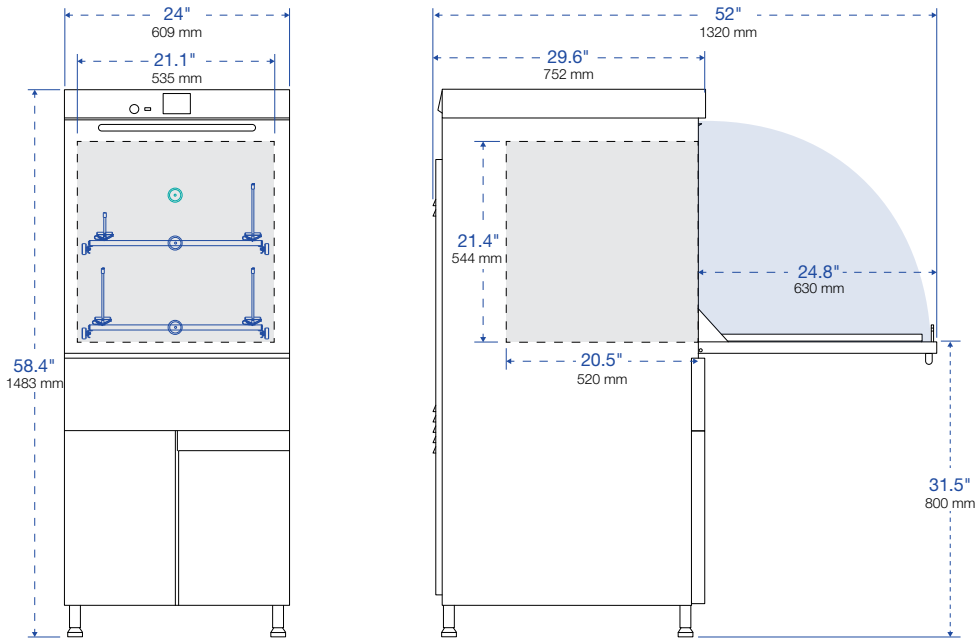


# ULTIMA series model 910 LX

## laboratory washer/dryer

**LANCER**  
GETINGE GROUP

### DATASHEET



### Base Model ULTIMA series 910 LX

- Door Configuration**  
 Fold-down door is made of solid 316L stainless steel. Optional View-In-Process (VIP) window provides a view inside the chamber.
- Water Per Fill**  
 3.4 gal (13 L)
- Interior Dimensions (w x h x d)**  
 21" x 21.4" x 20.5"  
 (535 x 544 x 520 mm)
- Exterior Dimensions (w x h x d)**  
 24" x 58.4" x 29.6"  
 (609 x 1483 x 752 mm)
- Wash Programs**  
 4 Presets,  
 36 Custom Settings
- Cycle Functions**  
 Wash Temp: 95°C / 203°F  
 Drying: Forced-air  
 Chamber, Injectors,  
 HEPA Filtered
- Weight**  
 315 lb. (143 kg)
- Effective Chamber Volume**  
 5.7 cu.ft.



Lancer model 910 LX labware washer; shown with optional View-In-Process (VIP) window.

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# General Specifications

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## General Features

### Fold-down Door

- Counterbalanced for ease of operation
- Ensures proper rack placement and connection to manifold
- Manufactured of solid 316L stainless steel
- Fully insulated to reduce heat loss and noise
- Provides sturdy loading platform, improving ergonomics

### Fully Extendable, Load-Bearing Arms

- Support jet racks for loading and unloading of glassware

### Storage System

- On-board chemical storage drawer for two 10 L standard bottles, minimizes chemical handling and exposure

### Spray System

- Spray arms made of sanitary high-grade 316L stainless steel
- Easily disassembled for cleaning and maintenance

### System Wash Levels

- Up to two levels with three positions to increase wash configurations
- Rack accessories are independent and easily removed for use on all levels
- Racks are interchangeable among ULTIMA series models 810 LX, 815 LX, 820 LX, 1300 LX and 1800 LXA

### Drying System

- Dryer incorporates 53 W fans to blow heated air through the chamber and through the injectors
- 2.4 kW heating elements and blower

### Main Recirculation Pump

- Capacity of 92 gal/min (350 L/min)

### Filter System

- Multi-chamber filters easily removed for cleaning
- Multi-chamber filters on all incoming water lines

### Automatic Peristaltic Dosing Pumps

- Provides precise addition of chemical agents

### Liquid Level Sensor

- Indicates low volume in detergent and acid additive reservoirs.

### Wash Solution Heating System

- 9 kW electric heating elements provide heat up to 95°C (203°F)

### Electronic Thermostat

- Independent selection of temperature for prewash, wash and final rinse between ambient and 95°C (203°F)

### Temperature Probe

- Integrated Pt-1000 temperature probe, user programmable

### Water Softener

- Softens incoming cold and hot water to prolong and improve efficiency in hard water areas, automatic regeneration after each wash cycle with low salt alarm

### Water Level Sensors

- Two independent sensors control chamber water level and prevent overflow
- Automatically adjust fill volume to optimal level based on chamber load

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## Controls

### HMI

- 3.5" Prolux programmable microprocessor controller
- Intuitive touchscreen user interface
- Real-time cycle performance

### Communication and Connectivity

- Front panel USB port
- Ethernet port
- RS422/485

### Programming

- User programmable with four preset programs and 36 user defined programs
- Passcode protected access levels

### System Monitoring

- Audible and visual alarms provide quality control for each wash cycle
- Self-diagnostic software provides real-time monitoring
- Alarm history

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## Programming and Cycle Operation

**1-Prewash:** Select number of prewashes (0-3), duration of pre-wash (up to 30 minutes), temperature of water (up to 95°C / 203°F) and detergent dosing time. User can select cold or hot or DI water.

