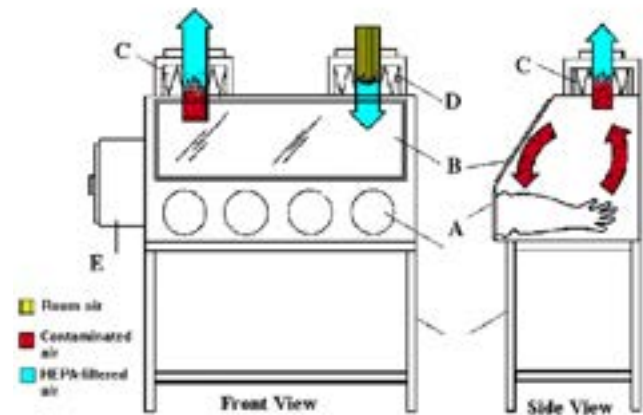
Biosafety Cabinet Class –II

The Class II biosafety cabinet provides protection to the user, the experimental material and the environment. The Class II biological safety cabinet is the type most commonly used in biomedical and microbiological laboratories. Air flow is drawn from the room around the operator into the front grille of the cabinet, which provides personnel protection. In addition, the downward laminar flow of HEPA-filtered air provides protection for experimental material inside the cabinet. Because cabinet air has passed through the exhaust HEPA filter, it is contaminant-free, providing environmental protection, and may be recirculated back into the laboratory (Class II Type A) or ducted out of the building (Class II Type B).



Biosafety Cabinet Class –III

The Class III biological safety cabinet is most suitable for work with biohazardous agents requiring high contains (biosafety level 3 or 4). The Class III cabinet is completely enclosed; HEPA filter-ventilated cabinet fitted with glove ports and decontamination capabilities for entry and exit of material. It offers the highest degree of personnel and environmental protection from infectious aerosols.



Technical Specifications & Ordering Information:

CLASS	Working Dimension in (Feet)	Overall Dimension in (mm)	MOC Inflow Velocity (Ft/m)		BSC – CLASS Selection
			Inner	Outer	
EPS/BSC-1200	4' X2'X2'	1280X780X1960	SS	MS	CLASS – I
EPS/BSC-900	3' X2'X2'	980X780X1960	SS	MS	CLASS II A1
EPS/BSC-600	2' X 2'X2'	680X780X1960	SS	MS	CLASS II A2
EPS/BSC-1200-S	4' X 2'X2'	1280X780X1960	SS	SS	CLASS II B1
EPS/BSC-900-S	3' X2'X2'	980X780X1960	SS	SS	CLASS II B2
EPS/BSC-600-S	2' X2'X2'	680X780X1960	SS	SS	CLASS III

EPS Fume hoods are ventilation devices that are designed to limit exposure to hazardous or toxic fumes, vapors or dusts. A fume hood is typically a large piece of equipment enclosing five sides of a work area, the bottom of which is most commonly located at a standing work height.

Fume hood exhaust options (Ducting)

Fume Hood Ducting exists two main types Ducted and Recirculating (ductless) and principle is the same for both types: air is drawn in from the front (open) side of the cabinet, and either expelled outside the building or made safe through filtration and fed back into the room. To ensure durability, the Fume Hood Duct is constructed with 200mm dia 4mm thick rigid FRP pipe of height 10' with suitable rain hood.

Features

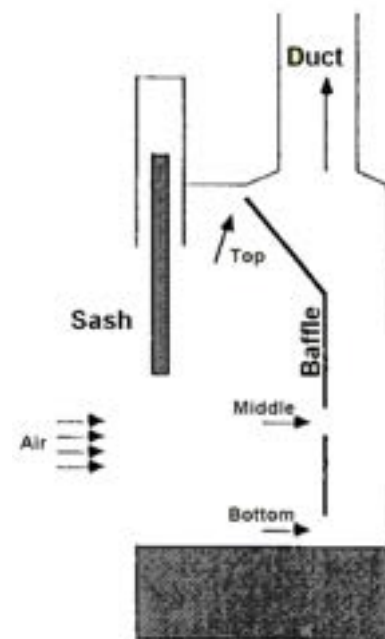
- Metal Construction with inner FRP lining or in complete FRP construction
- Heavy duty dynamically balanced blower assembly provided in the unit
- Counter balanced front sash with toughened glass view panels
- Provided with suitable lighting inside the work chamber.
- Fumes are completely removed from the workplace
- Ergonomic design
- Low maintenance

