



For undisputable sterilization

EQUITRON®

AUTOCLAVE - PORTABLE AUTOMATIC with Digital Display

Applications:

- ❖ **EQUITRON** Portable Automatic Autoclaves with Digital Display are ideal for Doctors especially Dentists, Ophthalmic Surgeons, Polyclinics, Small Nursing Homes, R & D, Laboratories and as a stand by unit.

EQUITRON Advantages:

- ❖ Hasslefree - preset automatic (electronically controlled) - with auto switch off.
- ❖ Can be safely kept in air conditioned clinics.
- ❖ Low power consumption. Just 0.8 units per cycle.
- ❖ A seamless (joint less) body provides a sturdy and tension free Autoclave.
- ❖ The total sterilization process takes just around 40 minutes from start to finish.
- ❖ Results reproducible because purging is automatic, while temperature and time are factory preset and electronically controlled.

Construction:

- ❖ Die pressed seamless body, lid & heater cover stand of stainless steel.
- ❖ Simple and easy "Press & turn" system of closing lid. Faster and more convenient than flynut assembly.

Standard Features:

Electronics and Electricals

- ❖ A Digital, preset Temperature Controller (121°C) cum Timer (20 minutes).
- ❖ The Controller is internally linked to Timer, to start its countdown after attaining the set temperature of 121°C (approx. 15 psi).
- ❖ End cycle buzzer and auto cut-off of heater.
- ❖ As control of temperature (pressure) is by switching the heater on / off, there is no venting of steam into room, besides saving on electricity charges.

Mechanical

- ❖ Lid is fitted with pressure gauge, safety valve, manual exhaust valve and vacuum breaker cum purge valve.
- ❖ Moulded rubber gasket.
- ❖ Stainless Steel Dressing Drum and heater cover stand.
- ❖ Industrial grade energy efficient ring type heater custom made for Autoclaves.



#7407PAD

| Model | Working Chamber Size (Ø x D) / Ltr. | Dressing Drum | Heater | App. Shipping Details Net / Gr. / Volume |
|-----------|-------------------------------------|-----------------------|--------|--|
| # 7407PAD | 30 x 23 cm (12 x 9") / 16 Ltr. | Ø27 x 22 cm (11 x 9") | 1.8 kW | 9.0 kg / 11.0 kg / 0.11 m ³ |

All electrical appliances work on 230 VAC, 50Hz, single phase. Due to continuous improvement in design, the product supplied may have modified features.



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For economic, safe & assured sterilization

EQUITRON®

AUTOCLAVE - SLE SERIES **Fully Automatic**

CE

Applications:

- ❖ The SLE series Autoclaves are suitable for a wide range of applications wherein fast and assured sterilisation is required.
- ❖ Ideal for Pharma QC, QA, Micro, R&D, Chemical Plants, Bio-Labs, Water & Air Pollution Labs, Fisheries, Mineral Water Plants, Food, Beverage & Distilleries, Flight Kitchens, Mass Kitchens, Five Star Hotels, Hospitals, Nursing Homes & Specialty Doctors.

EQUITRON Advantages:

- ❖ Unique single lever lock for lid with single hand opening.
- ❖ Microprocessor Based Control ensures repeatability & a high accuracy.
- ❖ Conformance to National & International Standards.

Construction:

The SLE range, like all *EQUITRON* FA Autoclaves, is designed for ease of use and dependability and is manufactured under strict supervision. Each & every chamber is hydrostatically tested as per standards. Rigorous inspection standards and traceable calibration reports ensure that the SLE range will deliver dependable performance.

- ❖ Internal Chamber and lid along with all wetted parts fabricated from Stainless Steel.
- ❖ Single lever pronged closure system (Patent under progress) with patented Silicone Gasket (registered design No. 208774.)
- ❖ External vertical panels of MS duly heat cured epoxy coated.
- ❖ Easy lift and closing of the lid by assisted support.
- ❖ Castors for ease of movement.
- ❖ Flexible sensor enables in-situ control and monitoring of cycles.
- ❖ Documenting options available.

Control System:

At the heart of SLE series is a secure microprocessor controller which provides high control accuracy along with user level flexibility for sterilizing various types of loads efficiently.

Safety:

Every single Autoclave chamber is hydrostatically tested to 1.5 times its operating pressure. Inspection as per set standards are carried out by qualified engineers at the raw material inward stage, mid process stage and during final tests and calibrations.