**2-Wash:** Select duration of wash (up to 30 minutes), detergent dosing time and temperature of water (up to 95°C / 203°F). User can select cold or hot or DI water.

**3-Rinse A:** Select number of rinses (0-9). Duration of rinse (up to 30 minutes), temperature of water (up to 95°C / 203°F). User can select cold or hot or purified water.

**4-Acid Rinse:** Select duration of rinse (up to 30 minutes). Acid dosing time and temperature of water (up to 95°C / 203°F). User can select cold or hot or purified water.

**5-Rinse B:** Select number of rinses (0-9). Duration of rinse (up to 30 minutes), temperature of water (up to 95°C / 203°F). User can select cold or hot or purified water.

**6-DI Rinse:** Up to 4. Duration of rinse (up to 30 minutes), temperature of water (up to 95°C/203°F). User can select cold or purified water.

**7-Final rinse:** Duration of rinse (up to 30 minutes), temperature of water (up to 95°C / 203°F).

**8-Drying:** Adjustable time up to 90 minutes, and mode to include heated forced-air injection drying.

**9-Cooling:** Duration of cooling (up to 30 minutes).

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## Construction

### Wash chamber and door

- Constructed of AISI 316L stainless steel
- High-grade finish, electronically-welded under Argon protection

### Components

- Constructed of stainless steel or other materials impervious to the effects of detergents, additives and general laboratory chemical residues

### Insulation


- Synthetic, rubber-based closed cell foam
- Guards against heat loss and reduces noise

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## Safety Features

- Door interlock prevents interference with wash cycle once it is in operation.
- Fold-down door is counterbalanced for safe operation.

# Optional Features

| <b>Features</b>                      |  | <b>910 LX</b>         |
|--------------------------------------|--|-----------------------|
| Discharge Water Cooling              | Reduces effluent temperature to less than 60°C (140°F) for code compliant transfer to utility drain.   | <input type="radio"/> |
| pH Programming                       | Neutralizes effluent before transfer to utility drain.   | <input type="radio"/> |
| External Printer, Externally Mounted | Installs by direct connection to washer port. Generates 2.25" (57 mm) thermal strip record of washer function.   | <input type="radio"/> |
| Communication / Control Dry contact  | Programmable output for external communication / control of external equipment (i.e.: exhaust fan, alarm light, cycle light)   | <input type="radio"/> |
| Condenser                            | Removes steam vapor when chamber temperature exceeds 50°C (122°F).   | <input type="radio"/> |
| IQ/OQ Validation                     | Includes documentation verification, review of accessories/options, review of equipment installation, verification of utility supplies, review of access levels, review of configuration settings, I/O testing, functional testing, alarm testing and a complete cycle test. | <input type="radio"/> |
| <b>Utilities</b>                     |  | <b>910 LX</b>         |
| Low Pressure Kit                     | Boosts DI water supply input pressure to assure optimum performance.   | <input type="radio"/> |
| Gravity Drop Drain                   | Pneumatic valve to discharge wastewater to floor level drain.  | <input type="radio"/> |
| <b>Construction</b>                  |  | <b>910 LX</b>         |
| Preventive Maintenance               | Annual Preventive Maintenance agreements ensure optimum washer/dryer performance and extend equipment life. Contact us for details.  | <input type="radio"/> |
| View-In-Process Window (VIP)         |  Includes interior light, permitting visual verification during wash cycles.   | <input type="radio"/> |

# Utility Requirements

| Utility  | Characteristic  | Connection                                 | Consumption  |
|--|---|--|--|
| Water <ul style="list-style-type: none"> <li>• cold</li> <li>• hot</li> <li>• DI</li> </ul>  | Pressure: 200 to 600 kPa<br>29 to 87 psi<br><br>Flow: 5.25 gpm (20 L/min)<br><br>Temperature: Ambient up to 50°C (122°F)  | Male threaded:<br>3/4" (20/27)             | 3.4 gal (13 L)<br>per fill   |
| Compressed air <i>(if option selected)</i> <ul style="list-style-type: none"> <li>• Drop drain <i>(pneumatic valve)</i></li> </ul> | Pressure: 500 to 700 kPa<br>70 to 100 psi   | Shut off valve with 3/8" hose barb fitting | Minimal consumption  |
| Electricity  | Voltage: request<br>Frequency: 60Hz   |  | See Electrical Table   |
| Vapor exhaust  | Atmospheric Exhaust Hood located 12" (300) to 40" (1000 mm) above exhaust pipe<br><br>*Refer to installation manual<br><br>Discharge Flow Rate: 40 CFM<br>Max temp.: 95°C (203°F)<br>Max Relative Humidity: 95% |  |  |
| Drain  | Fixed standpipe and plumbing trap<br>Height above floor: from 31" (800 mm) to 35" (900 mm)  | Inner Diameter:<br>1 1/2" (40 mm)          | Required to handle<br>10.5 gpm (40 L/min)<br>max temp 95°C (203°F) |

| Frequency (standard models) | kW | Amps | Breaker Size |
|-----------------------------|----|------|--------------|
| 208V, 60Hz, 3-phase         | 10 | 28   | 35           |
| 208V, 60Hz, 1-phase         | 7  | 34   | 40           |

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