Special Features:-

- Gas / Air cocks
- FLP Motor & Starter
- Power Socket

Optional Features

- Water Sink
- Inlet and outlet Flameproof electrical accessories



Technical Specifications & Ordering Information:

MODEL	Working Dimension	Overall Dimension	Top Cabinet Size	Support Stand
EPS/FH-600	2' x 2' x 2'	630X700X2100	630X700X1250	630X700X850
EPS/FH-900	3' x 2' x 2'	930X700X2100	930X700X1250	930X700X850
EPS/FH-1200	4' x 2' x 2'	1230X700X2100	1230X700X1250	1230X700X850
EPS/FH-1500	5' x 2' x 2'	1530X700X2100	1530X700X1250	1530X700X850
EPS/FH-1800	6' X 2' X 2'	1830X700X2100	1830X700X1250	1830X700X850

EPS autoclaves are manufactured with chamber volumes of 20 liters to 250 liters that accommodate two and three drums respectively. The vertically designed chamber maximizes space utilization, while microprocessor control system enables comfortable working all the time you operate the machine. Also provides guaranty of safe and efficient sterilization even in confined spaces.

Autoclave advantages

- EPS fully Automatic Vertical Autoclaves are ideal for all critical applications
- Digital temperature indicator cum Controller linked to a preset (15 min) timer
- PT100 sensor enabling precise monitoring
- Low water level cut off
- Easy operation and low maintenance
- Pressure is viewed with the analog dial bar
- Gaskets are made up of silicon rubber to maintain high temperature 121°C
- Power supply 220/440 Volts

Applications

Laboratory autoclaves are ideal for all applications and general purpose sterilization jobs

- Requiring routine total destruction of all living organism
- Ideal for Doctors, Primary Health Centers and also as a stand by unit.



Technical Specifications & Ordering Information:

MODEL	EPS/VA-22	EPS/VA-35	EPS/VA-53	EPS/VA-75	EPS/VA-113	EPS/VA-175
Internal Tank Capacity	22 Liter	35 Liter	53 Liter	75 Liter	113 Liter	175 Liter
Working Chamber (mm)	250x450 mm	300x500	350x550	400x600	450x710	550x750
Working Pressure	15 psi - 17 psi (Jack Type SS Lid to maintain pressure)					
Sterilizing Temperature	121°C - 134°C					
Heat Average	<=±1°C					
Outer Chamber	304 Stainless Steel (SS)					
Inner Chamber	304 Stainless Steel (SS)					
Door Locking type	Wing Nut (Foot lifted with safety and interlock device)					
Water Filling & Removal	Manual					

Portable Autoclave

MODEL	EPS/PA-6	EPS/PA-10	EPS/PA-15	EPS/PA-20
Internal Tank Capacity	6 Liter	10 Liter	15 Liter	20 Liter
Working Pressure / Temp	15 psi - 17 psi / 121°C			

EPS Humidity / Stability Chambers are widely used for controlling and monitoring the humidity level of the testing process. Our products are fabricated using the optical raw material procured from the reliable vendors of the market. The standard models are available from 100 liters to 5000 liters capacities.