- Low water detection.
- Spring loaded safety valve for over pressure.
- Pressure interlock on door.
- Audio & Visual alarms for sensor open and low water level.
- MCB for electrical safety.
- Independent over temperature safety cut out.

Installation:

- As the power requirement is single phase, installing the Autoclave is simple and straightforward.

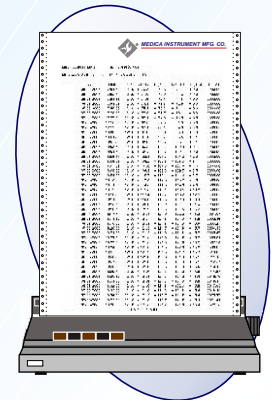




DOCUMENTING OPTIONS FOR SLE SERIES

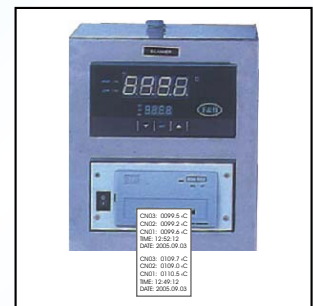
#GSDOP3P Simultaneous Display with Online printing of 3 temperature channels with 1 F_o + 1 pressure channel to external DMP

- Independent display of three sensors - plus one pressure sensor - allows monitoring and online documenting.
- Header with preset Company Name.
- Automatic four digit sequential batch numbering, with manual over-ride facility.
- Print interval user settable from 12 to 999 seconds.
- Prints with date, time, set point, process temperature of 3 temperature channels & F_o of Channel A, plus pressure channel.
- Prints to any compatible 80 / 132 column dot matrix printer. (Printer is not part of standard supply).



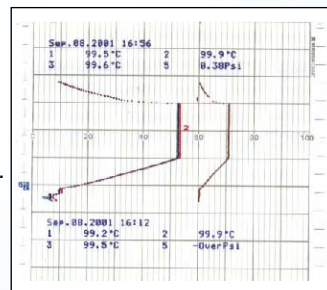
#SP3P Scanner - 3 temperature channels + 1 Pressure channel - with built in 18 column DMP

- Independent scanning of three flexible sensors plus one pressure sensor - allows in-situ monitoring and printing.
- Built-in 18 column impact printer - uses normal calculator paper roll - thus saving on paper costs as well as giving a long shelf life of data.
- Scans through the channels at preset time intervals.
- Prints online every one minute with time and date.



#SCRT4P Strip Chart Recorder (Point type) 4 temperature & 1 pressure channel

- The #SCRT4P is a compact recorder with a recording width of 100mm.
- Independent documenting by point method of 4 temperature & 1 pressure channels.
- The Recorder has a high speed of 6 dot / 10 sec.
- Highly reliability due to heavy duty voltage semiconductor.
- Pen servo unit uses ultra-small stepping motors.
- The measured value, channel number, alarm status and date/ time display are provided with 7 segments LED display.



SPECIFICATION & ORDERING DETAILS

| Model * | Working Chamber Size (Ø x D) / Capacity | Carrier (Ø x D) | External Dimension L/B/H in mm | App. Shipping Details Net / Gr. / Volume |
|-----------|---|------------------|--------------------------------|--|
| #7421SLE- | 30 x 50 cm / 35 lit | 1 of Ø25 x 45 cm | 550 x 390 x 850+300 | 50 kg / 92 kg / 0.51 m ³ |
| #7431SLE- | 35 x 55 cm / 53 lit | 1 of Ø30 x 50 cm | 595 x 445 x 895+355 | 62 kg / 102 kg / 0.65 m ³ |
| #7440SLE- | 40 x 60 cm / 75 lit | 1 of Ø35 x 55 cm | 670 x 490 x 870+400 | 74 kg / 124 kg / 0.80 m ³ |
| #7441SLE- | 45 x 71 cm / 113 lit | 2 of Ø40 x 33 cm | 725 x 545 x 1050+470 | 95 kg / 156 kg / 1.10 m ³ |
| #7451SLE- | 55 x 76 cm / 180 lit | 2 of Ø50 x 35 cm | 825 x 650 x 1080+580 | 121 kg / 195 kg / 1.33 m ³ |

* Add documenting option suffix GSDOP3P, SP3P or SCRT4P wherever required.

All electrical appliances work on 230V AC, 50Hz, single phase. Other Voltages available on request. Due to continuous improvement in design, the product supplied may have modified features.





