



MLS-3020U-PE

MLS

Portable Laboratory Autoclaves

48 L

Convenient sterilisation on demand offers great flexibility
MLS series top-loading autoclaves are a popular method of sterilisation for today's research laboratories. Self-contained and easy to use, these reliable energy-saving autoclaves are ideal for a wide range of applications.

Accurate & Customizable

A microprocessor monitors and controls steam temperature within the chamber, ensuring that it is maintained within the 105°C – 126°C range. Sterilisation temperature and time can be easily adjusted as needed.

User Friendly Design

The interior of the chamber is free of protrusions such as sensors or piping joints that could interfere with the insertion or removal of items. The handle turns easily and securely seals the chamber.

User Safety

A reliable pressure safety valve is used to prevent pressure inside the chamber from rising above acceptable levels. A safety mechanism prevents the autoclave from operating if the door is not completely closed.



Variable Applications

Our equipment is designed to meet good laboratory practice criteria in biotechnology, pharmaceutical, and clinical laboratories.



Compact and Portable

The compact design is ideal where space is limited. The body of the unit, with its built in exhaust bottle, measures a mere 440 x 550 mm so it will fit in the tightest spaces. Four wheels allow the unit to be easily moved.



Temperature control

Several audible and visual alarms add to the user safety. A buzzer sounds to alert the user to the end of sterilisation cycle so that items can be removed from the autoclave.

MLS Portable Laboratory Autoclaves

Panasonic laboratory autoclaves provide a safe and reliable high pressure steam sterilising environment within a unit that is particularly easy to use. Microprocessor control ensures that the correct temperature is accurately maintained and easily operated with one-touch operation.

Accurate sterilisation operation

A microprocessor monitors and controls steam temperature within the chamber, ensuring that it is maintained within the 105°C – 126°C range.

Customizable sterilization program

Sterilisation temperature and time can be easily adjusted as needed. Latest set values are always stored in the system, even after the autoclave is switched off.

Safety assured with fail-safe functions

- 1. Pressure safety valve**
 A reliable pressure safety valve is used to prevent pressure inside the chamber from rising above acceptable levels.
- 2. Door switch**
 A safety mechanism prevents the autoclave from operating if the door is not completely closed. A "door closed" lamp lets you check whether the door is closed.
- 3. Thermistor error detector**
 If there is a thermistor error and the connection is broken, the heater will turn off to prevent overheating. Buzzer alert: Pairs of short beeps repeated in succession.
- 4. Overheating protection function**
 The digital display starts to flash if the temperature in the chamber rises more than 2°C above the temperature setting. If it rises 3°C or more above the setting, the relay shuts off, and cuts off power to the heater.

Door protection function

If the magnet-holder is not connected to the switch button, the high pressure lamp will flash when the temperature inside the chamber is over 99°C.

Digital controls and display

The digital control panel allows temperature and time settings to be entered accurately in 1°C and 1-minute intervals. The display panel is easy to read, helping prevent errors when setting parameters.



Audible and visual alarms

A buzzer sounds to alert the user to the end of sterilization cycle so that items can be removed from the autoclave.

- 1. "Sterilization finished" alert**
 A buzzer sounds to tell you when sterilization is finished.
Buzzer alert: Single long beep
- 2. "Safe to remove contents" alert (cycle fully complete)**
 When the items being sterilized have cooled down to the point where it is safe to remove them, a buzzer sounds.
Buzzer alert: 10 long beeps in succession



A water outlet valve allows easy changeover of the sterilisation water.

Model Number		MLS-3020U-PE
External Dimensions (W x D x H)	mm	440 x 550 x 1050
Chamber dimensions (diameter x depth)	Ø mm	300 x 670
Effective capacity	liters	48
Net Weight	kg	67
Construction		
Chamber material		Stainless steel (SUS 304)
Stainless steel baskets	qty	3
Sterilisation		
Sterilisation temperature	°C	105 - 126
Temperature gauge range	°C	Digital display 80 - 141
Safety valve release pressure		177 kPa (25 psig)
Pressure gauge range		0 - 0.3 Mpa / 0 - 45 psi
Timer setting range	min.	1 - 180
Exhaust tank		3 ltr polyethylene tank
Safety devices		
		Pressure safety valve Anti dry scorch thermo limiter Door switch Handle switch Current fuse

Appearance and specification are subject to change without notice.