Applications

- Drug storage in pharmaceutical industry
- Circuit board testing in the electronics industry
- Paper testing in the Paper industry

Construction

- Inner chamber made up Stainless Steel (SS - 304)
- Outer chamber made up of Mild Steel (MS) powder coated for corrosive resistance
- Trays are made up of SS Material
- Double walled construction with mineral or glass wool insulation
- Shelves : Stainless steel Shelves removable

Salient Features

- Temperature & Humidity Control :- Micro processor Digital Controller
- Temperature range from 10°C to 60°C & Humidity Range from 30% to 95%
- Machine filled with mineral or glass wool insulation to eliminate void pockets.
- Adjustable trays
- Overload cut off relay for compressor
- Rounded inner chamber for easy cleaning
- Powerful fan motor for forced air circulation to maintain temperature & humidity

Optional

- Full Chamber Construction with Stainless Steel (Inner/Outer)
- Validation protocol with IQ, OQ, PQ Documentation.



Technical Specifications & Ordering Information:

HUMIDITY	EPS/HC-200	EPS/HC-270	EPS/HC-350	EPS/HC-430	EPS/HC-630	EPS/HC-800
STABILITY	EPS/SC-200	EPS/SC-270	EPS/SC-350	EPS/SC-430	EPS/SC-630	EPS/SC-800
Dimension (mm)	550X550X710	600X600X710	650X650X810	650X650X950	710X710X1250	800X800X1250
Volume (Liter)	200	270	350	430	630	800
Type	Vertical, Floor Type					
Temperature Range	+10°C to +55°C					
Humidity Range	35% to 95% RH					
Sensor for	Pt100, RTD, Class-A					
Sensor for Humidity	Capacitive type Rh sensor					
Humidity System	Direct detective method					
Controller	Digital PID humidity cum temp. controller with resolution of 0.1°C & 0.1%					
Uniformity	±1°C & ±3% Rh					
Wet & Dry Heaters	SS industrial heaters					
Temperature	Forced air circulation with fan motor					
Humidity unit	Inner Streaming unit, water line & controlling unit will be outside.					
Outer	MS with powder coated					
Inner	SS 304, duly polished					
Insulation	Super fine glass mineral wool					
Door	Double walled insulated & interior lined with SS304, silicon gaskets for leak proof					
Window	5mm thick vacuum glass window with illumination lamp.					
Trays	Adjustable type SS mesh tray					
Compressor	Hermetically sealed single stage Emerson Copeland make compressor.					
Refrigerant	Environmental/CFC free					
Condenser &	Air cooled Fin & Tube type					
Power Supply	230v, Single phase, 50Hz					

EPS Bacteriological Incubator is used for storage of bacteria plate and bacterial culture growth at 37°C. Standard models comes in small size as 50 liters capacity and large size as 340 liters and we also customize bacterial incubators on demand. Each unit is fitted with digital temperature controller for excellent accuracy and reliability.

Temperature

- Controlled with digital PID Temperature controller
- Noise-less fan is used for air circulation for uniform incubation inside the chamber.

Construction

- Inside SS 304 with mirror polish & outside mild steel duly powder coated.
- Double walled construction with insulation of glass wool for efficient thermal loss
- Shelves are made of stainless steel and can be easily adjusted inside the chamber
- Doors are double walled & fitted on heavy hinges
- Sturdy handle provides comfortable opening and closing.
- Doors open 180° angle in order to provide enough access to the heating chamber

Application

- Research laboratories, engineering lab, pharmaceutical lab, cosmetic industry, chemical lab, clinical lab,
- microbiological determination, pharmaceutical stability assays, food processing, QC.



Technical Specifications & Ordering Information:

MODEL	EPS/INC-50	EPS/INC-100	EPS/INC-150	EPS/INC- 200	EPS/INC- 250
Inner Chamber Capacity	60 Liter	95 Liter	125 Liter	224 Liter	336 Liter
Inner Chamber Size (mm)	350x350x350	450x450x450	450x450x605	605x605x605	605x605x900
Load	250W	500W	1.0 KW	1.5 KW	2.0 KW
Temperature Range	5°C above ambient to 80°C maximum				
Temperature Accuracy	+ / - 1°C				
Controls	Digital PID Controller				
Temp Display	LED Display				
Outer Chamber	Mild Steel (304 stainless Steel – Optional)				
Inner Chamber	304 Stainless steel				
Sensor	"RTD" type sensor				
Shelves	2 – 3 Stainless steel shelves (Removable)				

EPS BOD Incubators are widely used in microbiology laboratories for the applications that include cell culture and fungal growth, BOD test, fermentation, crop and physiology and various pharmaceutical tests etc. It is also known as low temperature incubator or refrigerated incubator because it is made with temperature range between 5°C to 60°C or with cooling and heating functions under one unit.