For assured & critical sterilization

EQUITRON[®]

Fully Automatic Autoclave

Applications:

- ❖ *EQUITRON* Fully Automatic Vertical Autoclaves are ideal for all critical applications requiring assured and reliable total destruction of all living microorganisms.
- ❖ Ideal for Pharma QC / QA / Micro / R & D, Chemical Plants, Bio-Labs, Waste treatment, Water & Air Pollution Labs, Fisheries, Mineral Water, Food, Beverage & Distillery Plants, Flight Kitchens, Hotels, Hospitals, Nursing Homes, Polyclinics, specialty Doctors and all applications requiring assured sterilization.

EQUITRON Advantages:

- ❖ Enables reproducibility of results as full cycle including purging of stale air, sterilizing hold time, cycle end with exhaust of pressure is automatic, requiring no human intervention.
- ❖ Widest options for documenting available:
 - Independent scanning, displaying and printing to inbuilt printer
 - Independent Strip chart recorder
 - Independent Chart Recorder
- ❖ Supplied with Test Certificates & calibration reports along with traceabilities for Temperature Controller and Pressure Gauge.

Construction:

- Inside and outside chamber, carrier(s) are fully stainless steel.
- Hydraulically die pressed lid.
- Lid, flange, fly screw, cross pin, heater cover stand, are also fully stainless steel.
- All internal joints are argon welded, ground and polished to give crevice free internals.

Standard Features:

Electronics and Electrical

- μ Processor based Controller with time and temperature programmable by user.
- A backlit alphanumeric two line 32 characters LCD display, displays all information including process and set values at a glance, eliminating guesswork.
- Operating and Display range up to 122°C (135°C for models #7423 & #7433) in 0.1°C resolution.
- Pt100 sensor, enabling precise monitoring.
- Low water level alarm and cut off.
- Sensor open alarm.
- End of cycle buzzer and auto reset.
- Miniature Circuit Breaker for On/Off plus safety.
- Solenoid Valve for automatic purging and exhaust.
- Industrial grade energy efficient ring type heater, custom made for *EQUITRON* Autoclaves, thus reducing power bills by 16 to 40%.



Mechanical

- Lid is fitted with Pressure Gauge, Safety Valve, Extra Safety Valve, Manual Exhaust Valve, Vacuum Breaker cum Purge Valve and Quick Release Coupling for online pressure calibration checks.
- Handy-raise device for lid - safe and user friendly - on #7441 and #7451.



- Drain valve facilities easy cleaning.
- Moulded rubber Gasket.
- Stainless Steel carrier(s) along with heater cover stand.



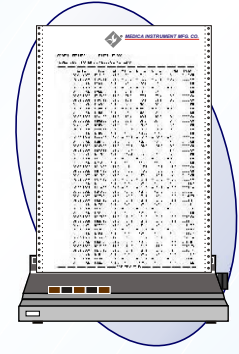
#CR Chart Recorder - Circular

- Independent online plotting of one flexible sensor - allows in-situ monitoring.
- At-a-glance - easy & quick readability.
- Small ~150mm - easy to handle circular chart size.
- Plotting temperature range 90 to 140°C - enables 1°C readability & eliminates ambiguity.
- Fast motor of 4 hours / 1 revolution enables a meaningful plot length, while at the same time is sufficient to accommodate at least two plots if desired.



#GSDOP3P Simultaneous Display with Online printing of 3 temperature channels with 1 F₀ + 1 pressure channel to external DMP

- Independent display of three sensors - plus one pressure sensor - allows monitoring - and online documenting.
- Header with preset Company Name.
- Automatic four digit sequential batch numbering, with manual over-ride facility.
- Print interval user settable from 12 to 999 seconds.
- Prints with date, time, set point, process temperature of 3 temperature channels & F₀ of Channel A, plus pressure channel.
- Prints to any compatible 80 / 132 column dot matrix printer. (Printer is not part of standard supply).



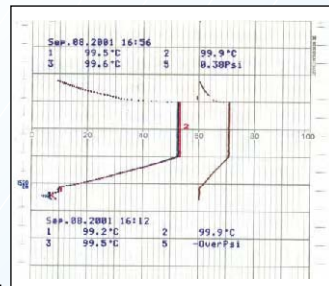
#SP3P Scanner - 3 temperature channels + 1 Pressure channel - with built in 18 column DMP

- Independent scanning of three flexible sensors plus one pressure sensor - allows in-situ monitoring and printing.
- Built-in 18 column impact printer - uses normal calculator paper roll - thus saving on paper costs as well as giving a long shelf life of data.
- Scans through the channels at preset time intervals.
- Prints online every one minute with time and date.



