

Top-Loading Portable Autoclaves

97002-404



97002-402

Ergonomic Design - Portable and Free-standing

Improved compact design allows for flexible placement, while the large chamber offers capacity of up to 8-12 flasks (1L).

Programmed Functions

Choice of up to 12 pre-set programs or ability to configure your own.

Alarms Notifications and Safety

State-of-the-art microprocessor delivers precise temperature control (115°C-135°C). It also notifies user of each step of the sterilization process via pre-recorded voice messages.

High
Performance



Optimum
Footprint



Maximum
Control



1.8 cu.ft. | 2.6 cu.ft



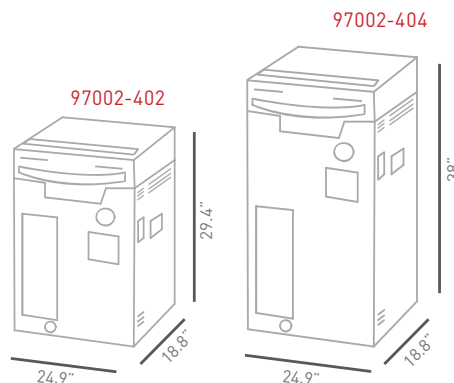
Programmable

These units allow **maximum flexibility for the sterilization of laboratory equipment and media**. Users can select from 12 pre-set programs or configure their own, based on their needs.



Compact Design

These units **maximize the use of available floor space**, while still providing ample capacity for storage within the 14.6" chamber. Large chamber offers greater capacity, storing example load of 8-12 1,000 ml flasks.





MLS Series Top-Loading Portable Autoclaves

Self-contained, easy-to-use, reliable and energy-saving. These autoclaves are ideal for a wide range of applications, including liquid culture media preparation, lab ware and waste sterilization.

Microprocessor Controls

Temperature is accurately maintained with one-touch operation. It is controlled by the microprocessor within $\pm 2^{\circ}\text{C}$ of the set temperature in the range of 115°C to 135°C .

Process Voice Notification

The MLS series includes a voice notification of the system process. Each step of the process is notified via a pre-recorded voice message, allowing the end user to hear the process as it is happening.

Printer

Optional built-in process printer for batch documentation available. The printer prints out the process run results of temperature, pressure, vs. time. Each printout is date and time stamped.

Controls and Notifications

The MLS series voice notification system along with the Panasonic-built microprocessor will monitor the sterilization process step-by-step and the internal temperature of the unit in real-time.

Swing-Up Lid

Opens chamber for 100% access. It eliminates side space requirement.

Double Interlocking Structure

To ensure the safe operation of the high-temperature, high-pressure autoclave, the chamber and the open/close level are controlled by a double interlock system. This system is dependent on temperature and pressure sensors, which ensure safety levels before opening the autoclave.

Pre-Set Programs

Designed to meet GLP criteria in biotechnology, pharmaceutical and clinical laboratories, MLS series deliver high pressure steam with speed, efficiency, and reliability with option of pre-set programs as follows:

- » **Sterilizing**
For water, culture media, reagents and other fluids.
- » **Instrument Sterilizing:**
For flasks, beakers, test tubes, and other lab instruments.
- » **Sterilizing/Keep Warm:**
After sterilizing culture media, reagents and other liquids. High temperature prevents solidifying.
- » **Melting/Keep Warm:**
To melt or keep culture media at a fixed temperature.

PANASONIC MODEL NUMBERS	MLS-3751L-PA	MLS-3781L-PA
VWR MODEL NUMBERS	97002-402	97002-404
EXTERIOR DIMENSIONS (W X F-B X H)	18.8" x 24.9" x 29.4" (478 x 632 x 748 mm)	18.8" x 24.9" x 38.0" (478 x 632 x 965 mm)
CHAMBER DIMENSIONS (DIAMETER X DEPTH)	14.6" x 16.3" (370 x 415 mm)	14.6" x 24.2" (370 x 640 mm)
EFFECTIVE CAPACITY	1.8 cu. ft. (50 liters)	2.6 cu. ft. (75 liters)
NET WEIGHT	134 lbs. (61 kg.)	154 lbs. (70 kg.)
POWER SPECIFICATION	115V NEMA L5-20	208/230Vm NEMA L6-30
PRINTER	Optional, built-in type thermal printer, pressure and temperature vs. time process print out	Optional, built-in type thermal printer, pressure and temperature vs. time process print out
TEMPERATURE	Sterilization: 115°C to 135°C Culture Media Melting Temperature: 60°C to 114°C Keep Warm Temperature: 45°C to 60°C	Sterilization: 115°C to 135°C Culture Media Melting Temperature: 60°C to 114°C Keep Warm Temperature: 45°C to 60°C
COOL DOWN FAN	Standard, built-in	Standard, built-in
TIMER	1 min. up to 5 hrs. (Sterilization and Melting) 72 hrs. Delayed, automatic OFF (Keep Warm) 1 week (Program)	1 min. up to 5 hrs. (Sterilization and Melting) 72 hrs. Delayed, automatic OFF (Keep Warm) 1 week (Program)
EXHAUST CONTROL	Exhaust valve open temperature setting	Exhaust valve open temperature setting
SAFETY DEVICES	Pressure safety valve, over-temperature limiter, anti-scorch limiter, door interlock, over-pressure limiter, current fuse	Pressure safety valve, over-temperature limiter, anti-scorch limiter, door interlock, over-pressure limiter, current fuse
CHAMBER MATERIAL	SUS 304 stainless steel	SUS 304 stainless steel



1.800.932.5000
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