Incubators to provide a condition for optimal growth of microbiology cultures, biological labs for the preservation of vaccines, serological and complement fixation tests, General low temperature uses in physical /chemical labs, R&D centre, quality control laboratory, general laboratories of industries, pharmaceuticals, chemicals, petrochemicals, oil & gas, cement, pulp and paper, fertilizers, defense, railways, paint etc...

Construction

- Inner chamber made up Stainless Steel SS-304
- Outer chamber made up of Mild Steel (MS powder) coated for corrosive resistance
- Double walled construction with Super fine Glass Mineral wool insulation
- Trays are made up of SS-304 Material
- Removable Stainless Steel Shelves
- Attractive door profile with good looking

Ordering Information:

MODEL	EPS/BOD-120	EPS/BOD-180	EPS/BOD-240	EPS/BOD-350	EPS/BOD-430
Dimension LXDHXH(mm)	450X415X610	500X415X800	570X550X870	650X550X900	700X650X900
Volume (Width)	112 L	168 L	280 L	335 L	420 L
Capacity (CU.FT)	4	6	10	12	15
Temp Range	5°C to 60° c				
Temp Accuracy	+/- 1°C				
Temp Controller	Microprocessor based autotune PID temperature controller				
Sensor	PT 100 sensor is used for sensing the temperature.				
Refrigeration	CFC free hermetically sealed compressor for better cooling with R134A refrigerant				
Heating System	High quality tubular air heaters are used for better heating.				
Air Circulation	Motorized blower system at the back side for uniform air circulation in chamber				
Inner Door	Clear Acrylic with heavy thickness				
Illumination	Fluorescent or LED light				
Power Supply	230V AC, 50hz				



EPS Hot Air Oven offer continuous temperature range 5°C above ambient to 250°C with accuracy of $\pm 1^\circ\text{C}$ and Standard models are available from 22 liters to 300 liters volume; however, we can also design and manufacture hot air ovens meeting as per the customer requirements.

Temperature

- Controlled with digital control (PID controller), for uniform incubation inside the chamber
- Noise-less fan is used for air circulation.

Construction

- Chamber made up of MS powder coated corrosive resistance.
- Double walled construction with insulation of glass wool for efficient thermal loss
- Shelves are made of stainless steel and can be easily adjusted inside the chamber.

Doors

- Doors are double walled, made of MS steel (stainless steel optional)
- Insulated with mineral glass wool, fitted on heavy hinges.
- Sturdy handle provides comfortable opening and closing.
- Doors open 180° angle in order to provide enough access to the heating chamber.

Heating Elements

- For efficient heating, our hot air ovens are fitted with branded heating elements, nickel / chrome plated nichrome wire, kept inside the beads and placed at the bottom of both sides of the chamber.



Technical Specifications & Ordering Information:

MODEL	EPS/HAO-60	EPS/HAO-90	EPS/HAO-120	EPS/HAO- 220	EPS/HAO - 250
Inner Chamber Capacity	60 Liter	95 Liter	125 Liter	224 Liter	336 Liter
Inner Chamber (mm)	350x350x350	450x450x450	450x450x605	605x605x605	605x605x900
Load	1.0 KW	1.5 KW	2.0 KW	2.5 KW	3.0 KW
Temperature Range	5°C above ambient to 250°C maximum				
Temp Accuracy	$\pm 2^\circ\text{C}$				
Temp Display	LED Display				
Outer Chamber	Mild Steel (304 stainless Steel – Optional)				
Inner Chamber	304 Stainless steel				
Sensor	"J" type sensor				
Shelves	2 – 3 Stainless steel shelves (Removable)				
Air Circulation	Forced air circulation				

MUFFLE FURNACE

EPS Muffle Furnace offer temperature range starts 900°C, 1100°C, 1200°C, 1300°C & up to 1500°C and temperature control options to meet your application needs. Embedded or open heating elements designed to keep samples safe while maintaining reliable temperature uniformity.