#SCRT4P Strip Chart Recorder (Point type) 4 temperature & 1 pressure channel

- The #SCRT4P is a compact recorder with a recording width of 100mm.
- Independent documenting by point method of 4 temperature & 1 pressure channels.
- The Recorder has a high speed of 6 dot / 10 sec.
- Highly reliability due to heavy duty voltage semiconductor.
- Pen servo unit uses ultra-small stepping motors.
- The measured value, channel number, alarm status and date/ time display are provided with 7 segments LED display.



| Model | Working Chamber Size Ø x D in cm / Ltr. | PSI | Documenting Suffix | | | | Carrier (Ø x D) in cm | Net (kg)/Gr.(kg) / Volume (m ³) |
|----------|--|-----|--|--|--|---|--------------------------|--|
| | | | Independent | | | | | |
| #7421FA- | 30 x 50 (12x20") / 35 | 15 | CR: Plotting to inbuilt Circular Chart Recorder | #GSDOP3P: Simultaneous Display with Online printing of 3 temp ch with 1 F ₀ + 1 pressure ch to external DMP | SP3P: Scanning of 3 Temp. Ch. + Pressure Ch. - o/p to inbuilt 18 col Printer | #SCRT4P: Strip Chart Recorder (Point type) 4 temperature & 1 pressure channel | 1 of 25 x 45 | 40 / 80 / 0.48 |
| #7423FA- | 30 x 50 (12x20") / 35 | 30 | | | | | 1 of 25 x 45 | 45 / 85 / 0.48 |
| #7431FA- | 35 x 55 (14x22") / 53 | 15 | | | | | 1 of 30 x 50 | 45 / 85 / 0.58 |
| #7433FA- | 35 x 55 (14x22") / 53 | 30 | | | | | 1 of 30 x 50 | 50 / 90 / 0.58 |
| #7440FA- | 40 x 60 (16x24") / 75 | 15 | | | | | 1 of 35 x 55 | 74 / 160 / 1.17 |
| #7441FA- | 45 x 71 (18x28") / 113 | 15 | | | | | 2 of 40 x 33 | 86 / 145 / 1.16 |
| #7451FA- | 55 x 76 (22x30") / 180 | 15 | | | | | 2 of 50 x 35 | 117 / 200 / 1.42 |

Build your own custom featured Autoclave: 1st six digits for model & next two to eight for accessories (CR / GSDOP3P / SP3P / SCRT4P)

For example #7441FACR = A Fully Automatic Autoclave of size 45 Ø x 71 cm + Chart Recorder.

All electrical appliances work on 230VAC, 50Hz, single phase. Other Voltages available on request.
Due to continuous improvement in design, the product supplied may have modified features.





For routine sterilization - with ease

EQUITRON®

PAD - AUTOCLAVE

Preset Automatic Digital

Applications:

- ❖ **EQUITRON** Preset Automatic Digital Autoclaves are ideal for all applications requiring, routine destruction of all living micro-organisms.
- ❖ Ideal for all Hospitals, Nursing Homes, Speciality Doctors, Microbiology Labs, R & D and Industry.

EQUITRON Advantages:

- ❖ **Automatic purging** for efficient sterilization.
- ❖ Preset (at 121°C) Digital temperature indicator cum Controller linked to a preset (20 min) timer.
- ❖ Low water level cut off.
- ❖ End of cycle buzzer.
- ❖ Fitted with a Safety Valve for added safety.
- ❖ Supplied with traceable certificate for Pressure Gauge and Temperature Indicator.

Construction:

- ❖ Inside and outside chamber are fully stainless steel.
- ❖ Hydraulically die pressed lid from stainless steel plate.
- ❖ Flange, fly screw, cross pin, heater cover stand are also fully stainless steel.
- ❖ All internal joints argon welded, ground and polished to give crevice free internals.

Standard Features:

Electronics and Electrical

- Preset Digital Temperature Indicator cum Controller linked to a preset timer with 1°C resolution and ±1°C accuracy.
- Pt100 Sensor for precise control and monitoring.
- Low Water Level cut off.
- Industrial grade energy efficient ring type heater, custom made for Autoclaves, thus reducing power bills by 16 to 40%.