Furnaces in laboratory and industrial settings are used every day for a wide variety of simple and technical applications. Choose from a wide offering to accommodate your applications needs, which may include.

- Metal treatment
- Ashing
- Water treatment
- Pottery Designs with safety in mind

Temperature:

- Controlled with automatic Digital temperature indicating controller with Cr/A1. Thermocouple

Construction:

- Outer chamber made up of thick cold rolled mild steel with powder coated for corrosive resistance.
- Chamber is surrounded by ceramic fibre blankets on all the four sides and the rear to reduce heat losses to a minimum.

Doors:

- Rectangular in shape placed horizontally with opening in the front
- Sturdy handle provides comfortable opening and closing.
- Doors open 180° in order to provide enough access to the heating chamber.



Technical Specifications & Ordering Information:

MODEL	EPS/MF-100	EPS/MF-125	EPS/MF-150	EPS/MF-200	EPS/MF-300
Inner Chamber (mm)	100x100x250	125x125x250	150x150x300	200x200x300	300x300x300
Load	3.5 KW	4.0 KW	4.5 KW	5.0 KW	6.0 KW
Temperature Range	900°C, 1000°C, 1100°C, 1200°C, 1300°C up to 1500°C				
Temperature Accuracy	+ / - 2°C				
Input Power Supply	230 Volts AC, Single phase				

WATER BATH

Water Baths are designed & manufactured to comply requirements of industries. Water baths are suitable for various sizes of flasks supplied with concentric rings (Holes) and racks (Serological). Water Baths are fully double wall construction and the gap between the walls insulated with special grade glass wool to eliminate the heat loss to minimum. U' Shaped heaters are used.



WATER BATH (HOLES)

Technical Specifications & Ordering Information:

MODEL	EPS/WB-R6	EPS/WB-R9	EPS/WB-R12
Dimension (mm)	300x250x105	300x300x105	405x300x105
No. of Holes (Width)	6	9	12
Volume (Litres)	9	12	15
MOC	Outer :- Mild Steel(Powder coated), Inner :- Stainless steel		
Control	Thermostat/Microprocessor Digital controler (Optional)		
Heaters	'U' Shaped heater		
Power	1.5 kw		
Temperature	Ambient +5°C to 100 °C		

WATER BATH (SEROLOGICAL)

EPS Serological Water Baths are fully double wall construction and the gap between the walls insulated with special grade glass wool to eliminate the heat loss to minimum. U' Shaped heaters are used.



Technical Specifications & Ordering Information:

MODEL	EPS/WB-S2	EPS/WB-S4	EPS/WB-S6	EPS/WB-S8
Dimension(mm)	300x250x175	350x300x175	455x300x175	605x300x175
Volume (Width)	15	20	25	32
MOC	Outer :- Mild Steel(Powder coated), Inner :- Stainless steel			
Control	Thermostat/Microprocessor Digital controler (Optional)			
Heaters	'U' Shaped heater			
Power	1.5 kw			2.0 kw
Temperature	Ambient +5°C to 100°C			

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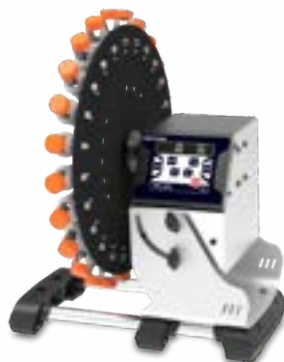
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Rotary Evaporator