Mechanical

- Lid is fitted with pressure gauge, safety valve/safety fusible plug, manual exhaust valve & vacuum breaker cum purge valve.
- Handy raise lid lifting device - safe and user friendly - for lid in #7441 & #7451.
- Moulded rubber gasket.
- Drain valve on side at bottom for easy cleaning.
- Stainless Steel **wire mesh carrier** and heater cover stand.



| Model | Working Chamber Size (Ø x D in cm / Lt) | Carrier (Ø x D) in cm | Heater | App. Shipping Details Net / Gr. / Volume |
|----------|---|-----------------------|---------|--|
| #7421PAD | 30 x 50 cm (12x20") / 35 | 1 of 25 x 45 | 1.80 kW | 34 kg / 65 kg / 0.32 m ³ |
| #7423PAD | 30 x 50 cm (12x20") / 35 | 1 of 25 x 45 | 3.00 kW | 40 kg / 80 kg / 0.45 m ³ |
| #7431PAD | 35 x 55 cm (14x22") / 53 | 1 of 30 x 50 | 2.25 kW | 39 kg / 68 kg / 0.40 m ³ |
| #7433PAD | 35 x 55 cm (14x22") / 53 | 1 of 30 x 50 | 3.00 kW | 48 kg / 88 kg / 0.55 m ³ |
| #7440PAD | 40 x 60 cm (16x24") / 75 | 1 of 35 x 55 | 3.00 kW | 80 kg / 130 kg / 1.10 m ³ |
| #7441PAD | 45 x 71 cm (18x28") / 113 | 2 of 40 x 33 | 3.50 kW | 77 kg / 125 kg / 0.92 m ³ |
| #7451PAD | 55 x 76 cm (22x30") / 180 | 2 of 50 x 35 | 5.00 kW | 110 kg / 180 kg / 1.28 m ³ |

All electrical appliances work on 230 VAC, 50Hz, single phase.
Due to continuous improvement in design, the product supplied may have modified features.



MEDICA INSTRUMENT MFG. CO.

Equitron



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EQUICLAVE®

MEDIA PREPARATOR
cum **A U T O C L A V E**



The new **EQUICLAVE** Media Preparator cum Autoclave from Medica - a firm with over 40 years experience in manufacturing autoclaves - offers utmost ease of use. **EQUICLAVE** ensures foolproof aseptic handling of media right up to pouring stage, reproducible results, user convenience & safety.





MEDIA PREPARATOR cum A U T O C L A V E

Applications:

- ❖ Pharma & Biotech industries.
- ❖ Food research & quality assurance labs.
- ❖ Agriculture research & quality assurance lab.
- ❖ Health care & diagnostic labs.
- ❖ Veterinary diagnostic labs.
- ❖ Universities.

EQUICLAVE Advantages:

- ❖ Prepares liquid media agar - 3~9 lit in #7415-09 & 12~27 lit in #7415-27.
- ❖ It autoclaves/sterilizes & cools the media to user settable temperature within 60-110 minutes.
- ❖ Continuous stirring throughout the cycle assures proper mixing of media & uniformity.
- ❖ Separate large addition port provided for adding nutrient / blood.
- ❖ Controls actual media temperature as temperature probe is kept immersed in media.
- ❖ Media sterilization temperature range: up to 122°C.
- ❖ Media dispensing temp range: 40~80°C.
- ❖ Removable / exchangeable media vessels & hence easy to clean and enables back to back preparation of different media.
- ❖ Equiclave is suitable for connecting to any petri dish filling line.
- ❖ Inbuilt support pressure mechanism/system avoids over boiling of media during cooling phase.
- ❖ Online printing to DMP printer with complete cycle information & temperature readings.



Construction:

- ❖ Internal chamber, Media container & lid alongwith all wetted parts fabricated from stainless steel or special food grade plastic.
- ❖ Single lever pronged closure system for Lid with a patented silicon gasket (registered design N. 208774).
- ❖ Easy lift & closing of the lid by assisted support.
- ❖ Easy access to all the components due to modular design.
- ❖ Built in pressure pump to prevent flash boiling.
- ❖ Large diameter addition port on lid.
- ❖ Special inbuilt magnetic stirrer.
- ❖ Removable stainless steel media container.



Control system:

At the heart of the *EQUICLAVE* - Media Preparator is a PLC with touch screen graphic display which provides higher accuracy, repeatability & user level flexibility. Thus making it operator friendly.

All the program data, critical parameters, process status & alarms are clearly displayed on the touch screen monitor. PLC controls & monitors each & every parameter.

- ❖ Online F_0 calculation.
- ❖ Corrective action program on power failure.
- ❖ Corrective action program on low sterilization temperature.
- ❖ Prints relevant cycle information with detail temperature reading & F_0 value to DMP printer (Printer not part of standard supply).
- ❖ Provides total user flexibility, User settable:
 - Sterilization temperature
 - Sterilisation Hold time
 - Dispense temperature
 - Dispense time
 - Print start temperature
 - Print interval



Safety:

- ❖ Low water level detection.
- ❖ Raw water under / over pressure detection.
- ❖ Alarms for sensor break.
- ❖ Door interlock for residual pressure.
- ❖ Dispense & addition port lid open alarm.
- ❖ Dispense & addition port lid locked under pressure.
- ❖ Spring loaded safety valve for over pressure.
- ❖ Independent thermal cut off for high temperature.
- ❖ MCB for electrical safety.
- ❖ Every chamber is hydraulically tested to twice its operating pressure. All EQUICLAVE products are manufactured with extreme care set as per ISO13485:2003. Each & every stage including raw material inward stage, processing & manufacturing is inspected by qualified engineers. All the products are finally calibrated, tested & validated in QC by qualified & experienced engineers & confirmed for desired performance.



Utility:

- ❖ **Supply:** Single Phase, 230 Vac, 50 Hz , 18Amp.
- ❖ **Water Supply:** Demineralised / purified water line with hardness & temperature less than <21 (German) & 30°C respectively. Minimum 2 bar pressure & Maximum 4 bar.
- ❖ **Exhaust /Drain line:** Capable of handling 121°C. steam / water.
- ❖ **Foot Print:** 750 x 650 mm.

Optional Accessories:

Peristaltic Pump:

It is used to dispense the required quantity of media from media preparator.

- Programmable fill volume.
- Programmable suck back to prevent dripping.
- Fill by revolution count for better accuracy.
- Copy function for repeat fill.
- Signals for synchronising with filling line.

Raw Water Filter:

Raw (Cooling) water with high TDS will increase the scalling, thus it will reduce the efficiency of EQUICLAVE considerably. The filter cum softening assembly for EQUICLAVE is essential, if the cooling water hardness is high.





Optional Accessories:

Booster Water Pump: #S4305-12

A booster pump would be essential where pressurised (2-4 bar) raw / cooling water is not available. The booster pump will increase the raw / cooling water pressure to match the requirement to operate the media preparator.

SPECIFICATION:

| Model | #7415-09 | #7415-27 |
|-------------------------|--|-----------------------|
| Size of media container | Ø280 x 250 mm approx. | Ø300 x 500 mm approx. |
| Capacity | 3 ~ 9 Ltr. | 9 ~ 27 Ltr. |
| Sterilization Temp | Max up to to 122.0°C. | |
| Sterilization Timer | 1~99 minutes. | |
| Dispense Temp | 40°C ~ 80°C. | |
| Dispense Timer | 1~999 minutes. | |
| Print Interval | 12 seconds ~ 5 minutes. | |
| Stirring Speed | 70 RPM. | |
| Display | 5 x 7 Monochrome Touch Screen display. | |
| Online Printing Option | Standard part of supply - to DMP printer (Printer not included). | |

| Model | Product | Capacity | External Dimension L/W/D in mm |
|-----------|--------------------------------|----------|--------------------------------|
| #7415-09 | Media Preparator cum Autoclave | 9 Ltr | 750 x 650 x 500 |
| #7415-27 | Media Preparator cum Autoclave | 27Ltr | 1055 x 665 x106 |
| #S4305-70 | Peristaltic Pump | – | 200 x 200 x 250 |
| #S1104-50 | Raw Water Filter | -- | 280 x 160 x 250 |
| #S4305-12 | Booster Water Pump | – | – |
| #S3101-53 | Media Container | 9 Ltr | – |
| #S3101-54 | Media Container | 27 Ltr | -- |

All electrical appliances work on 230 VAC, 50Hz, single phase.
Due to continuous improvement in design, the product supplied may have modified features.