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Weighing Balance



Weights - Class F1/E1/E2



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Gradient PCR Machine



Co2 Incubator



Vacuum - Oven / Pump



UV/VIS Spectrophotometer



FTIR Spectroscopy



Deep Freezer $-(80/40/20)^\circ\text{C}$



Lab Freezers



Horizontal Autoclave



ETO Sterilizers



Water Distillation Unit



Pipettes



Lab Consumables



Glassware/Chemicals

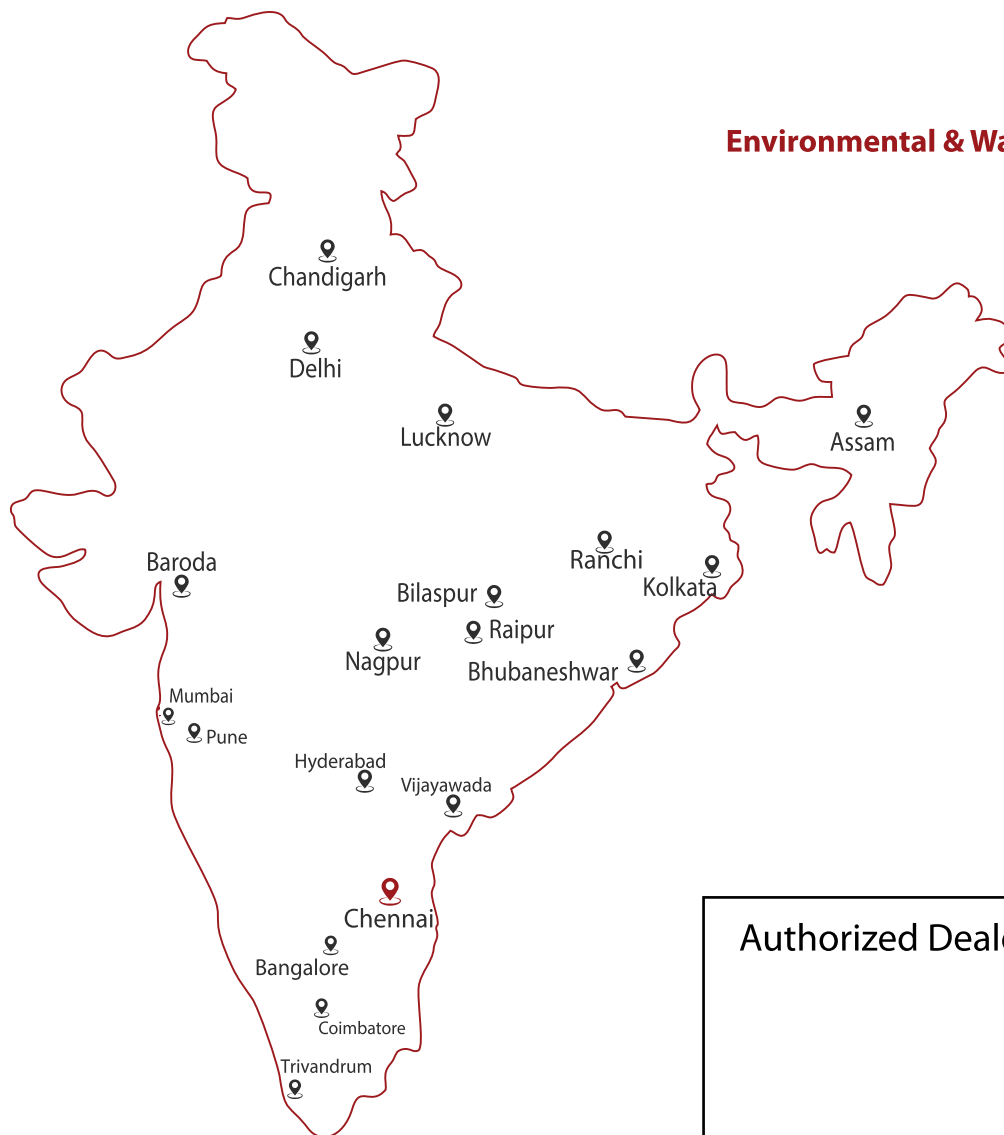


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